

AIM 艾美疫苗
全产业链疫苗集团

艾美疫苗股份有限公司
AIM Vaccine Co., Ltd.

(A joint stock company incorporated in the People's Republic of China with limited liability)

Stock Code: 6660

**GLOBAL
OFFERING**

Joint Sponsors, Joint Global Coordinators, Joint Bookrunners and Joint Lead Managers

**Goldman
Sachs**



CICC 中金公司



中信建投國際
CHINA SECURITIES INTERNATIONAL



MACQUARIE

Joint Bookrunners and Joint Lead Managers



中銀國際
BOCI

ICBC



工銀國際



招銀國際
CMB INTERNATIONAL



富途證券



**TIGER
BROKERS**

Joint Lead Managers



利弗莫尔证券
L.F. MORGAN INVESTMENT BANK

IMPORTANT

If you are in any doubt about any of the contents of this prospectus, you should obtain independent professional advice.



AIM Vaccine Co., Ltd. 艾美疫苗股份有限公司

(a joint stock company incorporated in the People's Republic of China with limited liability)

GLOBAL OFFERING

Number of Offer Shares under the Global Offering	: 9,714,000 H Shares (subject to the Over-allotment Option)
Number of Hong Kong Offer Shares	: 971,600 H Shares (subject to adjustment)
Number of International Offer Shares	: 8,742,400 H Shares (subject to adjustment and the Over-allotment Option)
Offer Price	: HK\$16.16 per H Share, plus brokerage fee of 1%, FRC transaction levy of 0.00015%, SFC transaction levy of 0.0027% and Stock Exchange trading fee of 0.005% (payable in full on application in Hong Kong Dollars and subject to refund)
Nominal value	: RMB1.00 per H Share
Stock code	: 6660

Joint Sponsors, Joint Global Coordinators, Joint Bookrunners and Joint Lead Managers

Goldman Sachs



Joint Bookrunners and Joint Lead Managers



Joint Lead Managers



Hong Kong Exchanges and Clearing Limited, The Stock Exchange of Hong Kong Limited and Hong Kong Securities Clearing Company Limited take no responsibility for the contents of this prospectus, make no representation as to its accuracy or completeness, and expressly disclaim any liability whatsoever for any loss howsoever arising from or in reliance upon the whole or any part of the contents of this prospectus.

A copy of this prospectus, having attached thereto the documents specified in "Appendix VII—Documents Delivered to the Registrar of Companies and Available on Display" to this prospectus, has been registered with the Registrar of Companies in Hong Kong as required by section 342C of the Companies (Winding Up and Miscellaneous Provisions) Ordinance (Chapter 32 of the Laws of Hong Kong). The Securities and Futures Commission of Hong Kong and the Registrar of Companies in Hong Kong take no responsibility for the contents of this prospectus or any other document referred to above.

The Offer Price will be HK\$16.16 per Offer Share, unless otherwise announced. Investors applying for the Hong Kong Offer Shares must pay, on application, the Offer Price of HK\$16.16 for each Offer Share together with brokerage of 1.0%, SFC transaction levy of 0.0027%, Stock Exchange trading fee of 0.005% and FRC transaction levy of 0.00015%.

The Joint Global Coordinators, for themselves and on behalf of the Underwriters may, with our consent, reduce the number of Offer Shares and/or the Offer Price below that is stated in this prospectus at any time prior to the morning of the last day for lodging applications under the Hong Kong Public Offering. In such a case, a notice of the reduction in the number of Offer Shares and/or the Offer Price will be published on the websites of the Stock Exchange at www.hkexnews.hk and our Company at www.aimbio.com not later than the morning of the last day for lodging applications under the Hong Kong Public Offering. See "Structure of the Global Offering" and "How to Apply for Hong Kong Offer Shares" for details.

We are incorporated, and substantially all of our businesses are located, in the PRC. Potential investors should be aware of the differences in the legal, economic and financial systems between the PRC and Hong Kong and that there are different risk factors relating to investments in PRC-incorporated companies. Potential investors should also be aware that the regulatory framework in the PRC is different from the regulatory framework in Hong Kong and should take into consideration the different market nature of our H Shares. Such differences and risk factors are set out in "Risk Factors," "Appendix IV—Summary of Principal Legal and Regulatory Provisions" and "Appendix V—Summary of Articles of Association" to this prospectus. Prior to making an investment decision, prospective investors should consider carefully all the information set forth in this prospectus, including but not limited to the risk factors set forth in "Risk Factors."

The obligations of the Hong Kong Underwriters under the Hong Kong Underwriting Agreement to subscribe for, and to procure applicants for the subscription for, the Hong Kong Offer Shares, are subject to termination by the Joint Global Coordinators (for themselves and on behalf of the Hong Kong Underwriters) if certain grounds arise prior to 8:00 a.m. on the day that trading in the H Shares commences on the Stock Exchange. Such grounds are set out in "Underwriting—Underwriting Arrangements and Expenses—Hong Kong Public Offering—Grounds for Termination" in this prospectus. It is important that you refer to that section for further details.

The Offer Shares have not been and will not be registered under the U.S. Securities Act or any state securities law in the United States and may not be offered, sold, pledged or transferred within the United States or to, or for the account or benefit of U.S. persons (as defined in Regulation S), except in transactions exempt from, or not subject to, the registration requirements of the U.S. Securities Act. The Offer Shares are being offered and sold (i) solely to QIBs as defined in Rule 144A pursuant to an exemption from registration under the U.S. Securities Act and (ii) outside the United States in offshore transactions in accordance with Regulation S.

ATTENTION

We have adopted a fully electronic application process for the Hong Kong Public Offering. We will not provide printed copies of this prospectus or printed copies of any application forms to the public in relation to the Hong Kong Public Offering.

This prospectus is available at the website of the Hong Kong Stock Exchange at www.hkexnews.hk and our website at www.aimbio.com. If you require a printed copy of this prospectus, you may download and print it from the website addresses above.

September 23, 2022

IMPORTANT

IMPORTANT NOTICE TO INVESTORS:

FULLY ELECTRONIC APPLICATION PROCESS

We have adopted a fully electronic application process for the Hong Kong Public Offering. We will not provide printed copies of this prospectus or printed copies of any application forms to the public in relation to the Hong Kong Public Offering.

This prospectus is available at the website of the Hong Kong Stock Exchange at www.hkexnews.hk under the “*HKEXnews > New Listings > New Listing Information*” section, and our website at www.aimbio.com. If you require a printed copy of this prospectus, you may download and print from the website addresses above.

To apply for the Hong Kong Offer Shares, you may:

- (1) apply online via the **HK eIPO White Form** service in the **IPO App** (which can be downloaded by searching “**IPO App**” in App Store or Google Play or downloaded at www.hkeipo.hk/IPOApp or www.tricorglobal.com/IPOApp) or at www.hkeipo.hk; or
- (2) apply through the **CCASS EIPO** service to electronically cause HKSCC Nominees to apply on your behalf, including by:
 - (i) instructing your **broker** or **custodian** who is a CCASS Clearing Participant or a CCASS Custodian Participant to give **electronic application instructions** via CCASS terminals to apply for the Hong Kong Offer Shares on your behalf; or
 - (ii) (if you are an existing **CCASS Investor Participant**) giving **electronic application instructions** through the CCASS Internet System (<https://ip.ccass.com>) or through the CCASS Phone System by calling +852 2979 7888 (using the procedures in HKSCC’s “An Operating Guide for Investor Participants” in effect from time to time). HKSCC can also input **electronic application instructions** for CCASS Investor Participants through HKSCC’s Customer Service Centre by completing an input request.

We will not provide any physical channels to accept any application for the Hong Kong Offer Shares by the public. The contents of the electronic version of this prospectus are identical to the printed prospectus as registered with the Registrar of Companies in Hong Kong pursuant to Section 342C of the Companies (Winding Up and Miscellaneous Provisions) Ordinance.

If you are an **intermediary, broker or agent**, please remind your customers, clients or principals, as applicable, that this prospectus is available online at the website addresses above.

Please see “How to Apply for Hong Kong Offer Shares” for details on the procedures through which you can apply for the Hong Kong Offer Shares electronically.

IMPORTANT

Your application through the **HK eIPO White Form** service or the **CCASS EIPO** service must be for a minimum of 200 Hong Kong Offer Shares and in one of the numbers set out in the table. You are required to pay the amount next to the number you select.

No. of Hong Kong Offer Shares applied for	Amount payable on application	No. of Hong Kong Offer Shares applied for	Amount payable on application	No. of Hong Kong Offer Shares applied for	Amount payable on application	No. of Hong Kong Offer Shares applied for	Amount payable on application
	HK\$		HK\$		HK\$		HK\$
200	3,264.57	4,000	65,291.48	60,000	979,372.11	240,000	3,917,488.46
400	6,529.14	5,000	81,614.34	70,000	1,142,600.80	260,000	4,243,945.82
600	9,793.71	6,000	97,937.22	80,000	1,305,829.49	280,000	4,570,403.20
800	13,058.30	7,000	114,260.08	90,000	1,469,058.17	300,000	4,896,860.57
1,000	16,322.87	8,000	130,582.94	100,000	1,632,286.85	350,000	5,713,003.99
1,200	19,587.44	9,000	146,905.82	120,000	1,958,744.23	400,000	6,529,147.43
1,400	22,852.01	10,000	163,228.68	140,000	2,285,201.59	485,800 ⁽¹⁾	7,929,649.55
1,600	26,116.59	20,000	326,457.37	160,000	2,611,658.97		
1,800	29,381.16	30,000	489,686.06	180,000	2,938,116.34		
2,000	32,645.74	40,000	652,914.74	200,000	3,264,573.71		
3,000	48,968.60	50,000	816,143.43	220,000	3,591,031.08		

(1) Maximum number of Hong Kong Offer Shares you may apply for.

No application for any other number of the Hong Kong Offer Shares will be considered and any such application is liable to be rejected.

EXPECTED TIMETABLE⁽¹⁾

Hong Kong Public Offering commences9:00 a.m. on Friday, September 23, 2022

Latest time for completing electronic applications under the **HK eIPO White Form** service through one of the below ways⁽²⁾:

(1) the **IPO App**, which can be downloaded by searching “**IPO App**” in App Store or Google Play or downloaded at www.hkeipo.hk/IPOApp or www.tricorglobal.com/IPOApp; or

(2) the designated website at www.hkeipo.hk11:30 a.m. on Wednesday, September 28, 2022

Application lists open⁽³⁾11:45 a.m. on Wednesday, September 28, 2022

Latest time for (a) completing payment for the **HK eIPO White Form** applications by effecting internet banking transfer(s) or PPS payment transfer(s) and (b) giving **electronic application instructions** to HKSCC⁽⁴⁾12:00 noon on Wednesday, September 28, 2022

If you are instructing your **broker** or **custodian** who is a CCASS Clearing Participant or a CCASS Custodian Participant to give **electronic application instructions** via CCASS terminals to apply for the Hong Kong Offer Shares on your behalf, you are advised to contact your **broker** or **custodian** for the latest time for giving such instructions which may be different from the latest time as stated above.

Application lists close⁽³⁾12:00 noon on Wednesday, September 28, 2022

Announcement of the level of indications of interest in the International Offering, the level of applications in the Hong Kong Public Offering and the basis of allocation of the Hong Kong Offer Shares to be published on the website of our Company at www.aimbio.com and the website of the Stock Exchange at www.hkexnews.hk on or before⁽⁵⁾⁽⁶⁾ Wednesday, October 5, 2022

Results of allocations in the Hong Kong Public Offering (with successful applicants’ identification document numbers, where appropriate) to be available through a variety of channels as described in the section headed “How to Apply for Hong Kong Offer Shares—(D) Publication of Results” in this prospectus from⁽⁶⁾ Wednesday, October 5, 2022

Dispatch of H Share certificates and **HK eIPO White Form** e-Auto Refund payment instructions/refund checks on or before⁽⁶⁾⁽⁷⁾⁽⁸⁾ Wednesday, October 5, 2022

Dealings in the H Shares on the Stock Exchange expected to commence at⁽⁶⁾9:00 a.m. on Thursday, October 6, 2022

EXPECTED TIMETABLE⁽¹⁾

Notes:

- (1) All dates and times refer to Hong Kong dates and times.
- (2) You will not be permitted to submit your application under the **HK eIPO White Form** service through the **IPO App** or the designated website at **www.hkeipo.hk** after 11:30 a.m. on the last day for submitting applications. If you have already submitted your application and obtained a payment reference number from the **IPO App** or the designated website prior to 11:30 a.m., you will be permitted to continue the application process (by completing payment of the application monies) until 12:00 noon on the last day for submitting applications, when the application lists close.
- (3) If there is a “black” rainstorm warning signal, a tropical cyclone warning signal number 8 or above and/or Extreme Conditions in force in Hong Kong at any time between 9:00 a.m. and 12:00 noon on Wednesday, September 28, 2022, the application lists will not open and close on that day. See the section headed “How to Apply for Hong Kong Offer Shares” in this prospectus.
- (4) Applicants who apply for Hong Kong Offer Shares through the **CCASS EIPO** service should refer to the section headed “How to Apply for Hong Kong Offer Shares—6. Applying Through the **CCASS EIPO** Service” in this Prospectus.
- (5) None of the websites or any of the information contained on the websites forms part of this Prospectus.
- (6) If there is a “black” rainstorm warning signal, a tropical cyclone warning signal number 8 or above and/or Extreme Conditions in force in Hong Kong from Friday, September 23, 2022 to Thursday, October 6, 2022 then the day of (i) announcement of the results of allocations under the Hong Kong Public Offering; (ii) dispatch of H Share certificates and **HK eIPO White Form** e-Auto Refund payment instructions/refund checks; and (iii) dealings in the H Shares on the Stock Exchange may be postponed and an announcement may be made in such event.
- (7) H Share certificates will only become valid at 8:00 a.m. on the Listing Date, which is expected to be Thursday, October 6, 2022, provided that the Global Offering has become unconditional in all respects at or before that time. Investors who trade H Shares on the basis of publicly available allocation details or prior to the receipt of the H Share certificates or prior to the H Share certificates becoming valid do so entirely at their own risk.
- (8) e-Auto Refund payment instructions/refund checks will be issued in respect of wholly or partially unsuccessful applications pursuant to the Hong Kong Public Offering.

The above expected timetable is a summary only. For details of the structure of the Global Offering, including its conditions, and the procedures for applications for the Hong Kong Offer Shares, you may refer to “Structure of the Global Offering” and “How to Apply for Hong Kong Offer Shares”, respectively.

CONTENTS

IMPORTANT NOTICE TO INVESTORS

This prospectus is issued by us solely in connection with the Hong Kong Public Offering and does not constitute an offer to sell or a solicitation of an offer to buy any security other than the Hong Kong Offer Shares offered by this prospectus pursuant to the Hong Kong Public Offering. This prospectus may not be used for the purpose of making, and does not constitute, an offer or invitation in any other jurisdiction or in any other circumstances. No action has been taken to permit a public offering of the Hong Kong Offer Shares in any jurisdiction other than Hong Kong and no action has been taken to permit the distribution of this prospectus in any jurisdiction other than Hong Kong. The distribution of this prospectus and the offering for purposes of a public offering and sale of the Hong Kong Offer Shares in other jurisdictions are subject to restrictions and may not be made except as permitted under the applicable securities laws of such jurisdictions pursuant to registration with or authorization by the relevant securities regulatory authorities or an exemption therefrom.

You should rely only on the information contained in this prospectus and the GREEN Application Form to make your investment decision. The Hong Kong Public Offering is made solely on the basis of the information contained and the representations made in this prospectus. We have not authorized anyone to provide you with information that is different from what is contained in this prospectus. Any information or representation not contained or made in this prospectus must not be relied on by you as having been authorized by us, the Joint Sponsors, the Joint Global Coordinators, the Joint Bookrunners and the Joint Lead Managers, any of the Underwriters, any of our or their respective directors, officers, employees, agents or representatives, or any other parties involved in the Global Offering.

	<i>Page</i>
Important	i
Expected Timetable	iv
Contents	vi
Summary	1
Definitions	25
Glossary of Technical Terms	37
Forward-Looking Statements	46
Risk Factors	48
Waivers from Strict Compliance with The Listing Rules and Exemptions from The Companies (Winding Up and Miscellaneous Provisions) Ordinance	93
Information about This Prospectus and the Global Offering	100
Directors, Supervisors and Parties Involved in the Global Offering	104
Corporate Information	110

CONTENTS

Industry Overview	112
Regulatory Overview	145
History and Development	163
Business	194
Relationship with Controlling Shareholder	294
Connected Transaction	298
Directors, Supervisors and Senior Management	300
Share Capital	316
Substantial Shareholders	322
Financial Information	323
Future Plans and Use of Proceeds	399
Underwriting	401
Structure of the Global Offering	412
How to Apply for Hong Kong Offer Shares	421
Appendix I – Accountants’ Report	I-1
Appendix II – Unaudited Pro Forma Financial Information	II-1
Appendix III – Taxation and Foreign Exchange	III-1
Appendix IV – Summary of Principal Legal and Regulatory Provisions	IV-1
Appendix V – Summary of Articles of Association	V-1
Appendix VI – Statutory and General Information	VI-1
Appendix VII – Documents Delivered to the Registrar of Companies and Available on Display	VII-1

SUMMARY

This summary aims to give you an overview of the information contained in this prospectus. As this is a summary, it does not contain all the information that may be important to you. You should read this prospectus in its entirety before you decided to invest in the Offer Shares. There are risks associated with any investment. Some of the particular risks in investing in the Offer Shares are set out in “Risk Factors” of this prospectus. You should read that section carefully before you decide to invest in the Offer Shares. There are unique challenges, risks and uncertainties associated with investing in companies such as ours. Your investment decision should be made in light of these considerations.

OVERVIEW

We are the second largest vaccine company in China in terms of 2021 approved lot release volume (excluding COVID-19 vaccines), accounting for a 7.4% market share following state-owned CNBG (中國醫藥集團中國生物技術股份有限公司), the largest vaccine market player in China accounting for a 35.5% market share. In terms of 2021 sales revenue (excluding COVID-19 vaccines), we accounted for a 2.1% market share in the PRC, whereas CNBG ranked first and accounted for 26.5%. As a major vaccine company in China, we cover the full value chain from research and development to manufacturing and to commercialization. According to CIC, we are the only China-based vaccine player that has all five proven human vaccine platform technologies worldwide, namely bacterial vaccine technologies, viral vaccine technologies, genetically engineered vaccine technologies, combination vaccine technologies and mRNA vaccine technologies, with at least one approved product or one vaccine candidate at CTA or clinical stages under each platform. We are one of the first two human vaccine companies in the PRC that have been granted permission under the Fourteenth Five Year Plan of the PRC to build a P3 Lab. In particular, in response to the current pandemic, we have taken full advantages of our full-spectrum platform technologies and are developing COVID-19 vaccine candidates spanning three technology routes validated by approved vaccines, namely mRNA, inactivated virus and recombinant adenoviral vector.

We strive to access the best industry resources. Through one decade of organic growth and external resource integration, we have become a major player in the Chinese vaccine industry. We acquired Rong'an Bio, AIM Honesty, AIM Kanghuai and AIM Weixin, between 2015 and 2017. After these acquisitions, we upgraded their infrastructure and built a number of new production lines to meet the latest GMP standards, improved manufacturing processes and techniques, formulated and executed production plans which closely follow group marketing strategies and consolidated supply chains. Through our standardized management measures, we successfully set up four market-driven Licensed Manufacturing Facilities. Furthermore, we promote a cross-functional and cross-entity R&D approach within the Group. We have established a dedicated R&D department in each of the four operating subsidiaries, with a specific focus on developing new vaccine varieties based on their respective major products and manufacturing specialties, to synergize R&D and manufacturing. We have also established three vaccine research institutes, namely AIM Explorer, Liverna and AIM Jianchi, of which AIM Explorer offers technological support to dedicated R&D departments in the four subsidiaries. Liverna develops mRNA vaccines leveraging its expertise in mRNA technologies, including our mRNA COVID-19 vaccine candidate; and AIM Jianchi focuses on the research and development of genetically engineered recombinant vaccines. These research institutions collaborate with the Licensed Manufacturing Facilities or with each other from time to time to accelerate our pipeline development. See “Business—Research and Development.” In addition, although each Manufacturing Facility engages in production activities of different products independently, we have a centralized sales and marketing system to synchronize marketing strategy and activities for products from these Manufacturing Facilities, which enables us to consolidate and integrate quality resources at the Group level instead of dispersing into four operating subsidiaries, and build effective sales channels for and strong CDC recognition of our products.

SUMMARY

We currently commercialize eight vaccine products against six disease areas, of which the HBV vaccines and human rabies vaccine are our market-leading key commercialized vaccine products. We have been relying on our HBV and human rabies vaccine products during the Track Record Period, from which we generated 84.2%, 90.2%, 93.0%, 94.3% and 92.0% of our total revenue in 2019, 2020, 2021 and the four months ended April 30, 2021 and 2022, respectively. We expect to continue to generate substantial revenue from these two product types in the near future. We also have 22 vaccine candidates against 13 disease areas, of which five candidates are at clinical stages. Out of these five vaccine candidates, we expect to launch at least four from 2023 to 2025. We also plan to file over 10 CTAs by the end of 2023 to advance multiple CTA-enabling and preclinical candidates to clinical trial stages. Our broad vaccine portfolio of large potential market size is illustrated as below:

- Our portfolio of vaccine products and vaccine candidates covers all top 10 vaccine products worldwide by 2021 global sales (totaling US\$101.9 billion);
- In 2021, we were the largest supplier of HBV vaccines in the globe and in the PRC, possessing a 45.4% market share in China in terms of approved lot release volume. In the PRC, anti-HBV vaccination is mandatory for all newborns within 24 hours of birth. In 2021, approximately 75% of China's newborns received our recombinant HBV vaccine (Hansenua Polymorpha). In addition, we were the third largest HBV vaccine supplier in the PRC in terms of 2021 sales revenue, accounting for a 24.0% market share;
- In 2021, we were the second largest supplier of human rabies vaccines in the globe and in the PRC, possessing 18.1% and 16.2% market shares of China market, respectively, in terms of approved lot release volume and sales revenue; and
- We have three candidates against COVID-19 (adopting mRNA, inactivated virus and recombinant adenoviral vector technologies), one EV71-CA16 bivalent vaccine candidate against HFMD, three candidates against pneumococcal disease (PCV13, PCV20 and PPSV23), three DTP-based combination candidates (DTcP, DTaP and DTP-Hib) and a number of others with high market potential, most of which target major vaccine-preventable infectious diseases with large-population base and five are potentially first-in-class in the globe or in the PRC.

Our sales and marketing function is centralized, and is specialized and market-oriented, which enables us to accelerate strategy formulation and execution, achieve high cost-efficiency and gain cross-selling opportunities. As of the Latest Practicable Date, we were one of the only four vaccine market players that sold vaccine products to all 31 provinces, direct-controlled municipalities and autonomous regions in China.

Our total revenue was RMB951.6 million, RMB1,638.0 million and RMB1,570.1 million in 2019, 2020 and 2021, respectively. Our gross profit was RMB732.8 million, RMB1,354.1 million and RMB1,294.7 million in 2019, 2020 and 2021, respectively. Our revenue and gross profit grew rapidly by 72.1% and 84.8% respectively from 2019 to 2020; then slightly decreased by 4.1% and 4.4% respectively in 2021 mainly due to the impact of the recurrence of COVID-19 in certain cities in China since late July 2021 on our sales volume in the second half of 2021. Our profit significantly increased by 234.2% from RMB119.8 million in 2019 to RMB400.4 million in 2020. We incurred a substantial loss of RMB675.9 million in 2021, which was resulted primarily from (i) our share-based compensation expenses totaling RMB952.1 million, including a one-off share-based compensation expense of RMB896.9 million and other share-based compensation expenses of RMB55.2 million for other share awards and options granted to our employees, and (ii) an increase in research and development costs from RMB157.8 million to RMB307.4 million to develop our rich pipeline of 22 vaccine candidates. Due to a slowdown in sales amid COVID-19 outbreaks in China, from the four months ended April 30, 2021 to the same period in 2022, our revenue decreased from RMB464.9 million to RMB275.3 million and our gross profit decreased from RMB384.1 million to RMB220.0 million. We had a profit of RMB57.7 million in the four months ended April 30, 2021 but recorded a loss of RMB95.8 million in the same period in 2022, mainly driven by the drop in revenue and as we rapidly advanced clinical trials of our vaccine candidates, which drove up our research and development costs.

SUMMARY

OUR VACCINE PRODUCTS AND VACCINE CANDIDATES

As of the Latest Practicable Date, we have commercialized eight vaccine products covering six vaccine-preventable diseases in the PRC, including rabies, HBV, HAV, mumps, HFRS and meningococcal diseases. As of the same date, we also have 22 vaccine candidates against 13 disease areas, of which five candidates (mRNA COVID-19 vaccine candidate against the Original Strain, inactivated COVID-19 vaccine candidate, PCV13, PPSV23 and MCV4) are at clinical stages. Out of these five vaccine candidates, we expect to launch at least four from 2023 to 2025. In addition, we plan to file over 10 CTAs by the end of 2023 to advance multiple CTA-enabling and preclinical candidates to clinical trial stages. The following table summarizes our vaccine portfolio consisting of both vaccine products and vaccine candidates:

Vaccine Portfolio

Indication	Vaccine Product/ Vaccine Candidate	In-house R&D/ Joint Development	Preclinical	CTA	Phase I	Phase II/III	NDA Approval /Market	Obtaining NDA Approval /Expected Timing to Market [#]
Vaccine Products ¹								
HBV	Recombinant HBV Vaccines (Hansenula Polymorpha) ²	In-house R&D	NDA approved in 2004					2004
HAV	Inactivated HAV Vaccines (HDC) ³	In-house R&D	NDA approved in 2015					2015
Mumps	Mumps Vaccine	In-house R&D	NDA approved in 2004					2004
HFRS	HFRS Inactivated Vaccine	In-house R&D	NDA approved in 2007					2007
Rabies	Human Rabies Vaccine (Vero Cell)	In-house R&D	NDA approved in 2007					2007
Meningococcal disease	MPSV4	In-house R&D	NDA approved in 2018					2018
Vaccine Candidates ⁴								
COVID-19	mRNA COVID-19 Vaccine	In-house R&D	Initiated Phase III in Q2 2022 ⁵					Q2 2023
	Inactivated COVID-19 Vaccine	Joint Development	Phase II ongoing (against the Original Strain); Start Phase I in 2022 (against the Delta Strain) ⁶					After launching mRNA COVID-19 vaccine ⁷
	Broad-spectrum COVID-19 Vaccine	Joint Development	File CTA in 2023 ⁸					2024 to 2025
HFMD	EV71-CA16 Bivalent HFMD Vaccine Candidate (HDC)	In-house R&D	Start Phase I in H2 2022					2026
Pneumococcal disease	PCV13	In-house R&D	Finish Phase III in Q2 2023 ⁹					2024
	PPSV23	In-house R&D	Finished Phase I in Q1 2022 and initiated Phase III in Q3 2022					2023
	PCV20	In-house R&D	Start Phase I in 2022					2025
DTP ¹⁰	DTP-Hib Combination Vaccine	In-house R&D	File CTA in 2023					2026
	DTaP	In-house R&D	File CTA in 2023					2026
	DTcP	In-house R&D	File CTA in 2024					After 2026
	Absorbed Tetanus Vaccine	In-house R&D	File CTA in 2022					2025
Hib	Hib Vaccine	In-house R&D	File CTA in 2023					2026
Rabies	mRNA Human Rabies Vaccine	In-house R&D	File CTA in 2022					2025
	Human Rabies Vaccine (Vero Cell, Serum-free)	In-house R&D	Start Phase III in H1 2023 ¹¹					2025
	Human Rabies Vaccine (HDC)	In-house R&D	File CTA in 2023					2026
HPV	HPV2	In-house R&D	File CTA in 2023					After 2026
	HPV9	In-house R&D	File CTA in 2023					After 2026
Meningococcal disease	MCV4	In-house R&D	Start Phase II in H1 2023					2025
Influenza	Tetavalent Influenza Vaccine (MDCK Cells)	In-house R&D	File CTA in 2023					2026
	Universal Influenza Vaccine	Joint Development	File CTA in 2022 ⁸					2026
Herpes	Shingles/Herpes Zoster Vaccine	In-house R&D	File CTA in 2023					After 2026
RSV	mRNA RSV Vaccine	In-house R&D	File CTA in 2023					After 2026
<div><div></div> Viral Vaccine Platform</div> <div><div></div> Bacterial Vaccine Platform</div> <div><div></div> mRNA Vaccine Platform</div> <div><div></div> Genetically Engineered Vaccine Platform</div> <div><div></div> Combination Vaccine Platform</div>								

■ Viral Vaccine Platform
 ■ Bacterial Vaccine Platform
 ■ mRNA Vaccine Platform
 ■ Genetically Engineered Vaccine Platform
 ■ Combination Vaccine Platform

SUMMARY

Notes:

- (1) Our human rabies vaccine (Vero cell) and MPSV4 are Class II vaccines.

For our recombinant HBV vaccines, the 10µg HBsAg/0.5ml dosage is a Class I vaccine for newborns and a Class II vaccine for other vaccinees, and the 20µg HBsAg/0.5ml dosage is a Class II vaccine in most cases, and a Class I vaccine procured under certain government procurement programs.

For our inactivated HAV vaccines, the 320Eu/0.5ml dosage is a Class I vaccine in Beijing, Shanghai, Tianjin and Jiangsu Province, and a Class II vaccine in other regions in the PRC, and the 640Eu/1.0ml dosage is a Class II vaccine.

Our HFRS vaccine and mumps vaccine are typically classified as Class II vaccines in the PRC. However, they may be procured by certain provincial level CDCs as a Class I vaccine under some special circumstances, such as local outbreaks.

- (2) We have developed two recombinant HBV vaccine products, differentiated in terms of HBsAg concentration: 10µg HBsAg per dose and 20µg HBsAg per dose. See “Business—Our Vaccine Products and Vaccine Candidates—Our Vaccine Products—Recombinant HBV Vaccines (Hansenula Polymorpha).”
- (3) We have developed two inactivated HAV vaccine products, differentiated in terms of isolated HAV antigen concentration: 320Eu/0.5ml per dose and 640Eu/1.0ml per dose. See “Business—Our Vaccine Products and Vaccine Candidates—Our Vaccine Products—Inactivated HAV Vaccines (HDC).”
- (4) We expect all of our vaccine candidates, except for DTaP, to be classified as Class II vaccines upon commercialization. We expect to commercialize our DTaP as a Class I vaccine.
- (5) As of the Latest Practicable Date, we entered Phase III clinical trial stage for our mRNA COVID-19 vaccine candidate (against the Original Strain). We expect such clinical trials to accelerate our R&D activities for mRNA vaccine candidates against other COVID-19 variants. We are currently in the CTA filing process for mRNA vaccine candidate against the Delta variant. We are also conducting preclinical studies for mRNA vaccine candidate against the Omicron variant.
- (6) As of the Latest Practicable Date, our inactivated COVID-19 candidate against the Original Strain was in Phase II clinical trial stage. We are also collaborating with Zhejiang Provincial CDC in the development of a second generation inactivated COVID-19 vaccine candidate against the Delta variant strain. See “Business—Research and Development—Collaboration Agreements—Collaboration with Zhejiang Provincial CDC”.
- (7) Considering that (i) our mRNA COVID-19 candidate has reached the Phase III clinical trial stage, becoming one of the most advanced COVID-19 vaccine candidates in our pipeline; (ii) mRNA COVID-19 vaccines provide a higher degree of protection in comparison with other vaccination technology routes and there is no approved mRNA vaccine in the PRC to date; and (iii) major circulating COVID-19 virus variants in the globe and PRC are changing from time to time, and governmental disease prevention and control policies and measures as well as the vaccination strategy in China are continuously adjusting accordingly, we plan to accelerate and prioritize the development of our mRNA COVID-19 vaccine, in order to gain fast-to-market and first-mover advantages in the massive COVID-19 vaccine market. We target to launch our mRNA candidate first, and will then proceed with later stage clinical trials and ongoing CTA filing process of our inactivated candidates, subject to the changing pandemic epidemiology, circulating variants, containment measures and vaccination policies in China.
- (8) We are currently collaborating with SPHCC in the development of two novel recombinant adenoviral vector-based broad-spectrum candidates against coronavirus (including viruses causing COVID-19 and its variant strains) and influenza. See “Business—Research and Development—Collaboration Agreements—Collaboration with SPHCC.”
- (9) This refers to the completion of vaccination procedure for all test subjects in the relevant clinical trial.
- (10) DTP refers to three diseases, namely diphtheria, tetanus and pertussis. DTP-based combination vaccines also utilize bacterial vaccine technologies.
- (11) Per communications with the CDE, we may directly undertake Phase III clinical trials, without having to undertake Phase I or II clinical trials first.
- # Timing of obtaining NDA refers to the time when a vaccine product obtained NDA approval. Expected timing to market refers to the time we expect to launch a vaccine candidate onto the market.

SUMMARY

Our Vaccine Products

Among our current vaccine products, we have been relying on HBV vaccines and human rabies vaccines during the Track Record Period, our two key commercialized products that lead their respective vaccine markets in the PRC, from which we collectively generated 84.2%, 90.2%, 93.0%, 94.3% and 92.0% of our total revenue in 2019, 2020, 2021 and the four months ended April 30, 2021 and 2022, respectively. See “—Summary of Key Financial Information—Summary of Consolidated Statements of Profit or Loss.” We expect to continue to generate substantial revenue from these two product types in the near future. In addition, we have other vaccine products against HAV, meningococcal diseases, mumps and HFRS, which diversify our product portfolio and revenue sources. See “Risk Factors—Risks Relating to Our Business and Industry—Risks Relating to the Sales and Marketing of Our Vaccine Products and Commercialization of Our Vaccine Candidates—Our market-leading key commercialized vaccine products generate a significant portion of our profits and cash flows. Any decrease in their revenue or market share would adversely affect our business, financial condition, results of operations and prospects.”

Recombinant HBV Vaccines (Hansenula Polymorpha)

We were the largest supplier of HBV vaccines in the globe and in the PRC, possessing a 45.4% market share in China in terms of 2021 approved lot release volume. In the PRC, anti-HBV vaccination is mandatory for all newborns within 24 hours of birth, and approximately 75% of China’s newborns received our recombinant HBV vaccine in 2021. Also in 2021, we were the only supplier of HBV vaccines using Hansenula Polymorpha for antigen expression, which is widely recognized as the best manufacturing technology route for HBV vaccines, featuring with high yields, high purity of antigen expression and low cost. Our recombinant HBV vaccine products have maintained 100% pass rate in lot release quality audits of NIFDC since their approvals. As of the Latest Practicable Date, our recombinant HBV vaccines have been sold to provincial CDCs of all 31 provinces, direct-controlled municipalities and autonomous regions in the PRC and over 1,800 county-level CDCs nationwide.

Human Rabies Vaccine (Vero Cell)

In 2021, we were the second largest supplier of human rabies vaccines globally and in the PRC, possessing 16.2% and 18.1% market shares of China market, respectively, in terms of sales revenue and approved lot release volume. As a Class II private vaccine, human rabies vaccines enjoy greater pricing flexibility and higher profit margins as compared to Class I vaccine products in China. According to CIC, China’s CDCs required approximately 70 million doses of human rabies vaccines in average from 2015 to 2020, which is expected to grow to 80 million doses from 2021 to 2030, indicating a strong and increasing market demand for our products. Since the commercialization in 2007, the human rabies vaccine (Vero cell) has maintained 100% pass rate in lot release quality audits by the NIFDC for 15 years. As of the Latest Practicable Date, we sold this product to all 31 provinces, direct-controlled municipalities and autonomous regions in the PRC, covering over 2,000 county-level CDCs nationwide.

According to CIC, among different technology routes, the current Vero cell-based vaccine has and is expected to continue to be the mainstream type of human rabies vaccines up to 2030 in terms of approved lot release volume and up to 2026 in terms of sales revenue. As a result, we believe our human rabies vaccines (Vero cell) will remain as one of our major sources of revenue in the next three to five years. However, the market of Vero cell human rabies vaccines is expected to experience negative CAGRs from 2021 to 2030 in terms of approved lot release and sales revenue, due to increasingly intensive competition with other technology routes especially new ones with more advanced technology, clinical benefits and potentially higher pricing, primarily including: (i) Vero-cell serum free technology that allows a more controlled bioprocess with an improved safety profile. It is expected that Vero-cell serum free human rabies vaccines would become a fast-growing human rabies vaccine type in the next decade after its expected availability in China in 2023, with the approved lot release volume increasing at a CAGR of

SUMMARY

35.9% and sales revenue increasing at a CAGR of 37.1% from 2023 to 2030; (ii) HDC human rabies vaccines that are expected to become the most primary type of human rabies vaccines in China from 2027 in terms of sales revenue; and (iii) mRNA human rabies vaccines that are expected to be launched in China in 2025 and begin to capture meaningful market share thereafter due to technology and efficacy advantages, with the approved lot release volume increasing at a CAGR of 39.1% and sales revenue increasing at a CAGR of 40.2% from 2025 to 2030. See “Industry Overview—Human Rabies Vaccine Market in the PRC—Market for Human Rabies Vaccines.” As a result of such market trends, we have started to develop new human rabies vaccines under technology routes of Vero cell serum free, HDC and mRNA. These three human rabies vaccine candidates are currently in preclinical stage. We expect to commence clinical trial (a Phase III clinical trial without having to undertake Phase I or II trials first) for the Vero cell serum free candidate in the first half of 2023 and launch this product in 2025, file a CTA for the HDC candidate in 2023 and launch this product in 2026, and file a CTA for the mRNA candidate in 2022 and obtain the NDA approval in 2025. As such, in and after 2025, we will have multiple new and advanced human rabies vaccine products to help us continue to solidify the market-leading position and increase our market share in China’s human rabies vaccine market. As a result of such a proactive product upgrade in the human rabies vaccine portfolio, together with other new vaccine products to be launched in the next five years, we believe the negative CAGRs of the market size of the Vero cell human rabies vaccines would not have a material impact on our future business growth and results of operations.

Other Vaccine Products

Besides the two types of market-leading key commercialized vaccines, we have the following four types of products:

- *Inactivated HAV vaccines (HDC).* We are the second largest supplier of inactivated HAV vaccines (HDC) in the PRC in terms of 2021 approved lot release volume. We generated revenue of RMB87.2 million, RMB97.2 million, RMB86.1 million, RMB20.5 million and RMB15.8 million from sales of our inactivated HAV vaccines, accounting for 9.2%, 5.9%, 5.5%, 4.4% and 5.7% of our total revenue in 2019, 2020, 2021 and the four months ended April 30, 2021 and 2022, respectively. According to CIC, from 2021 to 2030, the market size of HAV vaccines in the PRC is expected to grow from RMB858.8 million to RMB2,251.4 million, of which the percentage of inactivated vaccines will increase from 49.4% to 79.7%, due to less safety concerns and higher biological stability as compared to live attenuated HAV vaccines, indicating a promising revenue growth driver for us;
- *MPSV4.* We launched MPSV4 in March 2020. Revenue from sales of our MPSV4 was RMB26.7 million, RMB18.7 million, RMB4.4 million and RMB6.2 million in 2020, 2021 and the four months ended April 30, 2021 and 2022, respectively. According to CIC, MPSV4 is expected to have a market size over or around RMB800 million by 2024. We believe that this product will continue to make meaningful revenue contribution and help us to build brand recognition and sales channels in China’s meningococcal vaccine market to prepare for future launch of MCV4 by 2025;
- *Mumps vaccine.* Our mumps vaccine is an live attenuated single-dose vaccine product with 100% pass rate in lot release quality audits of the NIFDC every year after its commercialization. According to CIC, the market size of mumps vaccines (without taking into account the combination choices) would remain relatively stable at RMB100 million from 2022 to 2030. We have begun to upgrade production lines and process for our mumps vaccine from February 2020, and we expect to resume production in the second half of 2023 and continue to generate revenue from this product; and

SUMMARY

- *HFRS vaccine.* According to CIC, the market size of HFRS vaccines in the PRC is expected to reach RMB135.4 million in 2030. Among all five approved HFRS vaccines in the PRC as of the Latest Practicable Date, we were the largest supplier every year from 2015 to 2019 in terms of approved lot release volume. We have recently relocated the production line for HFRS vaccines, and we expect to produce new HFRS vaccine for commercial sales in the fourth quarter of 2022 and continue to generate revenue from this product.

Our Vaccine Candidates

Among 22 vaccine candidates in our pipeline against 13 disease areas, we have five candidates at clinical stages, and we plan to file over 10 CTAs by the end of 2023 to advance multiple CTA-enabling and preclinical candidates to clinical trial stages. Out of this robust pipeline, we expect to obtain NDA approvals and/or launch new vaccine products every year from 2023 to 2025 and 12 other new products in and after 2026, to bring sustainable new growth drivers to our business with a continuously diversifying product portfolio. For details, see “Business—Our Strategies—Accelerate the development of vaccine candidates and continue to enrich our product portfolio.”

COVID-19 Vaccine Portfolio

According to CIC, ongoing COVID-19 pandemic has created a massive and sustainable vaccine market in the globe and the PRC, the number of vaccinees in the PRC is expected to increase from 1,150 million in 2021 to more than 1,300 million in 2025, and will remain stable at 1,400 million per year from 2026 to 2030. See “Industry Overview—COVID-19 Vaccine in the PRC—Massive and Sustained Demand for COVID-19 Vaccines.” We are adopting three technology routes in developing COVID-19 vaccine products, namely mRNA, inactivated virus and recombinant adenoviral vector, of which (i) our mRNA candidate against the Original Strain has reached the Phase III clinical trial stage. We are currently conducting a Phase II clinical trial in the PRC and have initiated a global Phase III clinical trial in June 2022 for our mRNA candidate. As of the Latest Practicable Date, six PRC vaccine developers were undertaking clinical trials for their respective mRNA COVID-19 vaccine candidates in the PRC or overseas, two of which (including us) reached Phase III clinical trials. We believe mRNA COVID-19 vaccines, once approved, would rapidly gain market share in China due to higher protective efficacy rates; (ii) inactivated candidates. We believe this product would become a competitive choice for people that prefer the well-validated inactivated technology route with less side effect concern; and (iii) the broad-spectrum COVID-19 candidate is a potential broad-spectrum vaccine against different coronaviruses such as SARS-CoV-2, SARS, MERS and so on.

We believe such comprehensive COVID-19 vaccine portfolio enables us to address the diverse vaccination demand, and to develop and supply COVID-19 vaccines in an efficient manner by fully utilizing our established vaccine platforms and manufacturing capabilities. We plan to first obtain NDA approval for and/or launch our mRNA vaccine against the Original Strain in the second quarter of 2023 to address the urgent and near-term market demand. For the longer future, we plan to launch the broad-spectrum recombinant adenoviral vector vaccine, which is not only effective against COVID-19 variants, but also risks of other coronaviruses and therefore have a larger market coverage beyond the COVID-19 vaccine market. As such, we believe each type of our COVID-19 vaccines will all have significant market opportunities. See “Business—Our Vaccine Products and Vaccine Candidates—Our Vaccine Candidates—COVID-19 Vaccine Candidates.”

SUMMARY

Pneumococcal Vaccine Portfolio

As of the Latest Practicable Date, we are developing three pneumococcal vaccine candidates, including (i) a PCV13 candidate. We are undergoing a Phase III clinical trial for our PCV13 candidate and had completed administration of the first dose of PCV13 for all test subjects in the Phase III clinical trial as of the Latest Practicable Date. In China, there are only three PCV13 products indicated for children below six years old and the penetration rate for approved age groups in 2021 was only around 11%. Such low penetration rate indicates a significant market potential for our PCV13 candidate in the PRC, for which we plan to rapidly advance its clinical development and launch this product in 2024; (ii) a PCV20 candidate that potentially offers better protection than PCV13 and PPSV23, for which we filed a CTA with the NMPA in June 2022 and plan to initiate Phase I clinical trial by the end of 2022; and (iii) a PPSV23 candidate currently in a Phase I clinical trial with a commercial launch plan in 2023.

EV71-CA16 Bivalent HFMD Vaccine Candidate

We are developing an innovative EV71-CA16 Bivalent HFMD Vaccine candidate. As of the Latest Practicable Date, all commercialized HFMD vaccines worldwide were single-valent vaccines, which protect only against the EV71 viral strain. Our EV71-CA16 HFMD Vaccine Candidate is a potentially global innovative bivalent HFMD vaccine against both the EV71 and CA16 viral strains. We filed a CTA for this candidate in July 2022 and plan to commence Phase I clinical trial in the second half of 2022.

Other Vaccine Candidates

We are also developing other vaccine candidates with large market potential, primarily including (i) DTP-based combination candidates (DTaP, DTcP and DTP-Hib); (ii) three human rabies vaccine candidates, consisting of one global innovative mRNA candidate, one candidate using serum-free Vero cells and one HDC-based candidate; (iii) one MCV4 candidate. CIC estimates that the market size of MCV4 to be RMB4.0 billion in 2030 in the PRC; (iv) two influenza vaccine candidates, one is recombinant universal influenza vaccine candidate based on adenoviral vector and the other is cell-based quadrivalent; (v) two HPV candidates including HPV2 and HPV9; (vi) one herpes vaccine candidate; and (vii) one RSV vaccine candidate.

OUR COMPETITIVE STRENGTHS

We believe the following competitive strengths have contributed to our success and differentiated us from our competitors:

- The second largest vaccine company by approved lot release volume in China covering the full value chain, empowered by a full spectrum of proven human vaccine platform technologies;
- Strive to access the best industry resources and innovative technologies to accelerate product development and commercialization;
- Broad COVID-19 candidates portfolio covering three validated technology routes, capturing massive market opportunities;
- Phase III mRNA COVID-19 vaccine candidate and mRNA platform technologies supported by proven manufacturing capabilities and established commercialization capabilities;
- Carefully selected vaccine portfolio consisting of market-leading vaccine products and vaccine candidates with advanced technologies and large market size, targeting major vaccine-preventable infectious diseases;

SUMMARY

- Strong R&D capabilities fueled up by the full-spectrum proven human vaccine platform technologies;
- Mass-scale manufacturing capabilities with proven quality management;
- Extensive sales network and highly experienced and efficient commercialization team; and
- Visionary founder with strong support from experienced execution team and industry-leading scientists.

OUR STRATEGIES

The key elements of our strategies are to:

- continue to strive to access to quality industry resources to expand and optimize our business;
- accelerate the development of vaccine candidates and continue to enrich our product portfolio;
- continue to solidify and expand market leadership by increasing sales and marketing efforts for approved vaccine products and commercializing new products;
- expand our production capabilities to support our future growth; and
- continue to attract, train and retain talent to further expand our capabilities.

COMPETITION

In terms of 2021 approved lot release volume (excluding COVID-19 vaccines), we are the second largest vaccine company in China, accounting for 7.4% of market share following CNBG, the state-owned vaccine conglomerate, which took up 35.5% of market share. In 2021, we accounted for 0.3% and 2.1% of the total vaccine sales revenue globally and in the PRC, respectively (excluding COVID-19 vaccines). See “Industry Overview—Overview of the PRC Vaccine Market—Competition and Entry Barriers of the PRC Vaccine Market”.

RESEARCH AND DEVELOPMENT

Our continued research and development of innovative and potential market-leading vaccines are empowered by our platform technologies, which cover all five proven human vaccine platform technologies worldwide, namely bacterial vaccine technologies, viral vaccine technologies, genetically engineered vaccine technologies, combination vaccine technologies and mRNA vaccine technologies. Our in-house R&D team primarily consists of (i) three vaccine research institutes, namely AIM Explorer, Liverna and AIM Jianchi; and (ii) the dedicated R&D team in each of our four operating subsidiaries, namely AIM Honesty, AIM Kanghuai, Rong'an Bio and AIM Weixin. We have also established our R&D management center at the Group level to coordinate and supervise all R&D activities across the research centers and operating subsidiaries. In addition, our in-house R&D team is supported by an external scientific advisory board that comprises prominent scientists in the PRC vaccine industry.

SUMMARY

We promote a cross-functional and cross-entity R&D approach in the Group. For example, the R&D team dedicated to each operating subsidiary primarily focuses on new vaccine varieties based on their respective major products and manufacturing specialties, enabling us to synergize R&D and manufacturing. For example, AIM Kanghuai and Rong'an Bio focus on viral vaccine platform technologies; AIM Honesty concentrates on genetically engineered vaccine platform technologies; and AIM Weixin is developing vaccine candidates using combination and bacterial vaccine platform technologies. Moreover, our three research institutions collaborate with the four Licensed Manufacturing Facilities or with one another from time to time to accelerate our pipeline development. For example, for our bacterial vaccine candidates, the research work is conducted by AIM Explorer, and AIM Weixin is responsible for vaccine development, including investigational vaccine supply for clinical trials, production scale-up studies and production process verification; and for mRNA COVID-19 vaccine development, Liverna has collaborated with AIM Explorer in clinical trials and manufacturing technologies transfer to Rong'an Bio.

In 2019, 2020, 2021 and the four months ended April 30, 2021 and 2022, our research and development costs amounted to RMB98.9 million, RMB157.8 million, RMB307.4 million, RMB81.9 million and RMB113.6 million, respectively, representing 10.4%, 9.6%, 19.6%, 17.6% and 41.3% of our revenue for corresponding periods, respectively. Our research and development costs increased during the Track Record Period as we advanced R&D of our rich pipeline of 22 vaccine candidates. In particular, our research and development costs increased by 94.8% from 2020 to 2021, driven by increases in research materials cost, professional service fee and research and development staff cost, as we advanced development programs of our vaccine candidates, including primarily our mRNA COVID-19 vaccine candidates, pneumococcal vaccine portfolio, inactivated COVID-19 vaccine candidates as well as our EV71-CA16 Bivalent HFMD Vaccine Candidate. Our research and development costs also increased by 38.7% from the four months ended April 30, 2021 to the same period in 2022 as we simultaneously advanced research and clinical development of various vaccine candidates, especially candidates in our COVID-19 and pneumococcal portfolios.

MANUFACTURING

We operate four individual Licensed Manufacturing Facilities in Rong'an Bio, AIM Honesty, AIM Kanghuai and AIM Weixin, with an aggregated GFA of approximately 128,219 sq.m. and a total designed annual production capacity of 91.3 million doses. According to CIC, the NMPA approved lot releases of 623.8 million doses of 46 vaccines against 26 diseases (exclusive of COVID-19 vaccines) in 2021, of which we contributed 7.4%, or approximately 46 million doses. In addition, all our four operating subsidiaries have maintained 100% pass rate in vaccine lot release audits by NIFDC under our operation. The following table sets forth the location, GFA, production capacity, responsible products and production line(s) of our four Licensed Manufacturing Facilities as of the Latest Practicable Date. Please see "Business—Manufacturing—Manufacturing Facilities and Production Capacity—Our Production Capacity" for details of the utilization rates of our Licensed Manufacturing Facilities during the Track Record Period.

Name	Location	GFA (sq.m.)	Annual bulk production capacity (million doses)	Responsible products	Production Line(s)
Rong'an Bio Licensed Manufacturing Facility	Ningbo, Zhejiang Province	25,318	25.0	Human rabies vaccine (Vero cell)	Two
AIM Honesty Licensed Manufacturing Facility	Dalian, Liaoning Province	11,877	45.0	Recombinant HBV vaccine (Hansenula Polymorpha)	One

SUMMARY

Name	Location	GFA (sq.m.)	Annual bulk production capacity (million doses)	Responsible products	Production Line(s)
AIM Kanghuai Licensed Manufacturing Facility	Taizhou, Jiangsu Province	18,711	5.3	Inactivated HAV vaccine	One
AIM Weixin Licensed Manufacturing Facility	Ningbo, Zhejiang Province	72,313	16.0	HFRS vaccine, mumps vaccine and MPSV4	Three

As the four Licensed Manufacturing Facilities have different product foci, each of them engages in production activities independently. Meanwhile, they collaborate with our internal R&D research institutions from time to time to accelerate our pipeline development. See “—Research and Development.” In addition, for sales and marketing of products from these Manufacturing Facilities, we have a centralized system to synchronize our marketing strategy and activities, therefore we consolidate quality sales and marketing resources at the Group level instead of dispersing into four operating subsidiaries, enabling us to build effective sales channels for and strong CDC recognition of our products.

Immediately before and during the Track Record Period, we suspended or ceased production of certain vaccine products. In 2018, we did not produce any human rabies vaccine (Vero cell) products due to preparation work for and a prolonged review process of the GMP certificate renewal. We resumed production by the end of 2018, and received the first lot release approval under the new GMP certificate in September 2019 and recovered back to uninterrupted commercial supply afterwards. From September 2018 to mid-February 2019, we did not produce any mumps vaccine products due to maintenance and testing in preparation for GMP certificate renewal. We ceased production of mumps vaccine products since February 2020 for the GMP inspection and upgrade of our production line. We passed the on-site GMP inspection in June 2020 and are currently working to improve certain aspects of our production process. We expect to resume mumps vaccine production in the second half of 2023. In addition, at the end of 2018, we ceased production of HFRS vaccine to relocate the relevant production line to new production lines with more advanced equipment and higher production capacity. We submitted the relocation approval application in April 2020 and sample HFRS vaccines to the relevant authorities in January 2021. After a prolonged inspection and approval process due to the COVID-19 pandemic, we passed GMP inspections in June 2022. We expect to produce new HFRS vaccine for commercial sales in the fourth quarter of 2022. We also ceased production of our HAV vaccines between May and September 2021 to perform maintenance and upgrades to our production facilities. We are currently undergoing necessary inspections and expect to produce new HAV vaccines for commercial sales in the fourth quarter of 2022. For details, see “Business—Manufacturing—Manufacturing Facilities and Production Capacity—Our Production Capacity.” The production suspension of our human rabies and mumps vaccine products in 2018, for instance, resulted in the decrease in revenue from these two vaccine products and in turn our relatively low total sales revenue in 2019. Nevertheless, we strove to control the negative impact by significantly increasing sales from our other vaccine products such as recombinant HBV vaccines and inactivated HAV vaccines, and therefore the overall impact was not material. More importantly, in 2020, after we had resumed production of our human rabies vaccine, sales revenue from this product increased by 140.5% from 2019 to 2020, and our total sales revenue also experienced rapid growth in 2020. See “Financial Information—Consolidated Statements of Profit or Loss—Revenue—Revenue by Vaccine Product.”

SUMMARY

We voluntarily undertook all the aforementioned production suspension or cessation in our ordinary course of business, and none of them was due to or associated with any issues in product quality or product liabilities. In addition, our Directors confirm that we did not incur any liabilities due to such production suspension or cessation, whether medical liabilities, liabilities to our customers or otherwise. Since we typically do not enter into sales contracts with our CDC customers before we have products available for sale, the production suspension or cessation did not result in the failure to fulfill contractual obligations to any of our customers.

SALES AND MARKETING

Our sales and marketing is centralized, and is specialized and market-oriented. We have a professional and dedicated in-house sales and marketing team assembled at the Group level, consisting of over 100 members. We adopt a two-pronged sales and marketing approach in managing and expanding our sales network. We have divided by geographic regions our in-house marketing team into four teams, namely Northern, Southern, Western and Eastern China teams. In each sales region, our in-house sales and marketing team formulates and supervises execution of overall marketing strategies, and covers certain areas in a few number of direct-controlled municipalities and large-population provinces for all or part of our products. To a larger extent, we engage third-party CSOs to cover areas where our in-house team has not established specific coverage.

Public Tenders and Pricing

We are required to participate in the public tender process held by different levels of CDCs in order to sell our vaccine products in the PRC. Public tenders for Class I vaccines are held by national or provincial-level CDCs. Public tenders for Class II vaccines are held by provincial-level CDCs. We generally compete with competitors on the bid price, clinical effectiveness and quality of each product, as well as reputation. Once we win a public tender, we will be eligible for selling vaccine products to CDCs.

During the Track Record Period, through successful bids at public tenders, we sold our Class I vaccine products to all 31 provincial-level CDCs and our Class II vaccine products to over 2,000 county-level CDCs in all 31 provinces across the PRC. In 2019, 2020, 2021 and the four months ended April 30, 2022, our tender success rate for both Class I and Class II vaccines was 100%.

OUR CUSTOMERS AND SUPPLIERS

During the Track Record Period, substantially all of our customers were provincial-level and county-level CDCs, to which we typically grant credit periods of 60 to 180 days. In 2019, 2020, 2021 and the four months ended April 30, 2022, the aggregate sales to our five largest customers were RMB85.2 million, RMB62.0 million, RMB81.7 million and RMB17.0 million, respectively, representing 8.9%, 3.8%, 5.1% and 6.1% of our revenue, respectively. Sales to our largest customer for the same periods were RMB26.4 million, RMB18.3 million, RMB21.3 million and RMB4.2 million, respectively, representing 2.8%, 1.1%, 1.4% and 1.5% of our revenue, respectively. We have stable relationships with our five largest customers with an average of 12 years.

During the Track Record Period, our major suppliers primarily consisted of suppliers of raw materials, manufacturing equipment, construction services, R&D technical services, CSO services, cold-chain storage and transport services. In 2019, 2020, 2021 and the four months ended April 30, 2022, our purchases from our five largest suppliers in the aggregate accounted for 27.1%, 36.1%, 44.0% and 48.0% of our total purchases, respectively. Purchases from our largest supplier during the Track Record Period, alone accounted for 7.2%, 13.9%, 24.5% and 26.4% of our total purchases in 2019, 2020, 2021 and the four months ended April 30, 2022, respectively. We enjoy long-term relationships with our five largest suppliers, with whom we have worked for 6 years on average. Credit terms given by our suppliers vary according to the type of goods and services they provide us.

SUMMARY

SUMMARY OF KEY FINANCIAL INFORMATION

This summary of historical financial information set forth below has been derived from, and should be read in conjunction with, our audited consolidated financial statements for the years ended December 31, 2019, 2020 and 2021 and the four months ended April 30, 2022, and the unaudited consolidated financial statements for the four months ended April 30, 2021, including the accompanying notes, set forth in the Accountants' Report set out in Appendix I to this prospectus, as well as the information set forth in "Financial Information" of this prospectus. Our financial information was prepared in accordance with IFRSs.

Summary of Consolidated Statements of Profit or Loss

The table below sets forth our consolidated statements of profit or loss with line items in amounts and as percentages of our revenue for the years and periods indicated derived from our consolidated statements of profit or loss and other comprehensive income set out in the Accountants' Report included in Appendix I to this prospectus:

	Year ended December 31,						Four months ended April 30,			
	2019		2020		2021		2021		2022	
	Amount	% of revenue	Amount	% of revenue	Amount	% of revenue	Amount	% of revenue	Amount	% of revenue
	(unaudited)									
	(in thousands of RMB, except for percentages)									
Revenue	951,648	100.0	1,637,970	100.0	1,570,129	100.0	464,926	100.0	275,255	100.0
Cost of sales	(218,803)	(23.0)	(283,882)	(17.3)	(275,429)	(17.5)	(80,858)	(17.4)	(55,280)	(20.0)
Gross profit	732,845	77.0	1,354,088	82.7	1,294,700	82.5	384,068	82.6	219,975	80.0
Other income and gains	26,163	2.7	40,714	2.5	53,622	3.4	21,256	4.6	8,314	3.0
Selling and distribution expenses	(330,009)	(34.7)	(533,249)	(32.6)	(460,114)	(29.3)	(156,778)	(33.7)	(117,944)	(42.8)
Administrative expenses	(157,181)	(16.5)	(198,697)	(12.1)	(1,167,979)	(74.4)	(79,160)	(17.0)	(85,023)	(30.9)
Research and development costs	(98,886)	(10.4)	(157,761)	(9.6)	(307,353)	(19.6)	(81,894)	(17.6)	(113,620)	(41.3)
Impairment losses on financial assets, net	2,103	0.2	(826)	(0.1)	(7,981)	(0.5)	(2,008)	(0.5)	(4,915)	(1.8)
Other expenses	(7,493)	(0.7)	(2,642)	(0.2)	(895)	*	(47)	*	(3,322)	(1.2)
Finance costs	(10,781)	(1.1)	(15,741)	(1.0)	(10,703)	(0.7)	(3,154)	(0.7)	(6,269)	(2.3)
Profit/(loss) before tax	156,761	16.5	485,886	29.6	(606,703)	(38.6)	82,283	17.7	(102,804)	(37.3)
Income tax expense	(36,947)	(3.9)	(85,472)	(5.2)	(69,170)	(4.4)	(24,606)	(5.3)	7,000	2.5
Profit/(loss) for the year/period	119,814	12.6	400,414	24.4	(675,873)	(43.0)	57,677	12.4	(95,804)	(34.8)

* Less than 0.1%

SUMMARY

We generated substantially all of our revenue from sales of vaccine products during the Track Record Period. We also generated revenue of RMB2.8 million and RMB28,000 from provision of research and development services related to mRNA-based drugs to Independent Third Parties in 2021 and the four months ended April 30, 2022, respectively. The following table sets forth a breakdown of our revenue by product for the periods indicated:

	Year ended December 31,						Four months ended April 30,			
	2019		2020		2021		2021		2022	
	Amount	% of revenue	Amount	% of revenue	Amount	% of revenue	Amount	% of revenue	Amount	% of revenue
(unaudited)										
(in thousands of RMB, except for percentages)										
Vaccine products										
Human rabies vaccine										
(Vero cell)	446,114	46.9	1,072,854	65.5	937,414	59.7	301,548	64.9	175,765	63.9
Recombinant HBV vaccines										
(Hansenula Polymorpha) ⁽¹⁾	354,910	37.3	404,781	24.7	523,252	33.3	136,872	29.4	77,425	28.1
Inactivated HAV vaccines										
(HDC) ⁽²⁾	87,249	9.2	97,221	5.9	86,057	5.5	20,473	4.4	15,819	5.7
MPSV4	—	—	26,739	1.6	18,666	1.2	4,411	1.0	6,218	2.3
Mumps vaccine	39,551	4.2	35,505	2.2	1,893	0.1	1,622	0.3	—	—
HFRS vaccine	23,824	2.4	870	0.1	—	—	—	—	—	—
Sub-total	<u>951,648</u>	<u>100.0</u>	<u>1,637,970</u>	<u>100.0</u>	<u>1,567,282</u>	<u>99.8</u>	<u>464,926</u>	<u>100.0</u>	<u>275,227</u>	<u>100.0</u>
Research and development										
services	—	—	—	—	2,847	0.2	—	—	28	*
Total	<u>951,648</u>	<u>100.0</u>	<u>1,637,970</u>	<u>100.0</u>	<u>1,570,129</u>	<u>100.0</u>	<u>464,926</u>	<u>100.00</u>	<u>275,255</u>	<u>100.00</u>

Notes:

* Less than 0.1%

(1) We have developed two recombinant HBV vaccine products, differentiated in terms of HBsAg concentration: 10µg HBsAg per dose and 20µg HBsAg per dose. See “Business—Our Vaccine Products and Vaccine Candidates—Our Vaccine Products—Recombinant HBV Vaccines (Hansenula Polymorpha).”

(2) We have developed two inactivated HAV vaccine products, differentiated in terms of isolated HAV antigen concentration: the 320Eu/0.5ml per dose indicated for the age group of one to 15 years old, and the 640Eu/0.5ml per dose indicated for people older than 15. See “Business—Our Vaccine Products and Vaccine Candidates—Our Vaccine Products—Inactivated HAV Vaccines (HDC).”

Our net profit increased from RMB119.8 million in 2019 to RMB400.4 million in 2020, primarily driven by our revenue growth as well as efficient operation cost and expense control. In 2021, we had a loss of RMB675.9 million, which was primarily due to (i) our share-based compensation expenses totaling RMB952.1 million, including a one-off share-based compensation expense of RMB896.9 million and other share-based compensation expenses of RMB55.2 million for other share awards and options granted to our employees, and (ii) an increase in research and development costs from RMB157.8 million to RMB307.4 million to develop our rich pipeline of 22 vaccine candidates. We had a net profit of RMB57.7 million in the four months ended April 30, 2021 but recorded a loss of RMB95.8 million in the same period in 2022, mainly because of a slowdown in sales amid COVID-19 outbreaks in China and as we rapidly advanced clinical trials of our vaccine candidates, which drove up our research and development costs. For a detailed discussion of our financial performance during the Track Record Period, see “Financial Information—Consolidated Statements of Profit or Loss.”

SUMMARY

Summary of Consolidated Statements of Financial Position

The following table sets forth selected information from our consolidated statements of financial position as of the dates indicated:

	As of December 31,			As of
	2019	2020	2021	April 30,
	(in thousands of RMB)			2022
Total current assets	1,346,308	2,438,458	2,358,684	2,344,660
Total current liabilities	1,190,969	1,130,969	1,570,042	1,877,272
Net current assets	155,339	1,307,489	788,642	467,388
Total non-current assets	1,604,414	2,249,495	5,713,669	6,020,923
Total assets less current liabilities	1,759,753	3,556,984	6,502,311	6,488,311
Total non-current liabilities	141,629	135,359	803,021	851,526
Net assets	1,618,124	3,421,625	5,699,290	5,636,785
Paid-in capital/Share capital	850,734	1,110,000	1,200,000	1,200,000
Reserves	688,593	2,311,625	3,692,595	3,627,062
Non-controlling interests	78,797	—	806,695	809,723
Total equity	1,618,124	3,421,625	5,699,290	5,636,785

Our net current assets significantly increased to RMB1,307.5 million as of December 31, 2020, primarily due to (i) an increase of RMB425.0 million in trade and bills receivables, which primarily corresponded with the 72.1% increase in revenue from 2019 to 2020, and (ii) an increase of RMB784.2 million in cash and cash equivalents, which was mainly due to proceeds from Pre-IPO Investments in 2020 (including capital increases in May, September and November 2020). See “History and Development—Pre-IPO Investments.” Our net current assets decreased by 39.7% to RMB788.6 million as of December 31, 2021, primarily due to a decrease of RMB456.1 million in cash and cash equivalents, which was mainly due to increased investment in our rich pipeline of 22 vaccine candidates. Our net current assets further decreased by 40.7% to RMB467.4 million as of April 30, 2022, primarily due to an increase of RMB326.1 million in interest-bearing bank borrowings as we obtained short-term bank loans to support our business operations and development.

Our non-current assets mainly include property, plant and equipment, right-of-use assets, goodwill and other intangible assets. Our goodwill amounted to RMB234.6 million, RMB234.6 million, RMB482.9 million and RMB482.9 million, and our other intangible assets amounted to RMB390.8 million, RMB356.9 million, RMB2,192.7 million and RMB2,211.7 million, as of December 31, 2019, 2020, 2021 and April 30, 2022, respectively. The significant increase of our other intangible assets from December 31, 2020 to December 31, 2021 was primarily reflecting the acquired deferred development costs in relation to mRNA drug candidates and mRNA technologies, which were acquired as part of the Liverna Acquisitions in May 2021. The fair value of such acquired deferred development costs was determined using multi-period excess earnings method taking into account the nature of the assets, using cash flow projections and the contributory asset charges. See “Financial Information—Discussion of Certain Key Balance Sheet Items—Other Intangible Assets.”

SUMMARY

In order to accelerate building up a competitive vaccine portfolio and manufacturing capabilities, we acquired Rong'an Bio, AIM Honesty, AIM Kanghuai and AIM Weixin between 2015 and 2017. As of January 1, 2019, we recorded accumulated losses of RMB389.8 million, primarily attributable to the accumulated losses of AIM Honesty and AIM Kanghuai before our acquisition and impairment of goodwill related to the acquisitions. After the acquisitions, we made comprehensive improvement from R&D, manufacturing to sales, which significantly improved our profitability. See “Financial Information—Discussion of Certain Key Balance Sheet Items—Accumulated Losses or Retained Profits.”

Our net assets decreased from RMB1,717.0 million as of January 1, 2019 to RMB1,618.1 million as of December 31, 2019, primarily due to (i) a RMB167.2 million decrease in capital reserve and a RMB265.8 million decrease in non-controlling interests, due to our acquisition of the then remaining equity interest in AIM Weixin in January 2019, after such acquisition AIM Weixin became our wholly-owned subsidiary. See “History and Development—Major Subsidiaries of Our Company—AIM Weixin;” and (ii) a RMB86.0 million decrease in non-controlling interests, due to dividends paid by Rong'an Bio to non-controlling shareholders. Such decrease was partially offset by (i) a RMB38.4 million increase in paid-in capital and a RMB229.6 million increase in capital reserve, as a result of capital contributions from shareholders in April 2019 and December 2019; and (ii) reduction in accumulated losses of RMB117.4 million and a RMB2.4 million increase in non-controlling interests, both attributable to our profit of RMB119.8 million in 2019.

Our net assets increased to RMB3,421.6 million as of December 31, 2020, primarily due to (i) a RMB259.3 million increase in share capital and a RMB2,353.8 million increase in capital reserve, due to completion of certain Pre-IPO Investments (including capital increases in May, September and November 2020); and (ii) a RMB379.3 million increase in retained profits and a RMB21.1 million increase in non-controlling interests, due to our profit of RMB400.4 million in 2020. Such increase was partially offset by a RMB1,131.5 million decrease in capital reserve and a RMB99.9 million decrease in non-controlling interests, due to our acquisition of the then remaining equity interest in Rong'an Bio and AIM Explorer in October 2020 and November 2020, respectively. See “History and Development—Major Subsidiaries of Our Company—Rong'an Bio” and “History and Development—Major Subsidiaries of Our Company—AIM Explorer.”

Our net assets further increased to RMB5,699.3 million as of December 31, 2021, primarily driven by (i) a RMB90.0 million increase in share capital and a RMB1,121.2 million increase in capital reserve, due to completion of capital increases in May 2021; (ii) a RMB952.6 million increase in share-based compensation reserves, due to share awards and options granted to our management and employees; and (iii) a RMB789.8 million increase in non-controlling interests, due to the Liverna Acquisitions in May 2021. See “History and Development—Pre-IPO Investments.” Meanwhile, we recorded (i) a RMB692.8 million decrease in retained profits and (ii) RMB16.9 million increase in non-controlling interests, due to our loss of RMB675.9 million in 2021.

Our net assets slightly decreased to RMB5,636.8 million as of April 30, 2022, mainly because we had a RMB95.8 million loss in the four months ended April 30, 2022 and, accordingly, recorded (i) a RMB93.8 million increase in accumulated losses and (ii) a RMB2.0 million decrease in non-controlling interests. The decrease was partially offset by a RMB28.3 million increase in share-based compensation reserves.

For details on changes of our equity, see our consolidated statements of changes in equity set forth in the Accountants' Report in Appendix I to this prospectus.

For a detailed discussion of our financial position, see “Financial Information—Discussion of Certain Key Balance Sheet Items.”

SUMMARY

Summary of Consolidated Statements of Cash Flows

The following table sets forth our cash flows for the periods indicated:

	Year ended December 31,			Four months ended April 30,	
	2019	2020	2021	2021	2022
	(unaudited)				
	(in thousands of RMB)				
Net cash flows generated from/(used in) operating activities	327,012	250,331	93,398	(91,308)	(123,329)
Net cash flows used in investing activities	(340,196)	(604,917)	(1,337,505)	(297,510)	(177,773)
Net cash flows (used in)/generated from financing activities	(130,447)	1,138,777	788,019	28,725	344,844
Net (decrease)/increase in cash and cash equivalents	(143,631)	784,191	(456,088)	(360,093)	43,742
Cash and cash equivalents at beginning of year/period . . .	462,270	318,639	1,102,830	1,102,830	646,742
Cash and cash equivalents at end of year/period	318,639	1,102,830	646,742	742,737	690,484

We had net cash flows generated from operating activities of RMB327.0 million, RMB250.3 million and RMB93.4 million for 2019, 2020 and 2021, respectively. We had net cash flows used in operating activities of RMB91.3 million in the four months ended April 30, 2021, primarily due to an increase in trade and bills receivables, and of RMB123.3 million in the same period in 2022, primarily due to our loss before tax. See “Financial Information—Liquidity and Capital Resources—Cash Flows” for more details.

Taking into account the financial resources available to us, including the expected cash flows generated from our operations, cash and cash equivalents and unutilized banking facilities as of July 31, 2022, and the estimated net proceeds from the Global Offering, our Directors are of the opinion that we will have sufficient working capital required to fund our operations for at least the next 12 months from the date of this prospectus.

Key Financial Ratios

The following table sets forth the selected key financial ratios for the periods or as of the dates indicated:

	Year ended/as of December 31,			Four months ended/as of April 30,	
	2019	2020	2021	2021	2022
Gross margin ⁽¹⁾	77.0%	82.7%	82.5%	82.6%	80.0%
Net margin ⁽²⁾	12.6%	24.4%	(43.0%) ⁽⁶⁾	12.4%	(34.8%) ⁽⁷⁾
Current ratio ⁽³⁾	1.1	2.2	1.5	N/A	1.2
Quick ratio ⁽⁴⁾	0.9	1.9	1.3	N/A	1.0
Gearing ratio ⁽⁵⁾	26.2%	6.9%	11.4%	N/A	17.6%

SUMMARY

Notes:

- (1) Gross margin equals gross profit divided by revenue for the period.
- (2) Net margin equals profit/(loss) for the year/period divided by revenue for the period.
- (3) Current ratio equals current assets divided by current liabilities as of the end of the period.
- (4) Quick ratio equals current assets less inventories divided by current liabilities as of the end of the period.
- (5) Gearing ratio equals total financial indebtedness (including interest-bearing bank borrowings, lease liabilities and amounts due to related parties) divided by total equity as of the end of the period.
- (6) We had a loss of RMB675.9 million in 2021 primarily due to (i) our share-based compensation expenses totaling RMB952.1 million, including a one-off share-based compensation expense of RMB896.9 million and other share-based compensation expenses of RMB55.2 million for other share awards and options granted to our employees, and (ii) an increase in research and development costs from RMB157.8 million to RMB307.4 million to develop our rich pipeline of 22 vaccine candidates.
- (7) We had a loss of RMB95.8 million in the four months ended April 30, 2022 mainly because of a slowdown in sales amid COVID-19 outbreaks in China and as we rapidly advanced clinical trials of our vaccine candidates, which drove up our research and development costs.

Our gross margin increased from 77.0% in 2019 to 82.7% in 2020, which was primarily because our sales of Class II vaccine products increased as a primary source of our total revenue. Our gross margin remained relatively stable from 2020 to 2021. Our gross margin decreased from 82.6% in the four months ended April 30, 2021 to 80.0% in the same period in 2022, primarily due to increased provision for impairment of inventories and also as we continued to incur overhead manufacturing cost despite the downturn in sales over the same period. See “Financial Information—Key Financial Ratios” for a more detailed discussion of our key financial ratios.

Cost Structure

Our cost of sales mainly includes manufacturing cost and raw materials cost. We implement a series of measures to control our manufacturing cost. For example, we have devoted significant efforts to continuously improve our production efficiency through upgrading our manufacturing facilities as well as dynamically adjust the production capacity allocation. In addition, we also established long-term and amicable business relationships with our high-quality suppliers during the Track Record Period, which enabled us to maintain stable supply and prices of our raw materials. The following table sets forth a breakdown of our cost of sales by nature for the periods indicated:

	Year ended December 31,						Four months ended April 30,			
	2019		2020		2021		2021		2022	
	Amount	% of revenue	Amount	% of revenue	Amount	% of revenue	Amount	% of revenue	Amount	% of revenue
(unaudited)										
(in thousands of RMB, except for percentages)										
Manufacturing cost	105,843	11.1	124,898	7.6	110,783	7.0	34,777	7.5	23,187	8.5
Raw materials cost	52,159	5.5	81,482	5.0	77,441	4.9	22,387	4.8	13,856	5.0
Direct labor cost	25,812	2.7	34,972	2.1	31,803	2.0	9,333	2.0	5,544	2.0
Transportation cost	17,250	1.8	19,717	1.2	16,808	1.1	5,243	1.1	2,888	1.0
Tax and surcharge	12,208	1.3	16,225	1.0	16,923	1.1	1,891	0.4	1,194	0.4
Provision for impairment of inventories	5,531	0.6	6,588	0.4	21,671	1.4	7,227	1.6	8,611	3.1
Total	218,803	23.0	283,882	17.3	275,429	17.5	80,858	17.4	55,280	20.0

SUMMARY

Our operating expenses mainly include selling and distribution expenses, administrative expenses, and research and development costs. To optimize our selling and distribution expenses management, we have centralized our sales and marketing function to synchronize our marketing strategy and activities, which enables us to consolidate and integrate quality resources at headquarters. In addition, we have improved and would continue to improve the management of our CSOs to increase our sales efficiency, and thereby achieving a high cost-efficiency in our sales and marketing activities. Our administrative expenses increased significantly from 2020 to 2021, primarily reflecting a one-off share-based compensation expense of RMB896.9 million, as well as increases in remuneration and recurring share-based compensation to our administrative staff. Our research and development costs also increased significantly from 2020 to 2021 and from the four months ended April 30, 2021 to the same period in 2022 to develop our rich pipeline of 22 vaccine candidates. The following table sets forth a breakdown of our operating expenses by nature for the periods indicated:

	Year ended December 31,						Four months ended April 30,			
	2019		2020		2021		2021		2022	
	Amount	% of revenue	Amount	% of revenue	Amount	% of revenue	Amount	% of revenue	Amount	% of revenue
(unaudited)										
(in thousands of RMB, except for percentages)										
Selling and distribution expenses	330,009	34.7	533,249	32.6	460,114	29.3	156,778	33.7	117,944	42.8
Administrative expenses	157,181	16.5	198,697	12.1	1,167,979	74.4	79,160	17.0	85,023	30.9
Research and development costs	98,886	10.4	157,761	9.6	307,353	19.6	81,894	17.6	113,620	41.3
Total	586,076	61.6	889,707	54.3	1,935,446	123.3	317,832	68.4	316,587	115.0

See “Financial Information—Significant Factors Affecting our Financial Condition and Results of Operations—Our Ability to Control Operating Costs and Expenses” and “Financial Information—Consolidated Statements of Profit or Loss” for a detailed discussion on our cost structure.

FUTURE PLANS AND USE OF PROCEEDS

We estimate that we will receive net proceeds of approximately HK\$70.01 million from the Global Offering, assuming that the Over-allotment Option is not exercised and an Offer Price of HK\$16.16 per H Share, after deducting underwriting commissions and other estimated expenses payable by us in connection with the Global Offering.

We intend to use these net proceeds for the following purposes:

- approximately 60%, or HK\$42.00 million, to be allocated to advance R&D of our vaccine candidates and to continue to enrich our vaccine pipeline;
- approximately 35%, or HK\$24.50 million, to be allocated to fund the capital expenditure on the construction of new production facilities to expand our production capacity for new vaccine products; and
- approximately 5%, or HK\$3.51 million, to be invested in our sales and marketing activities, including to expand our sales and marketing team, fund more academic promotion activities, and conduct pre-launch marketing activities for our new vaccine products.

SUMMARY

See “Future Plans and Use of Proceeds” for details. See “Business—Our Strategies—Accelerate the development of vaccine candidates and continue to enrich our product portfolio” for our plan to develop our vaccine candidates; see “Business—Our Strategies—Expand our production capabilities to support our future growth” for our plan to construct new production facilities; and see “Business—Our Strategies—Continue to solidify and expand market leadership by increasing sales and marketing efforts for approved vaccine products and commercializing new products” for our plan to enhance our sales and marketing capabilities.

GLOBAL OFFERING STATISTICS

All statistics in the following table are based on the assumptions that the Global Offering has been completed and 9,714,000 new H Shares are issued pursuant to the Global Offering.

	Based on the Offer Price of HK\$16.16
Market capitalization of our Shares ⁽¹⁾	HK\$19.549 billion
Unaudited pro forma adjusted net tangible assets per Share ⁽²⁾	HK\$2.93

Notes:

- (1) The calculation of the market capitalization of our Shares is based on the assumption that 1,209,713,999 Shares will be in issue and outstanding immediately following the completion of the Global Offering, assuming the Over-allotment Option is not exercised and without taking into account any additional Shares to be issued upon the exercise of the options granted under the Pre-IPO ESOP.
- (2) The unaudited pro forma adjusted consolidated net tangible assets attributable to Shareholders of the Company per Share is arrived at by dividing the unaudited pro forma adjusted net tangible assets by 1,209,713,999 shares, being the number of shares in issue assuming that the Global Offering had been completed on April 30, 2022, without taking account of the exercise of the Over-allotment Option. The unaudited pro forma adjusted consolidated net tangible assets per Share is converted into Hong Kong dollars at an exchange rate of RMB0.88297 to HK\$1.00 prevailing on the Latest Practicable Date.

DIVIDENDS

No dividend was paid or declared by our Company during the Track Record Period. Under the PRC Company Law and the Articles of Association, we are required to allocate 10% of our after-tax profits at each year-end to statutory reserve until its balance reaches 50% of our Company’s registered capital, and dividends shall only be paid out of accumulated distributable profits for the year. In view of our accumulated losses as of April 30, 2022, as advised by our PRC Legal Advisor, we shall not declare or pay any dividend until we have distributable profits after the accumulated losses have been made up and statutory reserves have been drawn in accordance with relevant laws and regulations and the Articles of Association. In the future, our Board of Directors will formulate our profit distribution plan based on our results of operations, cash flow, financial condition, future business prospects, statutory and regulatory restrictions on the payment of dividends and other factors that our Board deems relevant. All of our Shareholders have equal rights to dividends and other distributions proportionate to their shareholding.

We adopt a discretionary dividend policy, which aims to provide a reasonable return on investment for our shareholders while taking into account the cash needs of our business operations. According to our internal policy, the dividends shall not exceed our accumulated distributable profits. Following the Listing of our H Shares on the Hong Kong Stock Exchange, any dividends to be paid to our H Share shareholders will be declared in RMB and paid in Hong Kong dollars and dividends to be paid to our domestic shareholders will continue to be declared and paid in RMB. If our Board does not propose a cash dividend distribution plan when we have distributable profits, we shall consult our independent directors and disclose the reasons and the use of the retained funds in our periodic report.

SUMMARY

LISTING EXPENSES

Our Listing expenses mainly comprise legal and other professional fees paid and payable to the professional parties, commissions payable to the Underwriters, and printing and other expenses for their services rendered in relation to the Listing and the Global Offering. The total Listing expenses payable by our Company are estimated to be approximately HK\$87.0 million, including (a) underwriting-related expenses of approximately HK\$7.8 million and (b) non-underwriting related expenses of approximately HK\$79.2 million, which consist of (i) fees and expenses of legal advisors and accountants of approximately HK\$57.4 million and (ii) other fees and expenses of approximately HK\$21.8 million, assuming the Over-allotment Option is not exercised and based on an Offer Price of HK\$16.16. These Listing expenses represent 55.4% of the gross proceeds from the Global Offering, assuming the Over-allotment Option is not exercised and based on an Offer Price of HK\$16.16.

No Listing expenses were recognized and charged to our consolidated statements of profit or loss and other comprehensive income in 2019 and 2020. Of the Listing expenses of approximately HK\$87.0 million: (i) approximately HK\$3.6 million and HK\$1.3 million were recognized and charged to our consolidated statements of profit or loss and other comprehensive income in 2021 and the four months ended April 30, 2022, respectively; (ii) approximately HK\$72.9 million is expected to be charged to our consolidated statements of profit or loss and other comprehensive income after April 30, 2022; and (iii) approximately HK\$9.2 million is expected to be accounted for as a deduction from equity upon Listing.

OUR CONTROLLING SHAREHOLDER

Immediately after the completion of the Global Offering and the Conversion of Domestic Shares into H Shares (assuming the Over-allotment Option and the options under the Pre-IPO ESOP are not exercised), Mr. Yan ZHOU, directly and through (a) Tibet Sincere Heart and (b) Zhongrenxing, will hold approximately 35.83% of the total issued share capital of our Company. Accordingly, Mr. Yan ZHOU will be our Controlling Shareholder upon Listing as defined under the Listing Rules. See “Relationship with Controlling Shareholder.”

OUR PRE-IPO INVESTORS

Since the establishment of our Company, we have received several rounds of Pre-IPO Investments. Our Pre-IPO Investors include but are not limited to CMBI, Gao Ling Xiheng, Loyal Valley Letai, Ningbo Free Trade Zone and Tongchuang Investments. For further details of the identity and background of our Pre-IPO Investors, and the principal terms of the Pre-IPO Investments, see “History and Development—Pre-IPO Investments.”

CHANGSHENG INCIDENT AND ENHANCED QUALITY CONTROL MEASURES

The Changsheng Incident had profound and long-lasting impact on the vaccine industry in the PRC. In July 2018, the China Food and Drug Administration (as its name then was, the “CFDA”) found that Changchun Changsheng, a company unrelated to us, had violated GMP standards, including falsifying production data of its human rabies vaccines. After further investigation, CFDA uncovered additional violations, and terminated Changchun Changsheng’s relevant drug production license, among others. The Changsheng Incident caused great public concerns on the safety of vaccine products and integrity of vaccine makers in general. CFDA subsequently launched a nation-wide investigation on all vaccine manufacturers with respect to the whole production process, from procurement of raw materials to lot releases.

SUMMARY

The Changsheng Incident created immediate impact on the vaccine market in the PRC. The lot release volume of human rabies vaccine market decreased rapidly in 2018 and 2019, from 77.9 million doses in 2017 to 58.8 million doses in 2019, mainly because Changchun Changsheng, the second largest human rabies vaccine manufacturer in China before the Changsheng Incident, ceased production. According to CIC, Changchun Changsheng had supplied approximately 10 million doses of human rabies vaccines in the PRC every year from 2014 to 2017. The lot release volume of human rabies vaccine went back to normal in 2020 as other qualified human rabies vaccine manufacturers such as our Group and Liaoning Chengda increased their manufacturing capability in order to meet market needs. Furthermore, due to the Changsheng Incident, on June 29, 2019, the PRC National People's Congress passed the Vaccine Administration Law (《疫苗管理法》), which was China's first piece of legislation on vaccine management. See "Regulatory Overview—PRC Regulation—Regulatory Provisions—Regulations Relating to Drugs". Based on the Vaccine Administration Law, the PRC government enforces strictly controls on the clinical research, manufacturing, sales and distribution of vaccines.

Although we already had a good quality control record before the Changsheng Incident, we were committed to enhancing our internal quality controls after the incident. Measures that we took included conducting training for our employees in our four vaccine manufacturing subsidiaries on the newly promulgated laws and regulations; in accordance with the requirements under the Vaccine Administration Law, implementing enhanced quality control measures over various production processes; and setting up various IT systems for product tracking. During the Track Record Period and up to the Latest Practicable Date, we had no material product quality or safety issues.

IMPACT OF THE COVID-19 OUTBREAK

In December 2019, a respiratory illness known as COVID-19 caused by a novel strain of coronavirus emerged has spread globally since then. We have employed various measures to mitigate any impact the COVID-19 outbreak may have on our operations in the PRC or the manufacturing and sales of our vaccine products and development of our vaccine candidates, including offering personal protection equipment such as masks to our employees, regularly checking the body temperature of our employees and closely monitoring their health conditions.

During the Track Record Period, sales of our vaccine products as well as our research and development in vaccine candidates had been adversely affected by outbreaks of COVID-19 and resulting government measures in the PRC. For example, some of our R&D staff were unable to work on-site at our R&D facilities in February and March 2020 due to travel restrictions and home-office policies implemented by the PRC government, which interrupted our research activities and caused delays in the clinical trials of some of our vaccine candidates. In addition, due to the impact of COVID-19, there have been a diversion of healthcare resources away from the conduct of clinical trials to focus on pandemic concerns, and delays in regulatory review of CTA applications due to prioritization of the review of COVID-19 vaccine candidates. In the second half of 2021, due to a resurgence of COVID-19 in certain cities in China, CDCs had to mobilize and focus more resources on COVID-19 vaccination (e.g., cold-chain logistics resources and physicians for vaccination) and delayed certain procurement and vaccination of other vaccines, which had an adverse impact on our sales volume and revenue. As a result, from 2020 to 2021, our revenue slightly decreased by 4.1% and our gross profit slightly decreased by 4.4%. Our Directors believe that such decreases were in line with the market conditions amid the COVID-19 recurrence in this period and were not significant.

SUMMARY

More recently, since early 2022, the Omicron variant has become the dominant variant and led to a new wave of COVID-19 resurgence in China, causing local outbreaks in various cities and areas. To achieve “dynamic-zero COVID-19 cases” (動態清零), the PRC government has adopted a series of prevention and containment measures, including but not limited to, quarantines, epidemiological investigations on infection sources and close contacts, large-scale community nucleic acid testing, travel restrictions, control on public events, and continuous booster vaccination measures. Such measures posed obstacles to our sales, marketing and promotion activities, particularly in the first quarter of 2022. Inter-city and inter-province transportation restrictions also interrupted our delivery to CDCs. Moreover, as CDCs continued to allocate and focus their resources on COVID-19 prevention and containment, many of them delayed or reduced procurement and vaccination of other vaccines. Sales volume of our human rabies vaccines and HBV vaccines decreased by 42.2% and 73.0%, and our revenue and gross profit decreased by 40.8% and 42.7%, respectively, from the four months ended April 30, 2021 to the same period in 2022. According to CIC, such decreases were consistent with the prevailing market conditions. For instance, over the same period, China’s total approved lot release volume of human rabies vaccines and HBV vaccines decreased by approximately 82.4% and 52.4%, respectively. See “Financial Information—Period-to-Period Comparison of Results of Operations.”

Our sales activities recovered in the remainder of the second quarter of 2022, as COVID-19 outbreaks gradually subsided and government prevention and containment measures were gradually relaxed in the PRC. In the second quarter of 2022, we resumed and actively undertook marketing and promotion activities to boost our sales. At the same time, CDCs began to replenish their stocks. Our revenue in May and June 2022 increased significantly as compared to the same period in 2021, driven in particular by increases in sales of our human rabies vaccines and recombinant HBV vaccines. For instance, sales volume and revenue of our human rabies vaccines in May and June 2022 almost doubled that of the same period in 2021.

We did not experience any material interruptions on our R&D activities or ongoing clinical trials since the beginning of 2022. Our in-house R&D team in our three vaccine research institutes and four operating subsidiaries proceeded with all of our pre-clinical studies mostly according to plan. Although some of our employees could not access office or lab facilities, such as those of AIM Explorer, they could continue their R&D work remotely. On the other hand, because none of our clinical trial sites were located in cities subject to the most stringent containment measures, our clinical trials were not materially affected. Likewise, while Rong’an Bio briefly suspended production of certain batches of human rabies vaccines in early January 2022 due to a local close-loop management in Beilun, Ningbo city, on the whole, this wave of COVID-19 resurgence did not have material interruptions on our production activities.

We have mobilized, and will continue to mobilize internal and external resources and leverage our operating capabilities to minimize the adverse effect on our business caused by the COVID-19 outbreak. For example, all of our operating subsidiaries had undertaken preventative measures such as stockpiling raw materials and procuring raw materials produced in the PRC. As a result, all of them had sufficient raw materials since the beginning of 2022 even when delivery of new stock was disrupted. According to CIC, the PRC government has made great disease containment efforts, which has gradually brought this wave of COVID-19 resurgence under control. Assuming that the COVID-19 resurgence in China does not deteriorate, our Directors are of the view that the COVID-19 pandemic is not expected to have a material adverse impact on the Group for the rest of 2022. Nevertheless, it is uncertain when and whether COVID-19 could be contained globally. We cannot guarantee you, however, that the COVID-19 outbreak will not further escalate or have a material adverse effect on our results of operations, financial position or prospects. See “Risk Factors—Risks Relating to Our Business and Industry—Other Risks Relating to Our Business—The COVID-19 outbreak in China and worldwide has adversely affected, and may continue to adversely affect, our business, results of operations and financial condition. Natural disasters, epidemics, acts of war or terrorism or other factors beyond our control in the future may have a material adverse effect on our business operations, financial condition and results of operations.”

SUMMARY

RECENT DEVELOPMENTS AND NO MATERIAL ADVERSE CHANGE

According to our PRC Legal Advisor, from April 30, 2022 up to the Latest Practicable Date, there had been no material regulatory changes relevant to the vaccine industry in the PRC. In addition, we had not experienced any shortage of electricity supply in our business operations amid recent power restrictions in certain provinces in China as of the Latest Practicable Date. For details of the impact of recent COVID-19 resurgence on our business and results of operations, see “—Impact of the COVID-19 Outbreak.”

We expect to record net loss for the year ending December 31, 2022, which is primarily attributable to a significant forecast increase in our research and development costs driven by the advancement of multiple vaccine candidates, especially candidates expected to be launched in near term, such as the COVID-19 vaccine pipeline especially the mRNA COVID-19 vaccine candidate, PCV13, PPSV23 and serum-free Vero cell human rabies vaccine candidates.

We expect to further improve our financial performance and achieve net profitability through (i) increasing sales of existing products through strengthening marketing efforts; (ii) advancing the development of our pipeline products to launch new products and bring additional sustainable growth drivers to further increase our revenue; and (iii) continuing to control our operating expenses and optimize our cost structure, assuming there are no changes in extrinsic factors that would materially influence the vaccine market in China generally or our Group specifically such as evolvement of COVID-19. See “Business—Our Vaccine Products and Vaccine Candidates—Our Vaccine Products.”

Our Directors confirm that, up to the date of this prospectus, except as disclosed above, there has been no material adverse change in our financial or trading position since April 30, 2022 (being the date on which the latest audited consolidated financial information of our Group was prepared) and there is no event since April 30, 2022 which would materially affect the information shown in our consolidated financial statements included in the Accountants’ Report in Appendix I to this prospectus.

RISK FACTORS

Our operations and the Global Offering involve certain risks and uncertainties, some of which are beyond our control and may affect your decision to invest in us and/or the value of your investment. Major risks we face include, among others, (i) if we are unable to compete effectively in the highly competitive vaccine industry, our business, financial condition, results of operations and prospects could be materially and adversely affected. Some of the competitors, such as CNBG (a state-owned vaccine conglomerate), may have a longer operation history, are in a bigger size, or may have greater financial and/or other resources than we do; (ii) our market-leading vaccine products generate a significant portion of our profits and cash flows, and decrease in their revenue or market share would adversely affect our business; (iii) if our bids in the public tender process are not successful or we fail to secure subsequent product orders, our business may be adversely affected; (iv) the manufacturing of vaccines is a highly exacting and complex process, and if we encounter problems in manufacturing our products, our business could suffer; (v) any failure to perform proper quality control and quality assurance would have a material adverse effect on our business and financial results; (vi) development of new vaccine products can be time-consuming and costly and we cannot guarantee successful regulatory approval; (vii) an impairment in the carrying value of goodwill and/or other intangible assets could have a material adverse effect on our financial condition and results of operations and (viii) any failure to comply with applicable law or regulations, or failure to maintain governmental licenses or permits could jeopardize our reputation and business. These risks are not the only significant risks that may affect the value of our Shares. See “Risk Factors” for details of risks and uncertainties related to us.

DEFINITIONS

In this prospectus, unless the context otherwise requires, the following terms shall have the meanings set out below. Certain other terms are explained in the section headed “Glossary of Technical Terms” in this prospectus.

“AIM Explorer”	AIM Explorer Biomedical R&D Co., Ltd. (艾美探索者生命科學研發有限公司), a company incorporated under the laws of PRC on September 10, 2018, a wholly-owned subsidiary of our Company
“AIM Honesty”	AIM Honesty Biopharmaceutical Co., Ltd. (艾美誠信生物製藥有限公司), a company incorporated under the laws of PRC on September 20, 1993, a wholly-owned subsidiary of our Company
“AIM Jianchi”	AIM Jianchi Biopharmaceutical (Shanghai) Co., Ltd. (艾美堅持生物製品(上海)有限公司), a company incorporated under the laws of PRC on May 17, 2021 and owned as to 90% by our Company and 10% by Chengdu Bole Action Biological Products Co., Ltd. (成都伯樂行動生物製品有限公司), an Independent Third Party
“AIM Kanghuai”	AIM Kanghuai Biopharmaceutical (Jiangsu) Co., Ltd. (艾美康淮生物製藥(江蘇)有限公司), a company incorporated under the laws of PRC on October 13, 2011, a wholly-owned subsidiary of our Company
“AIM Weixin”	AIM Weixin Biopharmaceutical (Zhejiang) Co., Ltd. (艾美衛信生物藥業(浙江)有限公司), a company incorporated under the laws of PRC on December 24, 2002 and owned as to 94.25% by our Company and 5.75% by Beibi Road
“Articles” or “Articles of Association”	the articles of association of the Company adopted on June 9, 2021 which will become effective upon the Listing Date, as amended from time to time, a summary of which is set out in Appendix V to this prospectus
“associate(s)”	has the meaning ascribed to it under the Listing Rules
“Beibi Road”	Shanghai Beibi Road Cultural Development Co., Ltd. (上海北璧之路文化發展有限公司), a company incorporated under the laws of PRC on March 28, 2017, a wholly-owned subsidiary of our Company
“BioKangtai”	Shenzhen Kangtai Biological Products Co., Ltd. (深圳康泰生物製品股份有限公司)
“BioNTech”	BioNTech SE, a Germany-based multinational biotechnology corporation
“Board” or “Board of Directors”	the board of Directors of our Company

DEFINITIONS

“Business Day(s)”	any day (other than a Saturday, Sunday or public holiday in Hong Kong) on which banks in Hong Kong are generally open for normal banking business
“CCASS”	the Central Clearing and Settlement System established and operated by HKSCC
“CCASS Clearing Participant”	a person admitted to participate in CCASS as a direct clearing participant or a general clearing participant
“CCASS Custodian Participant”	a person admitted to participate in CCASS as a custodian participant
“CCASS EIPO”	the application for the Hong Kong Offer Shares to be issued in the name of HKSCC Nominees and deposited directly into CCASS to be credited to your or a designated CCASS Participant’s stock account through causing HKSCC Nominees to apply on your behalf, including by (i) instructing your broker or custodian who is a CCASS Clearing Participant or a CCASS Custodian Participant to give electronic application instructions via CCASS terminals to apply for the Hong Kong Offer Shares on your behalf, or (ii) if you are an existing CCASS Investor Participant, giving electronic application instructions through the CCASS Internet System (https://ip.ccass.com) or through the CCASS Phone System (using the procedures in HKSCC’s “An Operating Guide for Investor Participants” in effect from time to time). HKSCC can also input electronic application instructions for CCASS Investor Participants through HKSCC’s Customer Service Center by completing an input request
“CCASS Investor Participant”	a person admitted to participate in CCASS as an investor participant who may be an individual, joint individuals or a corporation
“CCASS Participant”	a CCASS Clearing Participant, a CCASS Custodian Participant or a CCASS Investor Participant
“CD8+ T cells”	cytotoxic T cell, a T lymphocyte that usually bears CD8 molecular markers on its surface and functions in cell-mediated immunity by destroying a cell (such as a virus-infected cell) having a specific antigenic molecule displayed on its surface
“CDE”	the Center for Drug Evaluation of NMPA (國家藥品監督管理局藥品審評中心), a division of the NMPA mainly responsible for review and approval of CTA and NDA
“Changchun Changsheng”	Changchun Changsheng Biological Technology Co., Ltd. (長春長生生物科技有限责任公司), a PRC company which had violated GMP standards in 2018, including falsifying production data of its human rabies vaccines

DEFINITIONS

“Changsheng Incident”	an incident involving Changchun Changsheng, whose violations of GMP standards was uncovered in July 2018 and drug production license was subsequently terminated by the China Food and Drug Administration (國家食品藥品監督管理總局), which is the predecessor of NMPA
“Chengdu Bole”	Chengdu Bole Action Biological Products Co., Ltd. (成都伯樂行動生物製品有限公司)
“China” or “the PRC”	the People’s Republic of China, which for the purpose of this prospectus and for geographical reference, excludes Hong Kong Special Administration Region, Macau Special Administration Region and Taiwan
“CIC”	China Insights Industry Consultancy Limited, our industry consultant, which is an Independent Third Party
“CIC Report”	an independent market research report commissioned by us and prepared by CIC for the purpose of this prospectus
“CNBG”	Sinopharm CNBG (China National Pharmaceutical Group, China National Biotec Group) (中國醫藥集團中國生物技術股份有限公司), primarily including Beijing Institute of Biological Products Co., Ltd. (北京生物製品研究所有限責任公司), Changchun Institute of Biological Products Co., Ltd. (長春生物製品研究所有限責任公司), Chengdu Institute of Biological Products Co., Ltd. (成都生物製品研究所有限責任公司), Lanzhou Institute of Biological Products Co., Ltd. (蘭州生物製品研究所有限責任公司), Wuhan Institute of Biological Products Co., Ltd. (武漢生物製品研究所有限責任公司), Shanghai Institute of Biological Products Co., Ltd. (上海生物製品研究所有限責任公司) and Beijing Tiantan Biological Products Co., Ltd. (北京天壇生物製品股份有限公司)
“Companies Ordinance”	the Companies Ordinance (Chapter 622 of the Laws of Hong Kong), as amended, supplemented or otherwise modified from time to time
“Companies (Winding Up and Miscellaneous Provisions) Ordinance”	the Companies (Winding Up and Miscellaneous Provisions) Ordinance (Chapter 32 of the Laws of Hong Kong), as amended, supplemented or otherwise modified from time to time
“Company”, “our Company”, “the Company” or “AIM Vaccine”	AIM Vaccine Co., Ltd. (艾美疫苗股份有限公司), a joint stock company incorporated in the PRC with limited liability on November 9, 2011
“Company Law” or “PRC Company Law”	the Company Law of the People’s Republic of China (中華人民共和國公司法), as amended, supplemented or otherwise modified from time to time
“connected person(s)”	has the meaning ascribed to it under the Listing Rules

DEFINITIONS

“connected transaction(s)”	has the meaning ascribed to it under the Listing Rules
“Controlling Shareholder(s)”	refers to Mr. Yan ZHOU. See “Relationship with Controlling Shareholder” for his shareholding in our Company and the implications under the Listing Rules
“Conversion of Domestic Shares into H Shares”	the conversion of 481,111,111 Domestic Shares into H Shares on a one-to-one basis immediately upon completion of the Global Offering
“Coxsackie adenovirus receptor (CAR)”	a protein that belongs to the immunoglobulin superfamily and acts as a receptor for some adenovirus types and group B coxsackieviruses
“CSDC”	China Securities Depository and Clearing Corporation Limited (中國證券登記結算有限責任公司)
“CSO”	contract sales organization
“CSRC”	China Securities Regulatory Commission (中國證券監督管理委員會), a regulatory body responsible for the supervision and regulation of the PRC national securities markets
“Director(s)” or “our Director(s)”	the director(s) of our Company
“Domestic Share(s)”	ordinary share(s) in the issued share capital of our Company, with a nominal value of RMB1.00 each, which are subscribed for and paid up in Renminbi by domestic investors
“EIT Law”	the Enterprise Income Tax Law of the PRC (中華人民共和國企業所得稅法), as amended, supplemented or otherwise modified from time to time
“Extreme Conditions”	extreme conditions caused by a super typhoon as announced by the government of Hong Kong
“FDA”	the United States Food and Drug Administration
“FRC”	the Financial Reporting Council, the full-fledged independent auditor regulator of Hong Kong established under the Financial Reporting Council Ordinance (Chapter 588 of the Laws of Hong Kong)
“Global Offering”	the Hong Kong Public Offering and the International Offering
“GREEN Application Form(s)”	the application form(s) to be completed by the HK eIPO White Form Service Provider designated by our Company

DEFINITIONS

“Group”, “the Group”, “our Group”, “we” or “us”	our Company and all of our subsidiaries or, where the context so requires, in respect of the period before our Company became the holding company of its present subsidiaries, the businesses operated by such subsidiaries or their predecessors (as the case may be)
“GSK”	GlaxoSmithKline PLC
“HDC”	human diploid cell
“HKC”	hamster kidney cell
“HK eIPO White Form”	the application for Hong Kong Offer Shares to be issued in the applicant’s own name, submitted online through the IPO App or the designated website at www.hkeipo.hk
“HK eIPO White Form Service Provider”	the HK eIPO White Form service provider designated by our Company as specified in the IPO App or on the designated website at www.hkeipo.hk
“HK\$” or “Hong Kong dollars” or “HK dollars”	Hong Kong dollars, the lawful currency of Hong Kong
“HKSCC”	Hong Kong Securities Clearing Company Limited, a wholly-owned subsidiary of Hong Kong Exchanges and Clearing Limited
“HKSCC Nominees”	HKSCC Nominees Limited, a wholly-owned subsidiary of HKSCC
“Hong Kong” or “HK”	the Hong Kong Special Administrative Region of the PRC
“Hong Kong Offer Shares”	the H Shares initially offered by our Company for subscription at the Offer Price pursuant to the Hong Kong Public Offering (subject to reallocation as described in “Structure of the Global Offering” in this prospectus)
“Hong Kong Public Offering”	the offer of the Hong Kong Offer Shares for subscription by the public in Hong Kong at the Offer Price (plus brokerage fee of 1%, FRC transaction levy of 0.00015%, SFC transaction levy of 0.0027% and Stock Exchange trading fee of 0.005% on the terms and subject to the conditions described in this prospectus and the GREEN Application Form relating thereto, as further described in the section headed “Structure of the Global Offering—The Hong Kong Public Offering” in this prospectus
“Hong Kong Underwriters”	the underwriters of the Hong Kong Public Offering listed in the section headed “Underwriting—Hong Kong Underwriters” in this prospectus

DEFINITIONS

“Hong Kong Underwriting Agreement”	the underwriting agreement dated September 22, 2022 relating to the Hong Kong Public Offering entered into by, among others, our Company, the Joint Sponsors, the Joint Global Coordinators, and the Hong Kong Underwriters
“H Share(s)”	overseas listed foreign shares in the issued share capital of our Company with a nominal value of RMB1.00 each, which are to be subscribed for and traded in HK dollars and are to be listed on the Stock Exchange
“H Share Registrar”	Tricor Investor Services Limited
“IFRS”	the International Financial Reporting Standards, which as collective term includes all applicable individual International Financial Reporting Standards, International Accounting Standards and Interpretations issued by the International Accounting Standards Board
“Independent Third Party(ies)”	an individual or a company which, to the best of our Directors’ knowledge, information and belief, having made all reasonable enquiries, is not a connected person of the Company within the meaning of the Listing Rules
“International Offer Shares”	the Shares initially offered by our Company for subscription at the Offer Price pursuant to the International Offering together with, where relevant, any additional Shares which may be issued by our Company pursuant to the exercise of the Over-allotment Option (subject to reallocation as described in the section headed “Structure of the Global Offering” in this prospectus)
“International Offering”	the offer of the International Offer Shares by the International Underwriters at the Offer Price outside the United States in offshore transactions in accordance with Regulation S and in the United States to QIBs only in reliance on Rule 144A or any other available exemption from registration under the U.S. Securities Act, as further described in the section headed “Structure of the Global Offering” in this prospectus
“International Underwriters”	the underwriters of the International Offering
“International Underwriting Agreement”	the underwriting agreement relating to the International Offering expected to be entered into by, among others, our Company, the Joint Global Coordinators, and the International Underwriters on or about September 28, 2022, as further described in the section headed “Underwriting—Underwriting Arrangement and Expenses—International Offering” in this prospectus
“IPO App”	the mobile application for the HK eIPO White Form service which can be downloaded by searching “ IPO App ” in App Store or Google Play or downloaded at www.hkeipo.hk/IPOApp or www.tricorglobal.com/IPOApp

DEFINITIONS

“Joint Bookrunners”	Goldman Sachs (Asia) L.L.C., China International Capital Corporation Hong Kong Securities Limited, China Securities (International) Corporate Finance Company Limited, Macquarie Capital Limited, BOCI Asia Limited, ICBC International Capital Limited, CMB International Capital Limited, Futu Securities International (Hong Kong) Limited and Tiger Brokers (HK) Global Limited
“Joint Global Coordinators”	Goldman Sachs (Asia) L.L.C., China International Capital Corporation Hong Kong Securities Limited, China Securities (International) Corporate Finance Company Limited and Macquarie Capital Limited
“Joint Lead Managers”	Goldman Sachs (Asia) L.L.C., China International Capital Corporation Hong Kong Securities Limited, China Securities (International) Corporate Finance Company Limited, Macquarie Capital Limited, BOCI Asia Limited, ICBC International Securities Limited, CMB International Capital Limited, Futu Securities International (Hong Kong) Limited, Tiger Brokers (HK) Global Limited and Livermore Holdings Limited
“Joint Sponsors”	Goldman Sachs (Asia) L.L.C., China International Capital Corporation Hong Kong Securities Limited, China Securities (International) Corporate Finance Company Limited and Macquarie Capital Limited
“Latest Practicable Date”	September 16, 2022, being the latest practicable date for the purpose of ascertaining certain information contained in this prospectus before its publication
“Licensed Manufacturing Facility”	our manufacturing facility in each of Rong’an Bio, AIM Honesty, AIM Kanghuai and AIM Weixin, which have obtained valid production permits and passed GMP inspections, each a Licensed Manufacturing Facility, collectively Licensed Manufacturing Facilities
“Listing”	the listing of our H Shares on the Main Board
“Listing Committee”	the listing committee of the Stock Exchange
“Listing Date”	the date expected to be on or about Thursday, October 6, 2022, on which our H Shares are listed and from which dealings therein are permitted to take place on the Stock Exchange
“Listing Rules”	the Rules Governing the Listing of Securities on The Stock Exchange of Hong Kong Limited, as amended, supplemented or otherwise modified from time to time
“Liverna”	Liverna Therapeutics Inc (珠海麗凡達生物技術有限公司), a company incorporated under the laws of PRC on June 21, 2019 and owned as to 50.1546% by our Company. The other minority shareholders of Liverna are Independent Third Parties

DEFINITIONS

“Main Board”	the stock exchange (excluding the option market) operated by the Stock Exchange which is independent from and operated in parallel with the Growth Enterprise Market of the Stock Exchange
“Mandatory Provisions”	the Mandatory Provisions for Articles of Association of Companies to be Listed Overseas (到境外上市公司章程必備條款), as promulgated by the State Council Securities Commission and the State Restructuring Commission on August 27, 1994 and became effective on the same date, as the same may be amended and supplemented or otherwise modified from time to time
“Moderna”	Moderna, Inc., a U.S.-based multinational biotechnology corporation
“MOFCOM”	the Ministry of Commerce of the PRC (中華人民共和國商務部)
“MSD”	Merck Sharp & Dohme Corp., a multinational and biotechnology corporation and/or its subsidiaries, where the case may be
“NDA”	new drug application (藥品註冊證書申請)
“NDA approval”	new drug application approval (藥品註冊證書批准)
“NMPA”	the National Medical Products Administration of the PRC (國家藥品監督管理局) and its predecessor, the China Food and Drug Administration (國家食品藥品監督管理總局)
“Offer Price”	the offer price per Offer Share (exclusive of brokerage fee of 1%, FRC transaction levy of 0.00015%, SFC transaction levy of 0.0027% and Stock Exchange trading fee of 0.005%) at which the Offer Shares are to be subscribed for and issued pursuant to the Global Offering as described in the section headed “Structure of the Global Offering” in this prospectus
“Offer Share(s)”	the Hong Kong Offer Shares and the International Offer Shares, together with, where relevant, any additional H Shares which may be issued by our Company pursuant to the exercise of the Over-allotment Option
“Original Strain”	the SARS-CoV-2 virus strain that caused the initial COVID-19 outbreak
“Over-allotment Option”	the option expected to be granted by our Company to the International Underwriters, exercisable by the Joint Global Coordinators (on behalf of the International Underwriters) pursuant to the International Underwriting Agreement, pursuant to which our Company may be required to allot and issue up to an aggregate of 1,457,000 additional H Shares, representing not more than 15% of the Offer Shares initially being offered under the Global Offering, at the Offer Price to cover over-allocations in the International Offering, if any, further details of which are described in the section headed “Structure of the Global Offering” in this prospectus

DEFINITIONS

“PBOC”	the People’s Bank of China (中國人民銀行), the central bank of the PRC
“Pfizer”	Pfizer Inc., a U.S.-based multinational pharmaceutical and biotechnology corporation
“Pneumovax 23”	Pneumococcal Vaccine Polyvalent, a PPSV23 produced by MSD
“PRC Legal Advisor”	Jingtian & Gongcheng, our legal advisor as to PRC laws
“PRC Securities Law”	the Securities Law of the PRC (中華人民共和國證券法), as enacted by the 6th meeting of the 9th Standing Committee of the NPC on December 29, 1998 and became effective on July 1, 1999, as amended, supplemented or otherwise modified from time to time
“Pre-IPO ESOP”	the pre-IPO employee stock incentive scheme adopted by the Company and took effect on November 30, 2020, the principal terms of which are set out in the section headed “Statutory and General Information—A. Further Information about Our Company—6. Pre-IPO ESOP” in Appendix VI.
“Pre-IPO Investments”	the pre-IPO investments in our Company undertaken by the Pre-IPO Investors pursuant to the relevant investment agreements, details of which are set forth in the section headed “History and Development—Pre-IPO Investments” in this prospectus
“Pre-IPO Investors”	the investors, namely Beijing Huakong, Beijing Key Industry, Beijing Yizhuang, CMBI, Hainan Jiashui, Hengqin Qijing, Hengqin Ruifan, Hengqin Yuanyan, Gao Ling Xiheng, Hongtao Kexuan, Jiequan Tianhui Sumintou, Laobaixing, Loyal Valley Letai, Mr. Bole MA (馬伯樂), Mr. Hua WU (吳華), Mr. Wenkai CHEN (陳文凱), Mr. Zhen LIN (林振), Ms. Jing HUANG (黃靜), Ningbo Free Trade Zone, Qingdao Huakong, Qingdao Penglong, Shanghai Hutong, Shanghai Kangcheng, Shenzhen Gongying, Suqian Lingdao, Shenzhen Chongshi, Tibet Jiaze, Tongchuang Investments, Yunnan Ziyongchen and Zhuhai Ruijin, details of which are set out in the section headed “History and Development—Pre-IPO Investments—Information on the Pre-IPO Investors” in this prospectus, and each shall refer to as a “Pre-IPO Investor”
“prospectus”	this prospectus being issued in connection with the Hong Kong Public Offering
“QIB(s)”	a qualified institutional buyer within the meaning of Rule 144A
“Regulation S”	Regulation S under the U.S. Securities Act
“RMB” or “Renminbi”	Renminbi, the lawful currency of the PRC

DEFINITIONS

“Rong’an Bio”	Ningbo Rong’an Biological Pharmaceutical Co., Ltd. (寧波榮安生物藥業有限公司), a company incorporated under the laws of PRC on April 30, 2001 and owned as to 20% by our Company and 80% by AIM Weixin
“Rule 144A”	Rule 144A under the U.S. Securities Act
“SAFE”	the State Administration of Foreign Exchange of the PRC (中華人民共和國國家外匯管理局)
“SAMR”	the State Administration for Market Regulation of the PRC (中華人民共和國國家市場監督管理總局), previously known as the State Administration of Industry and Commerce of the PRC (中華人民共和國國家工商行政管理總局)
“Sanofi”	Sanofi Pasteur Inc., the vaccine division of Sanofi S.A., a French-based multi-national pharmaceutical company
“Securities and Futures Ordinance” or “SFO”	the Securities and Futures Ordinance (Chapter 571 of the Laws of Hong Kong), as amended, supplemented or otherwise modified from time to time
“SFC”	the Securities and Futures Commission of Hong Kong
“Share(s)”	share(s) in the issued share capital of our Company, with a nominal value of RMB1.00 each, comprising our Domestic Shares and our H Shares
“Share Award Scheme”	the share award scheme adopted by the Company on June 2, 2021
“Shareholder(s)”	holder(s) of our Shares
“Sinovac”	Sinovac Biotech Ltd. (科興控股生物技術有限公司)
“Special Regulations”	Special Regulations of the State Council on the Overseas Offering and Listing of Shares by Joint Stock Limited Companies (國務院關於股份有限公司境外募集股份及上市的特別規定), promulgated by the State Council on August 4, 1994
“SPHCC”	Shanghai Public Health Clinical Center (上海市公共衛生臨床中心)
“Stabilization Manager”	Goldman Sachs (Asia) L.L.C.
“State Council”	State Council of the PRC (中華人民共和國國務院)
“Stock Exchange”	The Stock Exchange of Hong Kong Limited
“subsidiary(ies)”	has the meaning ascribed thereto in section 15 of the Companies Ordinance

DEFINITIONS

“substantial shareholder(s)”	has the meaning ascribed to it under the Listing Rules
“Supervisor(s)”	supervisor(s) of our Company
“SZSE”	Shenzhen Stock Exchange (深圳證券交易所)
“Takeovers Code”	the Codes on Takeovers and Mergers and Share Buy-backs issued by the SFC, as amended, supplemented or otherwise modified from time to time
“Tibet Sincere Heart”	Tibet Sincere Heart Enterprise Management Co., Ltd (西藏赤誠之心企業管理有限公司) (previously known as Tibet Zhongtu Enterprise Management Co., Ltd. (西藏眾途企業管理有限公司)), a company incorporated under the laws of PRC on September 19, 2017 and a substantial shareholder of our Company, and is owned as to 99.99% by Mr. Yan ZHOU and 0.01% by Mr. Xin ZHOU
“Tibet Yingfeng”	Tibet Yingfeng Industrial Co., Ltd. (西藏盈豐實業有限公司), a company incorporated under the laws of PRC on November 8, 2016 and a substantial shareholder of our Company, and is owned as to 42.68% by Shanghai Xunjing Enterprise Management Center (Limited Partnership) (上海循景企業管理中心(有限合夥)), 31.68% by Shanghai China UniCredit Investment Development Co., Ltd. (上海中聯信投資發展股份有限公司), 12.20% by Mr. Chao ZHANG (張超), 6.12% by Mr. Jianguo SUN (孫建國), 4.88% by Mr. Zhenya FENG (馮振亞) and 2.44% by Ms. Jing WANG (王靜)
“Track Record Period”	the period comprising the years ended December 31, 2019, 2020 and 2021 and the four months ended April 30, 2022
“Underwriters”	the Hong Kong Underwriters and the International Underwriters
“Underwriting Agreements”	the Hong Kong Underwriting Agreement and the International Underwriting Agreement
“United States” or “U.S.”	the United States of America, its territories, its possessions and all areas subject to its jurisdiction
“U.S. dollars”, “US\$” or “USD”	United States dollars, the lawful currency of the United States
“U.S. Securities Act”	the United States Securities Act of 1933, as amended and supplemented or otherwise modified from time to time, and the rules and regulations promulgated thereunder
“VAT”	Value Added Tax
“Walvax”	Walvax Biotechnology Co., Ltd. (雲南沃森生物技術股份有限公司)
“ZFSW”	Chongqing Zhifei Biological Products Co., Ltd. (重慶智飛生物製品股份有限公司)

DEFINITIONS

“Zhongrenxing”	Shenyang Zhongrenxing Enterprise Management Center (Limited Partnership) (瀋陽眾人行企業管理中心(有限合夥)), a limited partnership established under the laws of PRC on December 26, 2017 and a Shareholder, the general partner of which is Shenyang Dongjian Yuanfang Enterprise Management Co., Ltd. (瀋陽洞見遠方企業管理有限公司), which is owned by Mr. Yan ZHOU, our Controlling Shareholder
“Zhejiang Provincial CDC”	Zhejiang Provincial Centre for Disease Control and Prevention (浙江省疾病預防控制中心)

For ease of reference, the names of the PRC laws and regulations, governmental authorities, institutions, natural persons or other entities (including certain of our subsidiaries) have been included in the prospectus in both the Chinese and English languages and in the event of any inconsistency, the Chinese versions shall prevail. English translations of official Chinese names are for identification purpose only.

GLOSSARY OF TECHNICAL TERMS

In this prospectus, unless the context otherwise requires, explanations and definitions of certain terms used in this prospectus in connection with our Group and our business shall have the meanings set out below. The terms and their meanings may not correspond to standard industry meaning or usage of these terms.

“AE”	adverse event
“adenovirus”	a DNA virus originally identified in human adenoid tissue, causing infections of the respiratory system, conjunctiva, and gastrointestinal tract, and including some capable of inducing malignant tumors in experimental animals
“adjuvant”	a substance added to a vaccine as immune potentiators or modulators
“antibody”	also known as an immunoglobulin, a protective Y-shaped protein produced by immune system in response to invading foreign particles (antigens) such as bacteria and viruses
“antibody titer”	a measurement of how much antibody an organism has produced that recognizes a particular epitope, expressed as the inverse of the greatest dilution (in a serial dilution) that still gives a positive result
“antigen”	substance that can stimulate an immune response
“attenuated vaccine” or “live attenuated vaccine”	a vaccine created by reducing the virulence of a pathogen, but still keeping it viable (or “live”)
“B cell”	a type of white blood cell that makes antibodies
“bioreactor”	a device that provides a favorable environment for the biological reaction process utilizing culture medium, oxygen and other substances
“CAGR”	compound annual growth rate
“carrier protein”	Protein-based molecules to conjugate with capsule polysaccharide
“CD4+ Th1 cells”	T helper type 1 (Th1) cells, a type of T cells that helps coordinate immune response by stimulating other immune cells to fight infection
“CDC”	Centre for Disease Control and Prevention (疾病預防控制中心)
“CHO”	Chinese hamster ovary

GLOSSARY OF TECHNICAL TERMS

“Chemistry Manufacturing and Controls (CMC)”	processes used in preclinical and clinical development stages to ensure that pharmaceutical and biopharmaceutical drug products are consistently effective, safe and high quality for consumers
“Class I vaccine”	a vaccine that the Chinese government provides to its citizens free of charge and that citizens should be vaccinated in accordance with relevant government regulations, including vaccines determined in the national immunization program, additional vaccines required by provincial government in the implementation of national immunization programs, and vaccines used in emergency vaccination or mass vaccination organized by the government at county-level or above, or their respective healthcare department
“Class II vaccine”	a vaccine that is voluntarily vaccinated by citizens in China, and the cost of which is paid by the recipient or his/her guardian
“clinical trial”	a research study for finding or validating the therapeutic and protective effects and side-effects of test drugs to determine the safety and efficacy of such drugs
“column chromatography”	a chromatography method used to isolate a single chemical compound from a mixture
“combination vaccines”	vaccines that can prevent two or more contagion
“conjugate”	chemically link bacterial capsular polysaccharide to a protein to enhance immunogenicity
“CPE”	cytopathic effect, structural changes in cell caused by viral infection
“CRM197”	a nontoxic mutation of diphtheria toxin
“CTA”	clinical trial application, the PRC equivalent of investigational new vaccine application
“culture medium”	a solid, liquid or semi-solid designed to support the growth of microorganisms or cells
“Delta variant strain”	the B.1.617.2 variant strain of the SARS-CoV-2 virus, which was first documented in India in October 2020
“dendritic cells”	cells that constantly sample their surroundings for pathogens such as viruses and bacteria, detect dangers, and initiate immune responses. Immature patrolling dendritic cells (DCs) have high endocytic activity and a low T-cells activation potential. Contact with a pathogen induces maturation and the expression of certain cell-surface molecules, greatly enhancing their ability to activate T cells

GLOSSARY OF TECHNICAL TERMS

“DT”	diphtheria toxoid, a toxoid that induces protective antitoxin antibodies of the IgG type
“DTaP”	diphtheria, tetanus and acellular pertussis combined vaccine
“DTcP”	diphtheria, tetanus and acellular pertussis (components) combined vaccine, each pertussis antigen of DTcP vaccines is purified individually and subsequently combined in a defined ratio, hence ensuring a fixed and consistent composition
“efficacy”	efficacy is the beneficial change resulted from a given intervention (vaccination and medicine)
“ELISA”	enzyme-linked immunosorbent assay, a plate-based assay technique commonly used for detecting and quantifying antigens in a biological sample
“EV71-CA16 Bivalent HFMD Vaccine Candidate”	our EV71-CoxA16 bivalent inactivated vaccine of hand-foot-mouth disease (human diploid cell) candidate
“EPI”	Expanded Programme on Immunization
“fetal bovine serum”	serum components isolated from the blood of fetal bovine
“GCP”	Good Clinical Practice for Drug Trials (GCP) (《藥物臨床試驗質量管理規範》) issued by CFDA on August 6, 2003 and implemented since September 1, 2003 as amended from time to time
“GDP”	Gross Domestic Product
“GFA”	gross floor area
“GLP”	Good Laboratory Practice, a quality management system concerned with the organizational process and the conditions under which non-clinical health and environmental safety studies are planned, performed, monitored, recorded, archived and reported
“GMP”	Good Manufacturing Practice, guidelines and regulations from time to time issued pursuant to the PRC Drug Administration Law (《中華人民共和國藥品管理法》) as part of quality assurance which aims to minimize the risks of contamination, cross contamination, confusion and errors during the manufacture process of pharmaceutical products and to ensure that pharmaceutical products subject to these guidelines and regulations are consistently produced and controlled in conformity to quality and standards appropriate for their intended use

GLOSSARY OF TECHNICAL TERMS

“GMT”	geometric mean titer, the average antibody titer for a group of subjects calculated by multiplying all values and taking the nth root of this number, where n is the number of subjects with available data
“GSP”	Good Supply Practice, a management system which ensures that pharmaceutical products meet quality standards during the process of procurement, quality examination, storage, distribution and sales. The core of the system is to strictly manage the behaviors of companies, and to ensure that companies take quality control of the whole process of manufacture and distribution of pharmaceutical products and provide quality products for customers
“ <i>Haemophilus Influenzae</i> type b” or “Hib”	a type of bacteria that is associated to bacteremia, acute bacterial meningitis, pneumonia and epiglottitis
“Haemorrhagic fever with renal syndrome”	a group of clinically similar illnesses caused by hantaviruses from the family Hantaviridae, in the order Bunyavirales
“hepatitis A”	a liver disease caused by the hepatitis A virus, which is primarily spread when an uninfected (and unvaccinated) person ingests food or water that is contaminated with the faeces of an infected person
“hepatitis B”	a liver infection caused by the hepatitis B virus, which is spread when blood, semen, or other body fluids from a person infected with the virus enters the body of someone who is not infected
“HFMD”	hand foot and mouth disease
“HPV”	human papillomavirus, a type of virus that can cause abnormal tissue growth (for example, warts) and other changes to cells
“HPV infection”	Human papillomavirus infection (HPV infection) is an infection by human papillomavirus
“HPV2”	Human Papillomavirus 2-valent Vaccine, a vaccine used for the prevention of human papillomavirus
“HPV9”	Human Papillomavirus 9-valent Vaccine, a vaccine used for the prevention of human papillomavirus
“ICR mice”	Institute of Cancer Research (ICR) mice
“IFN- γ ”	type II interferon, a cytokine, or a group of proteins, that control activity of immune system cells and is critical for innate and adaptive immunity against viral infections, some bacterial infections and protozoal infections (infections caused by parasites)
“IgG”	Immunoglobulin G, a type of serum antibody

GLOSSARY OF TECHNICAL TERMS

“ILCs”	innate lymphoid cells
“immunogenicity”	the ability of a particular substance, such as an antigen, to provoke an immune response in the body of a human and other animal
“inactivated vaccine”	a vaccine consisting of virus particles, bacteria, or other pathogens that have been grown in culture and then killed using a method such as heat or formaldehyde
“influenza”	a contagious respiratory illness caused by influenza viruses
“IPV”	inactivated polio vaccine
“KOL”	key opinion leader
“kWh”	Kilowatt hours, a unit of energy representing one thousand watt hours
“lot release”	the supervisory and administrative system by which NMPA designates a drug inspection institution to conduct document review, on-site verification and sample inspection in connection with vaccine products, blood products, in vitro diagnostics for blood screening, or any other biological products as described by NMPA, before any batch of such products can be marketed or exported. Any batch of products failing in the lot release inspection or approval shall not be marketed or imported
“MCV”	meningococcal conjugate vaccine, used to prevent infection caused by meningococcal bacteria
“MCV2”	Groups A and C MCV, a vaccine used for the prevention of <i>N. meningitides</i> (Lta)
“MCV4”	Groups A, C, Y and W135 MCV, a vaccine used for the prevention of <i>N. meningitides</i> (Lta)
“MenA”	meningococcal A
“meningococcal meningitis”	bacterial meningitis and a serious infection of the thin lining that surrounds the brain and spinal cord
“-mer”	a suffix derived from the Greek word <i>meros</i> , which means “part”
“MHC”	major histocompatibility complex, a large locus on vertebrate DNA containing a set of closely linked polymorphic genes that code for cell surface proteins essential for the adaptive immune system
“MMR”	measles, mumps and rubella vaccine, an immunization vaccine against measles, mumps, and rubella

GLOSSARY OF TECHNICAL TERMS

“MPSV”	meningococcal polysaccharide vaccines, used to prevent infection caused by meningococcal bacteria
“MPSV2”	Group A and C MPSV, a vaccine used for the prevention of epidemic cerebrospinal meningitis in children aged above two years old
“MPSV4”	Group A, C, Y and W135 MPSV, a vaccine used for the prevention of epidemic cerebrospinal meningitis in children aged above two years old
”mRNA”	messenger ribonucleic acid or messenger RNA, a single-stranded molecule of RNA that corresponds to the genetic sequence of a gene, and is read by a ribosome in the process of synthesizing a protein
“multi-valent vaccine”	vaccine that can provide immunization against two or more strains of serotype from the same pathogens
“nanocage”	a hollow nanoparticle
“National Pharmacopoeia”	Pharmacopoeia of the PRC (《中華人民共和國藥典》)
“Omicron variant strain”	the B.1.1.529 variant strain of the SARS-CoV-2 virus, which was first documented in South Africa in November 2021
“P3 Lab”	bio-safety level 3 laboratory
“P3 Production Facilities”	bio-safety level 3 production facilities
“PCV13”	13-Valent pneumococcal conjugate vaccine, 13-valent vaccine primarily used for the prevention of invasive pneumococcal diseases
“pertussis”	commonly known as whooping cough, a respiratory tract infection characterized by a paroxysmal cough
“Pharmacopoeia”	a book containing directions for the identification of compound medicines, and published by the authority of a government or a medical or pharmaceutical society

GLOSSARY OF TECHNICAL TERMS

“Phase I clinical trial”	Clinical trials testing potential medical products are commonly classified into four phases. The drug development process will normally proceed through all four phases over many years. If the drug successfully passes through Phases I, II, and III, it will usually be approved by the national regulatory authority for use in the general population. Phase IV trials are ‘post-marketing’ or ‘surveillance’ studies conducted to monitor safety over several years. Phase I trials are generally designed to test the safety, side effects, best dose, and formulation method for the drug
“Phase II clinical trial”	Phase II trials are generally designed to evaluate whether the drug has any biological activity or effect
“Phase III clinical trial”	Phase III trials are generally designed to assess the effectiveness of the new intervention and, thereby, its value in clinical practice
“PIC/s”	the abbreviation and logo used to describe both the Pharmaceutical Inspection Convention (PIC) and the Pharmaceutical Inspection Co-operation Scheme (PIC Scheme) operating together in parallel. Pharmaceutical Inspection Co-operation Scheme is a non-binding, informal co-operative arrangement between regulatory authorities in the field of GMP of medicinal products for human or veterinary use
“pneumococcal disease”	an infection caused by the <i>Streptococcus pneumonia</i> bacterium and can result in pneumonia, infection of the blood, middle-ear infection, or bacterial meningitis
“pneumonia”	an infection of the lungs that can be caused by viruses, bacteria, or fungi
“polysaccharide”	a carbohydrate that can be decomposed by hydrolysis into two or more molecules of monosaccharides
“PPSV23”	23-valent pneumococcal polysaccharide vaccine, used for the prevention of invasive pneumococcal disease in children aged above two years old and adults
“prefilled syringe”	a syringe that has been filled medication by the manufacturer
“preservative”	a preservative is a substance or a chemical that is added to prevent decomposition by microbial growth or by undesirable chemical changes
“Pevnar 13”	A pneumococcal vaccine and a conjugate vaccine used to protect infants, young children, and adults against disease caused by the bacterium <i>Streptococcus pneumoniae</i> (pneumococcus) produced by Pfizer

GLOSSARY OF TECHNICAL TERMS

“Qualified Person”	A position in a pharmaceutical manufacturer which is responsible for quality management of pharmaceutical (including vaccines) manufacturing, and conduct the internal audit of compliance and safety of products
“rabies”	a disease caused by rabies virus transmitted through animal bites to humans and is almost always fatal following the onset of clinical symptoms
“RBD”	receptor binding domain, a protein domain which binds to a specific receptor
“recombination”	the formation by the processes of crossing-over and independent assortment of new combinations of genes in progeny that did not occur in the parents
“registered potency”	the protective level of antigen in each dose of vaccine at the time of the inspection in the Lot Release application process
“residual host cell protein”	a protein that was a part of the residual host used to produce vaccine
“RNA”	ribonucleic acid, a polymeric molecule essential in various biological roles in coding, decoding, regulation and expression of genes
“S protein”	spike protein, a large type I transmembrane protein, which is the main antigen component in all structural proteins of SARS-CoV-2
“SAE”	serious adverse event
“seroconversion”	the development of detectable antibodies in the blood that are directed against an infectious agent
“serotype”	a group of organisms, microorganisms, or cells distinguished by their shared specific antigens
“set for single user” or “set”	a certain number of doses of vaccine to be taken for the vaccination of a single person to take full effect
“single-dose vial”	a vial of liquid medication intended for parenteral administration (injection or infusion) for use in a single patient for a single case, procedure, injection
“T cells”	cells that originate in the thymus, mature in the periphery, become activated in the spleen/nodes if their T-cell receptors bind to an antigen presented by an MHC molecule and they receive additional co-stimulation signals driving them to acquire killing (mainly CD8+ T cells) or supporting (mainly CD4+ T cells) functions

GLOSSARY OF TECHNICAL TERMS

“titer”	a measurement of the amount or concentration of a substance in a solution
“TT”	tetanus toxoid, also known as lockjaw, used to prevent tetanus, which is a serious illness that causes convulsions (seizures) and severe muscle spasms that can be strong enough to cause bone fractures of the spine
“vaccine”	a vaccine is a biological preparation that provides active acquired immunity to a particular disease
“valent”	in the context of vaccines, the number of antigens or microorganisms that the vaccine is designed to immunize against
“varicella”	a very contagious disease caused by the varicella-zoster virus
“vector”	an agent (such as a plasmid or virus) that contains or carries modified genetic material (such as recombinant DNA) and can be used to introduce exogenous genes into the genome of an organism
“Vero cell”	a lineage of cells isolated from kidney epithelial cells extracted from an African green monkey
“VLP”	virus-like particles (VLP)
“WHO”	the World Health Organization

FORWARD-LOOKING STATEMENTS

This prospectus contains certain forward-looking statements and information relating to us and our subsidiaries that are based on the beliefs of our management as well as assumptions made by and information currently available to our management. When used in this prospectus, the words “aim,” “anticipate,” “believe,” “continue,” “could,” “estimate,” “expect,” “going forward,” “intend,” “may,” “might,” “ought to,” “plan,” “potential,” “predict,” “project,” “seek,” “should,” “will,” “would” and the negative of these words and other similar expressions, as they relate to us or our management, are intended to identify forward-looking statements.

Such statements reflect the current views of our management with respect to future events, operations, liquidity and capital resources, some of which may not materialize or may change. These statements are subject to certain risks, uncertainties and assumptions, including the risk factors as described in this prospectus. You are strongly cautioned that reliance on any forward-looking statements involves known and unknown risks and uncertainties. The risks and uncertainties facing us which could affect the accuracy of forward-looking statements include, but are not limited to, the following:

- our operations and business prospects;
- our business and operating strategies and our ability to successfully implement these strategies;
- our ability to attract and retain senior management and key employees;
- our ability to control costs and expenses;
- our expectations with respect to our ability to advance our pipeline candidates into vaccine products, successfully complete clinical trials, and acquire and maintain regulatory licenses or permits;
- the amount and nature of, and potential for, future development of our business;
- changes to regulatory and operating conditions, and the competitive landscape in the industry and markets in which we operate;
- our ability to continue to maintain our market position in China’s vaccine industry;
- the outcomes of any pending or threatened litigation, arbitration or administrative proceedings against us or our Directors;
- our dividend policy; and
- all other risks and uncertainties described in the section headed “Risk Factors.”

By their nature, certain disclosures relating to these and other risks are only estimates and should one or more of these uncertainties or risks, among others, materialize, actual results may vary materially from those estimated, anticipated or projected, as well as from historical results. Specifically but without limitation, sales could decrease, costs could increase, capital costs could increase, capital investment could be delayed and anticipated improvements in performance might not be fully realized.

Subject to the requirements of applicable laws, rules and regulations, we do not have any and undertake no obligation to update or otherwise revise the forward-looking statements in this prospectus, whether as a result of new information, future events or otherwise. As a result of these and other risks, uncertainties and assumptions, the forward-looking events and circumstances discussed in this prospectus

FORWARD-LOOKING STATEMENTS

might not occur in the way we expect or at all. Accordingly, the forward-looking statements are not a guarantee of future performance and you should not place undue reliance on any forward-looking information. Moreover, the inclusion of forward-looking statements should not be regarded as representations by us that our plans and objectives will be achieved or realized. In this prospectus, statements of or references to our intentions or those of the Directors are made as of the date of this prospectus. Any such information may change in light of future developments.

All forward-looking statements in this prospectus are qualified by reference to the cautionary statements in this section.

RISK FACTORS

You should carefully consider all of the information in this prospectus, including the risks and uncertainties described below, before making an investment in our H Shares. You should pay particular attention to the fact that we are a PRC company, that most of our business is conducted in the PRC and that we are governed by a legal and regulatory environment which in some respects may differ from those in other countries. There are risks associated with investing in our H Shares not typical of investment in the capital stock of companies incorporated and/or engaging business in Hong Kong or the United States. Our business, financial condition and results of operations could be materially and adversely affected by any of these risks and uncertainties. The trading price of our Shares could decline due to any of these risks, and you may lose all or part of your investment. For more information concerning the PRC and certain related matters discussed below, see “Regulatory Overview” and “Appendix IV—Summary of Principal Legal and Regulatory Provisions.” Additional risks and uncertainties not presently known to us, or not expressed or implied below, or that we deem immaterial, could also harm our business, financial condition and results of operations.

RISKS RELATING TO OUR BUSINESS AND INDUSTRY

Risks Relating to the Development and Regulatory Approvals of Our Vaccine Candidates

Development of new vaccine products can be time-consuming and costly and we cannot guarantee successful regulatory approval.

Our success will depend in part on our ability to develop new vaccine products, which could be complex and uncertain, as well as time-consuming and costly. Whether we can be successful in developing new vaccine products depends on our ability to:

- accurately assess new trends and diseases, research and technology and anticipate market needs;
- maintain strong R&D capabilities and retain adequate and experienced R&D personnel;
- application of existing technology advances to development and production of new vaccine products;
- conduct and complete preclinical studies and clinical trials on a timely basis, in a cost-effective manner and under required procedures and standards; and
- obtain all required approvals for preclinical studies, clinical trials and manufacturing activities.

Preclinical studies and clinical trials must be taken out before obtaining regulatory approvals for the sale of our vaccine candidates, while their outcomes are inherently uncertain. In particular, failure can occur at any time during the clinical development process. Neither the outcome from preclinical studies or early-stage clinical trials nor the successful interim clinical trial results are indicative in nature and may not imply the positive conclusion of later-stage clinical trials. We may experience numerous unexpected events during, or as a result of clinical trials that could delay or prevent our ability to receive regulatory approval or commercialize our vaccine candidates, including:

- regulators may not authorize us or our investigators to commence or conduct a clinical trial at a prospective trial site;
- clinical trials of our vaccine candidates may produce negative or inconclusive results, and we may decide, or regulators may require us, to conduct additional clinical trials or abandon vaccine development programs;

RISK FACTORS

- the number of subjects required for clinical trials of our vaccine candidates may be larger, enrollment may be insufficient or slower and the subjects may drop out at a higher rate than we anticipate;
- in cases where the subjects lack clinical response or are exposed to unacceptable health risks, we may have to suspend or terminate clinical trials;
- our CROs may fail to comply with the applicable regulatory requirements or meet their contractual obligations in a timely manner, or at all;
- our vaccine candidates may fail to demonstrate safety and efficacy in preclinical studies or clinical trials and we may have to suspend or terminate clinical trials;
- regulators may require our investigators or us to suspend or terminate clinical research for various reasons, particularly in cases of non-compliance with certain regulatory requirements;
- the cost of clinical trials for our vaccine candidates may be greater than we anticipate; and
- the supply and quality of materials necessary for the clinical trials may be insufficient or inadequate.

Delays in conducting clinical trials or postponement in obtaining approvals may result in increases in our vaccine development costs. Significant delays in clinical trials will narrow the time frame in which our ability to retain the exclusive right to commercialize our vaccine candidates. Alternatively, this may allow our competitors to market similar products in advance subsequently impair our ability to commercialize our vaccine candidates which may harm our business and results of operations.

As a result of all the foregoing factors, we cannot assure you that we will be able to continue developing new vaccine products in an effective or timely manner or such new products could be successfully approved. Failure to do so may materially and adversely affect our business, reputation, financial results and future commercial prospects.

We may be unable to obtain regulatory approval for our vaccine candidates under applicable regulatory requirements. The denial or delay of any such approval would delay development and commercialization of our vaccine candidates and adversely impact our potential to generate revenue, our business and our results of operations.

To gain approval to commercialize our vaccine candidates in China, we must provide the NMPA with preclinical studies or clinical data that adequately demonstrate the safety and potency of our vaccine candidates for the intended indications. The time required to obtain approval from the NMPA is unpredictable but it may take years following the commencement of preclinical studies and clinical trials and depends upon numerous factors, and approval is subject to the substantial discretion of the NMPA. Our vaccine candidates could fail to receive regulatory approvals from the NMPA for many reasons, including:

- disagreement on the design or implementation of our clinical trials;
- disagreement on the specifications and standards of new vaccines;
- failure to demonstrate that a vaccine candidate is safe, effective and potent for its proposed indications;
- failure of clinical trial results to meet the level of statistical significance required for approval;

RISK FACTORS

- failure to demonstrate the clinical and other benefits of a vaccine candidate outweigh its safety risks;
- disagreement on our interpretation of data from preclinical studies or clinical trials;
- the insufficiency of data collected from clinical trials of our vaccine candidates to support the filing of NDA or other applicable submissions or obtaining regulatory approval;
- the relevant regulatory authorities' findings of deficiencies related to the manufacturing processes or facilities; and
- changes in approval policies or regulations that render our preclinical and clinical data insufficient for approval.

The NMPA or other applicable regulatory authorities may require more information, including additional preclinical or clinical data, to support the approval application, which may delay or prevent us in obtaining the regulatory approvals in time and subsequently impact on our commercialization plans, or in more extreme cases, we may decide to dismiss the development program. Though we were to obtain approvals, regulatory authorities may only grant approval for fewer or more limited indications for vaccine candidates compared to our requests, or subject to the performance of costly post-marketing clinical trials, or may approve with a label that is not desirable for the successful commercialization of that vaccine candidate. Any of the foregoing scenarios could materially harm the commercial prospects of our vaccine candidates.

In addition, approval policies, regulations or the type and amount of clinical data necessary to gain approval may change during the course of a vaccine candidate's clinical development. Moreover, changes in regulatory requirements and guidance during our clinical trials may occur, which may result in necessary changes to clinical trial protocols, which could increase our costs, delay the timeline for or reduce the likelihood of regulatory approval for our vaccine candidates.

Results of earlier studies and trials of our vaccine candidates may not be predictive of future trial results and completion of clinical trials does not guarantee approval of the vaccine candidate by regulatory authorities.

Success in preclinical studies and early clinical trials for our vaccine candidates does not ensure that later clinical trials will be successful. Significant setbacks could occur even after positive results are revealed in earlier preclinical studies or clinical trials. These setbacks could be caused by, among other things, preclinical findings made while clinical trials were underway and safety or efficacy observations made in clinical trials, including previously unreported adverse events. In addition, we also make assumptions, estimations, calculations and conclusions as part of our analyses of data, and we may not have received or had the opportunity to fully evaluate all preclinical data. As a result, the clinical trial results may differ from conclusions or expectations from earlier studies or different conclusions or consideration may qualify the results, once all clinical trial data have been received and fully evaluated. On the other hand, regulatory agencies may not accept or agree with our assumptions, estimates, calculations, conclusions or analyses. Therefore, notwithstanding any potential promising results in earlier studies and trials, we cannot assure you that we will not face similar setbacks. Vaccine candidates in later stages of clinical trials may fail to show the desired pharmacological properties or safety and efficacy traits despite having progressed through preclinical studies and initial clinical trials.

RISK FACTORS

Even if we are able to initiate and complete clinical trials, the results may not be sufficient to obtain regulatory approval for our vaccine candidates. Even if our clinical trials are completed, the results may not be sufficient to obtain regulatory approval for our vaccine candidates. Approval is subject to the substantial discretion on the part of regulatory authorities. See “—We may be unable to obtain regulatory approval for our vaccine candidates under applicable regulatory requirements. The denial or delay of any such approval would delay development and commercialization of our vaccine candidates and adversely impact our potential to generate revenue, our business and our results of operations.”

We engage CROs, which are not under our control, to conduct certain clinical trial-related activities.

In line with industry norm, we outsource certain clinical trial-related activities to CROs that are Independent Third Parties. The services provided by CROs include helping us to select and work with clinical trial institutions to implement the trial protocols and execute the clinical trials, and to prepare materials for CTA filing. We do not control these CROs. Outsourcing these functions involves the risk that third parties may not perform to our standards, may not produce results in a timely manner or may fail to perform at all. In addition, the use of third-party service providers requires us to disclose our proprietary information to these parties, which could increase the risk that this information will be misappropriated.

The staff of CROs engaged by us are not our employees and we cannot control whether or not they devote sufficient time, resources and oversight to our ongoing clinical programs. If we are unable to maintain or enter into agreements with these third parties on acceptable terms, or if any such engagement is terminated, we may be unable to conduct clinical trials and R&D testing in the manner that we anticipate. If these third parties fail to meet expected deadlines of their responsible work, timely transfer to us any regulatory information, adhere to protocols or act in accordance with regulatory requirements or our agreements with them, or if they otherwise perform in a sub-standard manner or in a way that compromises the quality or accuracy of their activities or the data they obtain, the clinical trials of our vaccine candidates may be compromised, delayed, prolonged, suspended or terminated, or our data may be rejected by the NMPA or other applicable regulatory authorities.

Nevertheless, we are responsible for ensuring that each of our studies is conducted in accordance with the applicable protocol and legal, regulatory and scientific standards, such as GCP, GLP, GMP and human and animal testing regulations, each of which may be applicable and enforced by the NMPA for vaccine candidates in development. The NMPA enforces these requirements through periodic inspections of trial sponsors, investigators and clinical trial sites, and the fact that we rely on CROs to conduct our trials does not relieve us of our regulatory responsibilities. If we or any of our CROs fail to comply with applicable GCP requirements, the clinical data generated in the clinical trials may be deemed unreliable and the NMPA may require us to perform additional clinical trials before approving our marketing applications. We cannot assure you that such regulatory authority will determine that any of our clinical trials comply with all of their requirements, which in turn may require us to repeat such trials, which would delay the regulatory approval process. If CROs do not successfully carry out their contractual duties or obligations or meet expected deadlines, or if the quality or accuracy of the clinical data CROs obtain is compromised due to their failure to adhere to our clinical protocols, the regulatory requirements or for other reasons, our clinical trials may be extended, delayed or terminated and we may not be able to obtain regulatory approval for or successfully commercialize our vaccine candidates. Any of the above could result in a material adverse effect on our business, financial condition and results of operations.

RISK FACTORS

Our vaccine candidates may cause undesirable side effects or have other properties that could delay or prevent their regulatory approval, limit the commercial profile of an approved label, or result in significant negative consequences following marketing approval, if any.

As with most biological products, our vaccine candidates could cause side effects that can vary in severity from minor reactions to death and in frequency from infrequent to prevalent. If unacceptable side effects arise in the development of our vaccine candidates, we could suspend or terminate our clinical trials, or the NMPA could order us to cease clinical trials or deny approval of our vaccine candidates for any or all targeted indications. Adverse reactions could also affect participant recruitment or the ability of enrolled participants to complete any of our clinical trials or result in potential product liability claims. In addition, side effects may not be appropriately recognized or managed by the treating medical staff. We expect to have to train medical personnel using our vaccine candidates to understand the side effect profiles for our clinical trials and upon any commercialization of any of our vaccine candidates. Inadequate training in recognizing or managing the potential side effects of our vaccine candidates could result in vaccinees' injury or even death. Any of these occurrences may harm our business, financial condition and prospects significantly.

In addition, even if we successfully advance our vaccine candidates through clinical trials, such trials will likely only include a limited number of subjects and limited duration of exposure to our vaccine candidates. As a result, we cannot assure you that adverse effects of our vaccine candidates will not be uncovered when a significantly larger number of vaccinees are exposed to the vaccine candidate after its commercialization. If one or more of our vaccine candidates receive regulatory approval, and we or others later identify undesirable side effects caused by such vaccines, a number of potential serious negative consequences could result, including:

- we may suspend commercialization of such vaccines;
- regulatory authorities may withdraw approvals of such vaccines;
- regulatory authorities may require additional warnings on the label;
- we may be required to conduct post-market studies to assess new safety risks;
- we could be sued and held liable for harm caused to subjects; and
- our reputation may suffer.

Any of the foregoing events could prevent us from achieving or maintaining market acceptance of the particular vaccine candidate, if approved, and result in the loss of significant revenues to us, which would materially and adversely affect our results of operations and business. In addition, if one or more of our vaccine candidates prove to be unsafe, our entire pipeline could be affected, which would have a material adverse effect on our business, financial condition, results of operations and prospects.

RISK FACTORS

Any cessation or suspension of our collaborations with research partners may increase our costs in R&D, lengthen our new vaccines development process and lower our efficiency in new products development.

The success of our business may in part depend on collaboration and other strategic arrangements with third parties. We have been cooperating with Zhejiang Provincial CDC and SPHCC in China for research and development of our vaccine candidates. See “Business—Research and Development—Collaboration Agreements” for details. The personnel of our research partners, however, are not our employees and may have other commitments that limit their availability to us. If a conflict of interest arises between their work for us and their work for another entity, we may lose the services of these scientists and institutions. Any cessation or suspension of our collaborations with research partners may increase our R&D costs, lengthen our new vaccines development process and lower our efficiency in new products development.

In addition, collaborative relationships in our industry can be complex, particularly with respect to intellectual property rights. Although those research partners are generally bound by agreements with us not to disclose our confidential information, any breach of such confidentiality obligation could cause leaking of valuable proprietary knowledge to the public, third parties or even our competitors, which would compromise our competitive advantage and adversely affect our results of operations in a significant manner. Disputes may arise in the future regarding ownership rights to technology developed by or with other parties. These and other possible disagreements between us and third parties with respect to our licenses or our collaborative relationships could lead to delays in the research, development, manufacture and commercialization of our vaccine candidates. These disputes could also result in litigation or arbitration, both of which are time-consuming and costly.

Furthermore, there is no assurance that our research partners would deliver adequate research results to support our product development. Our contracts with research partners generally set out research goals and specific project requirements. However, due to the limit of capabilities of these research partners, foreseeability of research results and technology and other potential restraints in research programs, it is possible that the research partners may face significant delays or difficulties in conducting research projects or may be unable or unwilling to complete the research. In those cases, they may not be able to deliver the R&D results as we originally planned so that we have to announce a partial or complete failure of the research program. Failure in completion of research projects as planned may delay our product developments or improvements, which could harm our competitive strength as well as results of operations.

If we encounter difficulties enrolling subjects in our clinical trials, our clinical development activities could be delayed or otherwise adversely affected.

Our ability to enroll a sufficient number of subjects that remain in the trial until its conclusion is a key factor in determining whether we can complete a clinical trial in a timely manner. We may experience difficulties in subject enrollment in our clinical trials for a variety of reasons, including:

- the size of the study population required for analysis of the trial’s primary endpoints;
- design and eligibility criteria for the clinical trial in question;
- our ability to recruit clinical trial investigators with the appropriate competencies and experience;
- the risk that subjects enrolled in clinical trials will not complete a clinical trial;
- our ability to obtain and maintain subject consents;

RISK FACTORS

- the age of subjects which may require parental consent;
- the public awareness of the infection rates of targeted infectious diseases and the size of population at risks of infection; and
- the availability of approved vaccines that are non-inferior or even superior to our vaccine candidates.

In addition, our clinical trials may compete with our competitors' clinical trials for vaccine candidates that are in the same preventive areas as our vaccine candidates. Such competition will reduce the number and types of subjects available to us, as some subjects might opt to enroll in a trial being conducted by our competitors instead of ours. Even if we are able to enroll a sufficient number of subjects in our clinical trials, delays in subject enrollment may result in increased costs or may affect the timing or outcome of the planned clinical trials, which could prevent completion of these trials and adversely affect our ability to advance the development of our vaccine candidates.

We might not be able to continue to identify, discover, develop or obtain regulatory approval for innovative and promising vaccine candidates.

We may not be successful in our efforts to extend our pipeline of vaccine candidates, including identifying or discovering innovative and promising vaccine candidates in the future. A key element of our strategy is to use our in-house R&D capabilities, know-how and our expertise in our R&D platform technologies to develop and deliver what we believe are safer and more effective vaccines. However, we may not be able to develop vaccine candidates that are safe and effective, or which compare favorably with other commercially available alternatives. Even if we are successful in continuing to build our pipeline and developing innovative and promising vaccine candidates, the potential vaccine candidates that we identify may not be suitable for clinical development, including as a result of lack of safety, low immunogenicity, or other characteristics that indicate that they are unlikely to be products that will receive marketing approval, achieve market acceptance or obtain reimbursements under relevant PRC government policies. There is no assurance that we will be able to successfully advance any of these additional vaccine candidates through the development process. Our research programs may initially show promise in identifying potential vaccine candidates, yet fail to yield vaccine candidates for clinical development or commercialization for many reasons, including the following:

- we may not be able to assemble sufficient resources to acquire or discover additional vaccine candidates;
- the vaccine candidates may not succeed in preclinical or clinical testing;
- the vaccine candidates may on further study be shown to have serious side effects or other characteristics that indicate it is unlikely to be effective or otherwise does not meet applicable regulatory criteria;
- competitors may develop alternatives that render our vaccine candidates obsolete or less attractive; and
- the vaccine candidates may not be accepted as safe and effective by patients or the medical community.

If any of these events occur, we may be forced to abandon our development efforts for a program or programs, or we may not be able to identify, discover, develop or commercialize additional vaccine candidates, which would have a material adverse effect on our business and results of operations.

RISK FACTORS

We are currently developing three COVID-19 vaccine candidates, which is costly and may divert resources from the clinical development of our other vaccine candidates, and the result is uncertain.

In order to grasp the massive opportunities brought by the COVID-19 pandemic, we are currently adopting three technology routes to develop vaccine candidates against the Original Strain as well as variant strains of COVID-19. Clinical trials involve a time-consuming and costly process with an uncertain outcome. The development of our COVID-19 vaccines requires us to expend financial, personnel and other resources and may cause delays in or otherwise negatively impact our other development programs, despite uncertainties surrounding the longevity and extent of COVID-19 as a global health concern. Furthermore, our business could be negatively impacted by our allocation of significant resources to a global health threat that is unpredictable and could rapidly dissipate or against which either of our vaccines, if developed, may not be partially or fully effective.

If any clinical trials for our COVID-19 vaccines are perceived to be successful, we may need to work toward the large-scale technical development, manufacturing scale-up and larger scale deployment of this vaccine candidate. If we are unable to conduct production and manufacturing activities or if either of our COVID-19 vaccine requires more doses to achieve sufficient efficacy than we expect, we may not complete our product development or commercialization efforts in a timely manner. In addition, during a global health crisis, such as the COVID-19 pandemic, where the spread of a disease needs to be controlled, closed or heavily regulated national borders will create challenges and potential delays in our development and production activities and may necessitate that we pursue strategies to develop and produce our vaccine candidates within self-contained national or international borders, at potentially much greater expense and with longer timeframes for public sales.

We may be unable to successfully commercialize a COVID-19 vaccine and establish a competitive market share for our vaccine before a competitor or before the COVID-19 outbreak is effectively contained or the risk of coronavirus infection is significantly diminished.

We are currently adopting three technology routes concurrently to develop vaccines against the Original Strain and variant strains of COVID-19 leveraging our strong R&D capabilities. However, a large number of vaccine manufacturers, academic institutions and other organizations are also in the process of developing COVID-19 vaccines. Our competitors may have greater financial, vaccine candidate development, manufacturing and marketing resources than we do. Larger pharmaceutical and biotechnology companies have extensive experience in clinical testing and obtaining regulatory approval for their products, and may have the resources to heavily invest to accelerate discovery and development of their COVID-19 vaccines. We believe that our research, development and collaboration efforts could result in effective COVID-19 vaccines. For example, we are currently conducting a Phase II clinical trial in the PRC and have initiated a global Phase III clinical trial in June 2022 for our mRNA candidate. Nevertheless, clinical trials involve a lengthy and expensive process, and competitors may develop and commercialize one or more COVID-19 vaccines before us. For example, as of the Latest Practicable Date, six PRC vaccine developers were undertaking clinical trials for their respective mRNA COVID-19 vaccine candidates in the PRC or overseas, indicating intensive competition for the first-mover advantages of mRNA vaccines in China. If our competitors develop and commercialize one or more COVID-19 vaccines that are superior to ours in any way, such as being safer, more effective, produce longer immunity against COVID-19, less expensive, requiring fewer administrations, and/or having fewer severe side effects, we may fail to obtain a meaningful market share even if we are successful in developing a COVID-19 vaccine. Since late 2020, multiple SARS-CoV-2 variants including variants of concern have emerged. As such, since the COVID-19 pandemic continues to evolve in China and globally, the long-term effectiveness and protection of any marketed or development-stage COVID-19 vaccines against various SARS-CoV-2 strains continues to be evaluated in longitudinal studies. Although our mRNA COVID-19 vaccine against the Original Strain has reached Phase III stage and been proven to be effective against the Original Strain in Phase I and II clinical trials, there is limited clinical research data to prove its efficacy on variant

RISK FACTORS

strains. To address future demand for vaccines against variant strains, we are currently undertaking CTA filing for our mRNA candidate against the Delta variant strain and undergoing preclinical studies for our mRNA candidate against the Omicron variant strain. However, our competitors may be able to commercialize candidates against variant strains before us.

The regulation requirements for COVID-19 vaccines are highly dynamic and continue to evolve and may result in unexpected or unforeseen challenges.

Prior to obtaining approval to commercialize any of our COVID-19 vaccine candidate in the PRC or any other jurisdictions, we must demonstrate with substantial evidence from well-controlled clinical trials, and to the satisfaction of the NMPA or other regulatory authorities, that such vaccine candidate is safe and effective for its intended uses. Results from preclinical studies and clinical trials can be interpreted in different ways. Even if we believe that the preclinical or clinical data for our vaccine candidates are promising, such data may not be sufficient to support approval by NMPA or other regulatory authorities. The NMPA or other regulatory authorities may also require us to conduct additional preclinical studies or clinical trials for our vaccine candidates either prior to or post-approval, or it may object to elements of our clinical development program, requiring their alteration.

Whether we can successfully obtain regulatory approval and achieve commercialization of COVID-19 vaccine candidates is subject to factors beyond our control. Of the large number of COVID-19 vaccine products under development, only a small percentage have successfully completed the NMPA's or other regulatory authorities' approval processes and are commercialized. The lengthy approval or marketing authorization process as well as the unpredictability of future clinical trial results may result in our failure to obtain regulatory approval or marketing authorization for our vaccine candidates, which may harm our business, financial condition, results of operations and prospects.

Even if we eventually complete clinical testing and receive approval of NDA, or foreign marketing application for our vaccine candidates, the NMPA or other comparable regulatory authorities may grant approval or other marketing authorization contingent on the performance of costly additional clinical trials, including post-market clinical trials. The NMPA or other comparable regulatory authorities may not approve or authorize the labeling that we believe is necessary or desirable for the successful commercialization of our COVID-19 vaccine candidate. Any delay in obtaining, or inability to obtain, applicable regulatory approval or other marketing authorization would delay, inhibit or prevent commercialization of that vaccine candidate and would adversely impact our business and prospects.

Risks Relating to the Manufacturing and Supply of Our Vaccine Products

The manufacturing of vaccines is a highly exacting and complex process, and if we encounter problems in manufacturing our products, our business could suffer.

The manufacturing of vaccines is a highly exacting and complex process, particularly because the complexity of biological mechanisms leads to variability in industrial yields, and also because the biological material being manufactured is very vulnerable to contamination. The manufacturing of vaccines is also heavily regulated by the NMPA and other regulatory authorities in China. Problems may arise during the manufacturing for a variety of reasons, including but not limited to:

- equipment malfunction;
- failure to follow specific protocols and procedures;
- problems with raw materials;
- delays related to the construction of new facilities;

RISK FACTORS

- failure to comply with strictly enforced regulatory requirements and GMP;
- changes in the types of products produced;
- physical limitations that could inhibit continuous supply; and
- human-made or natural disasters and environmental factors.

If problems arise during the production of a batch of product, that batch of product may have to be discarded and we may experience product shortages or incur extra expenses. This could, among other things, lead to increased costs, decreased revenue, damage to customer relationships, time and expense spent investigating the cause and, depending on the cause, similar losses with respect to other batches or products. If problems are not discovered before the product is released to the market, recall and product liability costs may also be incurred. In addition, if we fail to timely improve and optimize our manufacturing processes or techniques or only make insufficient improvement, we may not be able to meet the clinical demand on better safety, immunogenicity and efficacy of vaccines, nor the market demand on larger and faster supply, which would impair our competitiveness in the vaccine industry, interfere with our current sales and future regulatory submissions and/or commercialization of new vaccine products, and in turn our business and results of operations would suffer.

Any failure to perform proper quality control and quality assurance would have a material adverse effect on our business and financial results.

Our products and manufacturing processes are subject to applicable laws, regulations and GMP requirements. These regulations and laws govern the manufacturing processes and procedures, such as record keeping, operating and implementing the quality management systems to control and assure the quality of products approved for sale and investigational products. We have established a comprehensive and robust quality control system in our production and sales process. See “Business—Quality Control and Assurance” for details. Despite our quality control system and procedures, errors, defects or failures may still occur. Quality defects may be attributable to a number of reasons, including:

- quality issues with the raw materials we purchase or produce;
- manufacturing errors;
- technical or mechanical malfunctions in the production process;
- human error or malfeasance by our quality control personnel;
- tampering by third parties; and
- other failure to comply manufacturing procedures and quality control requirements under applicable laws and GMP.

In addition, we are currently expanding existing manufacturing facilities and building new manufacturing facilities. See “Business—Manufacturing—Manufacturing Facilities and Production Capacity—Manufacturing Facilities and Equipment.” We may not be able to ensure consistent quality control in the such new facilities after they come into operation. If we acquire manufacturing facilities from other biotechnology or pharmaceutical companies in the future, we may not be able to immediately ensure that their manufacturing facilities and processes will meet our existing quality standards. Failure to detect and cure quality defects in our existing vaccine products or to prevent such defective products

RISK FACTORS

from being released for sale, failure to comply with relevant quality control requirements under applicable laws or GMP, or failure or deterioration of our quality control system and processes, could result in vaccinees' injury or death, product destroy, recalls or withdrawals, suspension or disruption in vaccine manufacturing, license revocation or regulatory fines, or other problems that could disrupt our business, seriously harm our reputation, expose us to liability, and adversely affect our results of operations.

Errors or defects in our manufacturing could harm our reputation or expose us to product liability claims.

We face an inherent risk of product liability caused by our vaccines. Any such product liability claims may include allegations of defects in manufacturing, defects in design, insufficient or improper labelling, inadequate or misleading disclosures of side effects or dangers inherent in the product, negligence, strict liability and a breach of warranties. Although during the Track Record Period, we have not received any material complaints on the quality of our vaccine products, or been involved in any significant litigation or disputes arising from customer complaints, we cannot guarantee that we will not be involved in product liability related disputes in the future. If we cannot successfully defend ourselves against product liability claims, we may incur substantial liabilities or subject to limitations for commercializing of our vaccine candidates. Even successful defense would require significant financial resources and management attention. Regardless of the merits or outcomes, liability claims may result in:

- withdrawal of clinical trial participants;
- substantial monetary compensation to trial subjects;
- a diversion of management's time and our resources;
- decreased demand for our vaccine candidates or any resulting products;
- injury to our reputation;
- product recalls, withdrawals or labeling, marketing or promotional restrictions;
- costs to defend the related litigation;
- loss of revenue;
- the inability to commercialize our vaccine candidates; and
- a decline in our H Share price.

Once our vaccine candidates obtain approvals, we are required to maintain liability insurance to cover product liability claims in accordance with the relevant laws and regulations. Any product liability insurance for clinical trials, when obtained, may be prohibitively expensive, or may not fully cover our potential liabilities. Our inability to obtain and retain sufficient product liability insurance at an acceptable cost to protect against potential product liability claims could prevent or inhibit the commercialization of vaccine candidates we develop. Even we maintain such insurance, any claim that may be brought against us could result in a court judgment or settlement in an amount that is not covered, in whole or in part, by our insurance or that is in excess of the limits of our insurance coverage. Our insurance policies also have various exclusions, and we may be subject to a product liability claim for which we have no coverage. We will have to pay any amounts awarded by a court or negotiated in a settlement that exceed our coverage limitations or that are not covered by our insurance, which may have an adverse effect on our financial condition.

RISK FACTORS

Any disruption of our current manufacturing facilities, any delays or failure in the completion of construction of our new manufacturing facilities or any failure to manage the manufacturing capacity properly due to ongoing regulatory obligations and continued regulatory review, could have a material and adverse effect on our business, financial condition and results of operations.

We currently manufacture all of our vaccine products for sale and vaccine candidates for clinical trials in the Licensed Manufacturing Facilities of our four operating subsidiaries, namely Rong'an Bio, AIM Honesty, AIM Kanghuai and AIM Weixin, with GFA used for manufacturing purposes of approximately 25,318 sq.m., 11,877 sq.m., 18,711 sq.m. and 72,313 sq.m., respectively. In order to grasp the market opportunities and grow our business, AIM Weixin is rebuilding and expanding the production lines for new products within its Licensed Manufacturing Facility, and Rong'an Bio is constructing new plants and production workshops on a piece of newly acquired land in the Ningbo Bonded Area. See "Business—Manufacturing—Manufacturing Facilities and Production Capacity—New Production Facilities."

The normal operation of our existing manufacturing facilities may be significantly impaired by natural disasters or other unanticipated catastrophic events, including power interruptions, water shortage, storms, fires, earthquakes, terrorist attacks and wars, as well as changes in governmental zoning plans, which would in turn disrupt our sales of existing products and adversely affect our business and financial results. In addition, our manufacturing facilities expansion efforts may not be successful. Besides the impact caused by the aforementioned catastrophic events, the final design of the new facilities and actual time of operation depend on our actual production plan, launch schedule of our vaccine candidates and other factors, many of which are out of our control. The construction of any of our production facilities may also be adversely affected by delays, cost overruns, regulatory restraints, construction hardship and many other factors. If our construction is not completed as planned, our operation and financial condition may be adversely affected, including that we may not be able to commercialize our vaccine candidates as scheduled and we may not be able to further improve the production capacity as expected.

Additionally, all vaccine manufacturing facilities are required to be approved by governmental authorities before we may use them to commercially manufacture products and are subject to inspection by regulatory agencies during the operation. If we fail to comply with applicable regulatory requirements for our existing or future new facilities, we may be subject to sanctions, including but not limited to,

- refusal of regulatory agencies to review pending production permit applications or supplements to such applications;
- withdrawals, revocation or non-renewal of approvals, license or permits previously issued;
- product recalls, seizure or confiscation;
- total or partial suspension of production;
- monetary penalties; and
- criminal prosecution.

Moreover, we may fail to manage the manufacturing capacity properly. The manufacturing capacity is calculated based on the designed manufacturing capacity of our manufacturing facilities, after taking into account any reduction in capacity caused by, among other factors, suspension of manufacturing for renewal of GMP certification or production permits, upgrades or maintenance. The manufacturing capacity for a product directly determines the maximum amount of vaccine products that could be produced in a given period and the volume of finished products that will be available for sale in subsequent periods.

RISK FACTORS

Proper management of the manufacturing capacity, and in particular, minimizing the time for renewing GMP certification or production permits, and maintaining sufficient GMP certified back-up capacity in preparation for suspension of manufacturing caused by planned or unexpected events, is critical to maintaining a steady supply of products and a stable growth in our revenues. For example, in 2018, we did not produce any human rabies vaccine (Vero cell) products due to preparation work for and a prolonged review process of our GMP certificate renewal as a result of the Changsheng Incident. The renewal of GMP certificate was originally expected to be completed in August 2018 based on our past experience, but was completed till December 2018 as a more rigorous scrutiny was imposed on the GMP certification process due to the Changsheng Incident. Our production of HFRS vaccine products and mumps vaccine products had also experienced temporary suspension in the past for the obtaining of necessary approvals or preparation for the GMP inspection. Such suspension of production or delay in production schedule had lowered the production utilization rates of the relevant products in the respective periods and affected our sales volume and revenue accordingly. See “Business—Manufacturing—Manufacturing Facilities and Production Capacity—Our Production Capacity” and “Financial Information—Consolidated Statements of Profit or Loss—Revenue.”

If we are not able to source sufficient quantity of raw materials of required quality at commercially acceptable cost, our business could be harmed.

In order to manufacture our vaccine products, we must obtain sufficient quantities of high-quality raw materials at commercially acceptable prices and in a timely manner. Most of our raw materials are widely available, however, if our suppliers become unable or unwilling to continue to supply the raw materials to us in the quantities or at the quality or price that we require, we would have to incur additional time and costs to find alternative supplier(s) that can meet our standards and we may not be able to pass on the increased costs to our customers. In addition, even for the widely available raw material, due to procedures required to replace a supplier or engage a new supplier and other factors such as any shortfall of market supply, we cannot assure you that we would always be able to obtain raw materials in the quantities or at the quality or price that we require without any interruption. We also cannot assure you that these third parties will be able to maintain and renew all licenses, permits and approvals necessary for their operations or comply with all applicable laws and regulations. Failure to do so by them may lead to interruption in their business operations, which in turn may result in shortage of the raw materials supplied to us. In either case above, our operations might be interrupted or delayed and our business and financial results might be adversely affected.

Furthermore, raw materials used in our production may be subject to price volatility caused by external conditions, such as market supply and demand, fluctuations in transportation costs, changes in governmental policies and natural disasters. For example, the price of fetal bovine serum, one of our main raw materials, increased by 30.2% between 2019 to 2021. Please see “Financial Information—Significant Factors Affecting Our Financial Condition and Results of Operations—Our Ability to Control Operating Costs and Expenses” for a sensitivity analysis for our raw materials costs. Various factors could lead to significant fluctuation in the prices of our key raw materials. We cannot assure you that our raw material cost will not increase significantly in the future, or that we could pass any increased raw material costs along to our customers. As a result, any significant price increase of our raw materials may have an adverse effect on our profitability and results of operations.

Moreover, we cannot guarantee that we will be able to detect all quality issues in the supplies we use. If we are unable to do so and the quality of our products suffer as a result, we may have to recall our products, be subject to product liability claims, suspend our production and/or incur significant costs to rectify such issue, which may have a material and adverse effect on our business, financial condition and results of operations.

RISK FACTORS

Failure to establish and maintain an effective cold-chain network may subject our vaccine products, reputation and business to incalculable risk of damage.

Vaccines are sensitive biological products. Even slight changes to temperature and lighting conditions may affect their potency. To maintain quality and potency, vaccines must be stored in strictly controlled environments through cold-chain logistics providers. The Vaccine Administration Law requires cold-chain transportation and storage in the entire delivery process of vaccines in order to ensure constant monitoring and control of temperature, with a tracking system implemented to keep proper records of the temperature of vaccines during transportation and storage. See “Regulatory Overview.” To fully comply with these requirements, we have engaged logistic companies with cold-chain capabilities to transport our products. Our agreements with such logistic companies require them to provide cold-chain transportation services with tracking systems that are suitable for vaccines or medical products. Upon delivery, the logistic companies are required to provide the temperature monitor records for the entire delivery process, and we are entitled to inspect their compliance with all applicable requirements. The logistic companies are also obligated to deliver our products on time and are responsible for losses and damages in transportation. While CDCs would generally require logistics companies to provide relevant licenses to show their eligibility to transport vaccine products, we also audit the logistic companies periodically to ensure the quality of their service. In addition to engaging cold chain logistic companies, as of the Latest Practicable Date, we used 23 storage centers located in 19 provinces, direct-controlled municipalities and autonomous regions that are qualified for cold-chain storage. See “Business—Sales and Marketing—Vaccine Transportation and Storage.” If we or third parties we cooperate with fail to strictly adhere to any of the requirements when transporting our products through cold-chain, our vaccine products may be exposed to inappropriate temperatures or other improper storage conditions and subject to potency diminishment or even potency loss. In this case, all the vaccine products that are transported in the same batch are subject to quality damage and may need to be destroyed. As a result, our reputation and business may be materially and adversely affected.

Vaccine products are susceptible to contamination.

Vaccine manufacturing usually requires cultivation steps, including growth of the appropriate organism and the use of substances of animal origin, which makes it easy to introduce a contaminant and to amplify low levels of contamination. In addition, cross-contamination could result from manufacturing activities being based on the sharing of equipment and facilities, which are common. Other activities such as diagnosis and research are frequently linked to manufacture, which may create opportunities for cross-contamination. Furthermore, any improper actions during the long-distance transportation, storage and delivery services may result in contamination of our vaccine products.

In the event of vaccine contamination or injury resulting from such contamination, we could be subject to liabilities for any resulting damages to vaccinees, product recalls, confiscation and/or destroy. We also could incur significant costs associated with civil or criminal fines and penalties for failure to comply with such laws and regulations. In addition, contamination of our vaccine products could cause customers or other third parties with whom we conduct business to lose confidence in our products’ quality and the reliability of our manufacturing procedures, which could adversely affect our sales and profits. In addition, contaminated products that are unknowingly distributed could result in harm on vaccinees, threaten the reputation of our vaccine products and expose us to product liability claims, criminal charges and administrative sanctions.

RISK FACTORS

We deal with potentially harmful biological materials and other hazardous materials that may cause environmental contamination or injury to others.

Our manufacturing operations and R&D activities involve the controlled use of potentially harmful biological materials and other hazardous materials. In particular, the risk of accidental contamination to the environment or injury to our employees or others from the use, manufacture, storage, handling or disposal of these materials may not be completely eliminated. For example, the virus and bacteria used for our production and examination of vaccines, if leaked, may pose risks on the environment or public health. In the event of contamination or injury, we could be held liable for any resulting damages, which could exceed any applicable insurance coverage we may have. Furthermore, governmental agencies could initiate investigations against us, which may result in fines, sanctions, revocations of operating permits, suspension of our operations, closure of our facilities or other penalties. Our reputation may be harmed as well. Laws and regulations regarding handling of harmful biological materials and other hazardous materials, or more stringent environmental regulations that may be adopted in the future, may mandate additional protective and other measures against potential contamination or injury caused by these materials, compliance with which could be costly, and our financial condition may be affected as a result.

Risks Relating to the Sales and Marketing of Our Vaccine Products and Commercialization of Our Vaccine Candidates

Our market-leading key commercialized vaccine products generate a significant portion of our profits and cash flows. Any decrease in their revenue or market share would adversely affect our business, financial condition, results of operations and prospects.

During the Track Record Period, our revenue was primarily derived from the sale of eight vaccine products against six disease areas. We generated substantial revenue from our key vaccine products, namely human rabies vaccine (Vero cell) and recombinant HBV vaccines (Hansenula Polymorpha), which occupy market leading positions in China, accounting for 18.1% and 45.4% market share, respectively, in terms of 2021 approved lot release volume. Revenue from sales of these vaccine products accounted for 84.2%, 90.2%, 93.0%, 94.3% and 92.0% of our total revenue in 2019, 2020, 2021 and the four months ended April 30, 2021 and 2022, respectively. We expect sales of our key products to continue to generate a significant portion of our revenues in future periods. Any decrease in the demand or pricing for our key products could cause our revenue and profitability to decline, which may adversely affect our business, financial condition, results of operations and prospects. Factors that could lead to such decline include, for example, the following, most of which we have very limited or no control:

- increased competition;
- new comparative or compelling product introductions by market newcomers or our competitors;
- the cost of vaccines relative to alternative treatments;
- results, timing and procedures of lot release determining whether we could market our products;
- results of public tenders determining whether we would be permitted to sell in designated markets;
- the market acceptability of our products to local CDCs and vaccinees and their willingness and power to purchase;
- PRC government-imposed pricing constraints or pricing guidance;

RISK FACTORS

- new stringent regulatory requirements on licensing and qualifications;
- disruptions in manufacturing or sales;
- media coverage and public opinion on side effect of vaccination or discovery of previously unknown adverse reactions; and
- newly discovered safety issues, such as issues relating to product quality or quality control.

If we are unable to compete effectively in the highly competitive vaccine industry, our business, financial condition, results of operations and prospects could be materially and adversely affected.

We operate in a highly competitive environment, and we expect the competition to increase in the future. The largest vaccine market player in China is CNBG, a state-owned vaccine conglomerate, which accounted for a 35.5% market share in terms of 2021 approved lot release volume and a 26.5% market share in terms of 2021 sales revenue (both metrics excluding COVID-19 vaccines). Compared to privately-owned companies, CNBG has significantly more resources at its disposal. In 2021, in terms of approved lot release volume, we took up a 7.4% market share, ranking the second largest among all market players and rank the largest among all privately-owned vaccine companies in the PRC vaccine market (excluding COVID-19 vaccines). More specifically, with respect to human rabies vaccine and HBV vaccines, being our major vaccine products, we primarily compete with domestic vaccine manufacturers. There are at least nine vaccine manufacturers in China offering human rabies vaccine products, and the largest supplier accounted for approximately 50.8% of the overall market in terms of 2021 approved lot release volume. For HBV vaccines, although in 2021 our products accounted for more than 45% of the market share in the PRC, we cannot guarantee that our dominant position will continue in the future. In addition, we expect to compete with a number of domestic and international market players for our vaccine pipeline. Most of our vaccine candidates are still in early development stages while there are already Phase III or NDA-stage candidates for the same indications. In certain of our targeted disease areas, there are also many competing candidates in the similar or more advanced development stages. For example, we are developing three COVID-19 vaccines, including one Phase III mRNA vaccine candidate, one inactivated vaccine candidate against the Original Strain in the Phase II clinical trial with its second generation against the Delta variant strain in the CTA filing process, and one universal coronavirus vaccine candidate under preclinical studies. While our COVID-19 vaccine candidates are still undergoing clinical trials, as of the Latest Practicable Date, there were nine COVID-19 vaccines having been conditionally approved or granted for emergency use in the PRC, according to CIC. Some of the competitors, including the state-owned CNBG, may have a longer operation history, are in a bigger size, or may have greater financial and/or other resources than we do. In addition, due to the growth potential of the vaccine markets, a number of other entities are trying to enter into the market and may offer products competing with ours. For example, as of the Latest Practicable Date, according to CIC, 17 human rabies vaccine candidates being developed by other companies were in Phase III clinical trial or a later stage. New competitors, domestic or international, may have, among other strengths, more innovative products or advanced technologies compared to ours. In addition, the technologies used by us and our competitors are evolving rapidly, and new developments frequently result in price competition and product obsolescence.

Accordingly, even if we have been occupying substantial market share and have successfully launched new vaccine products in the past, we may not be able to maintain our current market share or outperform a competing product in the future for many reasons, such as:

- the competing product may gain a wider market acceptance;
- the competing product may incorporate more recent technological innovations or research findings;

RISK FACTORS

- the competing product may be, or may be perceived to be, more effective or superior in quality or brand recognition;
- the competing product may be offered at a lower price or for free;
- the competing product may be less sensitive to incidents or negative publicity;
- the competitor may have more financial resources or better R&D resources;
- the competitor may have more efficient manufacturing processes, greater production capacity or lower manufacturing costs;
- the competitor may have more aggressive marketing strategies, greater marketing capabilities or pricing flexibility; and
- the competitor may have better or more resource to, or may be able to in a more efficient manner, respond to new regulations or industry practice.

Market players in the PRC vaccine market face many challenges, such as having to maintain stable vaccine manufacturing capacity and ensuring high quality standards, and the need to continuously invest in R&D and innovation. See “Industry Overview—Overview of the PRC Vaccine Market—Competition and Entry Barriers of the PRC Vaccine Market”. Furthermore, the vaccine market in China in general is expected to develop rapidly as a result of new trends, such as developing combined vaccines, mRNA vaccines and other innovative vaccines, as well as developments in related scientific research and technology. Our ability to react to new trends, research and technology and to identify, develop and commercialize in a timely and cost-effective manner vaccines is critical to our competitiveness and long-term success. Therefore, if we fail to effectively compete with our competitors in adjusting to new trends and market needs in the biotechnology and vaccine industries, or if we fail to obtain or maintain our leading positions in production and other technologies, our business, financial condition, results of operations and prospects may be materially and adversely affected.

If our bids in the public tender process are not successful or we fail to secure subsequent product orders, our business may be adversely affected.

We are required to participate in the public tender process held by difference levels of CDCs in order to sell our vaccine products in the PRC. Public tenders for Class I vaccines are held by national or provincial-level CDCs. Public tenders for Class II vaccines are held by provincial-level CDCs. In 2019, 2020, 2021 and the four months ended April 30, 2022, our tender success rate for both Class I and Class II vaccines was 100%. We generally compete with competitors on the bid price, clinical effectiveness and quality of each product, as well as reputation. Once we win a public tender, we will be eligible for selling vaccine products to CDCs. See “Business—Sales and Marketing—Public Tenders.” Our bids during the public tender process may not be successful and our vaccine products may not be chosen for a number of reasons, such as:

- our prices are not competitive;
- our products are perceived to be less clinically effective than competing products;
- our service quality or any other aspect of our operation is perceived not to meet relevant requirements; or
- our reputation is adversely affected by unforeseeable events.

RISK FACTORS

If we fail to participate or bid successfully during any public tender process, we will not be able to sell our products to the relevant CDCs, which will negatively impact our sales volume as well as our financial condition and results of operations.

Even if we bid successfully, we cannot guarantee that we will be able to secure purchase orders from local CDCs. For example, for our Class I vaccines, the winning bid will specify the volume to be procured by provincial CDCs. However, for other vaccines, public tenders serve as an admission for entry to market, typically for one year and in certain situations two or three years, without a specified volume, and the relevant CDCs will negotiate with us on the actual supply volume based on each CDC's demand. Therefore, winning the public tender does not guarantee that we will make sales to local CDCs. If we fail to secure subsequent product orders from local CDCs after we bid successfully at the higher level of CDCs, our sales volume and results of operations will be materially and adversely affected.

Our sales to CDCs may subject us to uncertainties associated with the government funding, budgeting and decision-making process.

During the Track Record Period, substantially all of our customers were different levels of CDCs in the PRC, which are government agencies administrating public health affairs. These expose us to certain risks relating to doing business with public authorities. For example, although we enter into contracts with CDCs for sales of our vaccine products, and such contracts generally stipulate the payment time and method, and dispute resolution, we have little or no control over their procurement decisions or payment cycles. Changes in the personnel of CDCs may result in changes or delays to, or cancellations of, their purchase commitments due to, among others, differing policy and budgetary agendas of the personnel involved. Any of the above mentioned actions taken by the authorities could have a material adverse effect on our results of operations and expected earnings, or result in our failure to meet, or having to adjust downwards, our sales estimates.

In addition, many of the remedies that are available to us when dealing with private parties, such as making claims for breach of contract or taking other legal actions, may not be practicable in our dealings with CDCs. For example, in the event of any dispute with a CDC, we may find it is not in our best interest to take legal actions against the CDC and may, instead, resolve such disputes through other means, such as negotiations or third-party mediations. Therefore, we cannot assure you that results from such processes will be the same as or more favorable to us than those we would have obtained in legal proceedings.

If we experience delays in collecting payments from CDCs, our cash flows and operations could be adversely affected.

We are exposed to certain risks when it comes to collecting payments from CDCs. Demand and ability to pay for our products may be affected by their budgetary cycles, shifting availability of funds and changes in government procurement policy. We typically grant credit period of 60 to 180 days to CDCs. The recovery period of the payment can be long due to multi-level internal review and approval procedures of CDCs at different levels. As of December 31, 2019, 2020, 2021 and April 30, 2022, the impairment of our trade and bills receivables were RMB28.8 million, RMB18.5 million, RMB26.3 million and RMB31.2 million, respectively, accounting for 6.5%, 2.1%, 2.5% and 3.1% of our trade and bills receivables as of the same dates, respectively. Our trade receivables turnover days were 218.3 days, 151.7 days, 229.9 days and 466.2 days in 2019, 2020, 2021 and the four months ended April 30, 2022, respectively. For more details on our trade receivables, see "Financial Information—Discussion of Certain Key Balance Sheet Items—Trade and Bills Receivables." Our CSOs and our sales and marketing employees are responsible for collecting amounts due from CDCs. We cannot assure you that CDCs could settle trade receivables in a timely manner, or at all, or that we can properly assess and respond in a timely manner to changes in their credit profile and financial condition. The delays in collecting payments from CDCs could adversely affect our cash flow and our working capital position for our normal business operation, our ability to make payments when due or to satisfy our financial needs to produce vaccines, conduct R&Ds or conduct other business activities as planned, which in turn would adversely impact our financial condition and results of operations.

RISK FACTORS

Our vaccine products or vaccine candidates, if approved, may become subject to national or other third-party reimbursement practices or unfavorable pricing regulations, which could harm our business.

The level of reimbursement available from PRC government health administration authorities, private health insurers and other organizations will affect how successfully we can commercialize an approved vaccine candidate. For example, if our vaccine is not covered by reimbursement from any third-party payor, while a competitor's vaccine targeting the same indications is covered, vaccinees may choose our competitor's vaccine over our own. On the other hand, certain vaccines may target diseases that do not or are not perceived to pose a high risk to a large number of people. If such vaccines are not covered by reimbursement, people may choose not to receive vaccination.

In the past, PRC government authorities and these third-party payors have attempted to control costs by limiting coverage and the amount of reimbursement for particular vaccines. Therefore, we cannot be sure that reimbursement will be available for any approved vaccine candidate that we commercialize in the future and, if reimbursement is available, what the level of reimbursement will be. Obtaining or maintaining reimbursement for approved vaccine products may be particularly difficult. Meanwhile, there may be delays in obtaining reimbursement for approved vaccine products, and coverage may be more limited than our expectation.

Moreover, eligibility for reimbursement does not imply that any vaccine will be paid for in all cases or at a rate that covers our costs, including research, development, manufacture, and sales. Payment rates may vary according to the use of the vaccine and the clinical setting in which it is used, may be based on payments allowed for lower-cost vaccines that are already reimbursed, and may be incorporated into existing payments for other services. Our inability to promptly obtain coverage and profitable payment rates from both government-funded and private payors for any future approved vaccine candidates and any new vaccines that we develop could have a material adverse effect on our business, our operating results, and our overall financial condition.

Our business and operation depends on our experience in launching and marketing vaccine products. If we cannot maintain sufficient marketing and sales capabilities, we may fail to generate sustainable revenue and profit.

To increase sales of our current vaccine products as well as successfully commercialize our vaccine candidates, we will need to maintain and continue to build out our sales and marketing capabilities, either on our own or in partnership with third parties, such as CSOs. The continued development of our sales and marketing team will be expensive and time-consuming and could delay any product launch. We compete with many vaccine companies that currently have extensive, experienced and well-funded marketing and sales operations to recruit, hire, train and retain marketing and sales personnel, and will have to compete with those companies to recruit, hire, train and retain any of our own marketing and sales personnel. If we are unable to sustain and expand our sales and marketing team, we may be unable to compete successfully against our competitors. On the other hand, for our collaboration with third-party marketing partners, such as CSOs, we need to negotiate and enter into arrangements with them. If we are unable to enter into such arrangements when needed, on acceptable terms, or at all, we may not be able to successfully commercialize any of our vaccine candidates that receive regulatory approval or any such commercialization may experience delays or limitations.

RISK FACTORS

If we fail to effectively manage third-party CSOs, over whom we have no full control, our business and operations could be harmed, and we may be subject to product liability claims, potential litigation, governmental investigations and penalties.

Our ability to expand our business will depend on our ability to establish a sales network that timely delivers our products. Our sales and marketing team is responsible for formulating overall marketing and promotion strategies. In executing such strategies and performing relevant marketing and promotion activities, our in-house sales and marketing team currently covers major direct-controlled municipalities (i.e., Beijing, Tianjin and Chongqing) and a number of large-population provinces dispensed in all our four sales regions. For the other provinces and areas in the PRC, we engage third-party CSOs with local resources, proven industry experience and expertise and quality compliance history to assist our sales. During the Track Record Period, we consolidated our CSO team by decreasing the number from approximately 60 to less than 40, increasing the average share of wallet from CSOs from RMB12.0 million in 2019 to RMB35.7 million in 2021. We typically enter into agreements with CSOs for a period of one to two years. Those CSOs may elect not to renew their agreements with us or otherwise terminate their business relationships with us for various reasons. Moreover, for each third-party CSO, we set performance requirements, yet we cannot assure you that they will always be able to meet such requirements as we have limited control over them. If our significant CSOs or a significant number of our CSOs suspend or terminate their relationships with us, or fail to accomplish the sales target we set for them, we may not be able to effectively maintain our sales volume. As a result, our business and operations could be harmed.

Under our marketing agreements with CSOs, they are required to acquire applicable qualification to conduct business, and to comply with applicable regulatory requirements on marketing activities and our sales policies. We can also monitor their marketing activities pursuant to those agreements. However, the acts of third-party CSOs are out of our control, and they may fail to maintain necessary business qualifications, fail to obtain the registration certificate from the relevant local authorities when they are required for sales in the designated market, fail to market our products in the manner we contemplate, or otherwise cannot adequately meet our needs or standards. In such cases, we may be subject to product liability claims, potential litigation, governmental investigations and penalties.

Even if one of our vaccine candidates obtains regulatory approval, they may fail to achieve the broad acceptance by CDCs, local vaccination sites and clinics, physicians, KOLs and vaccinees necessary for commercial success.

Even if one of our vaccine candidates obtains regulatory approval, the commercial success of any of our current or future vaccine candidates will depend significantly on the broad acceptance by CDCs, local vaccination sites and clinics, physicians, KOLs and vaccinees. The degree and rate of physicians and vaccinees' adoption of our current or future vaccine candidates, if approved, will depend on a number of factors, including:

- the clinical indications for which the product is approved and vaccinees demand for approved products that target those indications;
- the safety and immunogenicity of our product as compared to therapies for the disease and other available vaccines;
- the prevalence and severity of side effects;
- the time required for manufacture and release of our products;
- the availability of insurance coverage and adequate reimbursement from China's EPI, government payors and other third-party payors for any of our products;

RISK FACTORS

- acceptance by physicians, operators of local vaccination sites and clinics and vaccinees of the product as a safe and effective treatment;
- proper training and administration of our products by physicians and medical staff;
- vaccinees' satisfaction with the results and administration of our products and overall treatment experience, including, for example, the convenience of any dosing regimen;
- the cost of treatment with our vaccine candidates in relation to alternative treatments;
- limitations or warnings contained in the NMPA-approved labeling for our products;
- the effectiveness of our sales and marketing efforts;
- adverse publicity about our products or favorable publicity about competitive products; and
- potential product liability claims.

We cannot assure you that our current or future vaccine candidates, if approved, will achieve broad market acceptance among physicians and vaccinees. Any failure by our vaccine candidates that obtain regulatory approval to achieve market acceptance or commercial success would adversely affect our results of operations.

If our products cause, or are perceived to cause, severe side effects or adverse events following immunization, our revenue and profitability could be adversely affected.

As an inherent risk of our businesses, our vaccine products may cause side effects or adverse events following immunization as a result of a number of factors, many of which are outside of our control. For example, common vaccine reactions of human rabies vaccine mainly include fever and local swelling, and may be accompanied by general malaise, fatigue, loss of appetite, weakness and other syndromes, while other adverse events following immunization may include more severe consequences such as injuries and death. According to CIC, the common reasons for death following the use of vaccine include failure to complete the immunization process when the targeted virus or disease is fatal, such as rabies, or severe consequences leading to injuries or death, such as the complications of pneumococcal disease and asphyxia. The factors causing side effects or adverse events following immunization include without limitation potential side effects or adverse reactions not revealed in clinical trials, unusual but severe side effects or adverse reactions in isolated cases, defective products not detected by our quality management system, improper storage by hospitals or clinics or inappropriate vaccine handling, prescribing or administration by the physicians. Our products may also be perceived to cause severe side or adverse events following immunization when a conclusive determination as to the cause of the severe side effects or adverse events following immunization is not obtained or is unobtainable.

Our products may be perceived to cause severe side or adverse events following immunization if other vaccine manufacturers' products that target the same diseases, apply the same technology, or use the same culture cells or raw materials as our products cause or are perceived to have caused severe side effects or adverse events following immunization, or if one or more regulators, such as the NMPA or an international institution, such as the WHO, determines that products applying the same technology or using the same culture cells or raw materials as our products could cause or lead to severe side effects or adverse events following immunization.

RISK FACTORS

Moreover, under the PRC law, we, as the vaccine producer, may be required to bear the responsibility to make compensation to vaccinees who suffer from adverse events following immunization of Class II vaccines, in cases where the immunization causes damage to a vaccinee's organs or physiological functions or leads to severe injuries or death of a vaccinee in the process of or after the immunization of a qualified vaccine, and no party has any fault during the process. As a result, we may have to provide compensation even when the damages do not necessarily have a causal relationship with the quality of our vaccines.

If our products cause, or are perceived to cause, severe side effects or otherwise cause adverse events following immunization, we may face a number of consequences, including:

- recall or withdrawal of our products;
- removal of regulatory approvals for our products or the relevant production facilities;
- additional warnings required to be included on the label;
- a decrease in the demand for, and sales of, our products; and
- damage to the brand name of our products and our reputation.

Failure to maintain and predict inventory and finished goods levels in line with the level of demand for our vaccine products could cause us to lose sales or face excess inventory risks and holding costs, either of which could have a material adverse effect on our business, financial condition and results of operations.

To operate our business successfully and meet our CDCs' demands and expectations, we must maintain a certain level of finished goods to ensure timely delivery when requested. Furthermore, we are required to maintain an appropriate level of inventory of our raw materials for our commercial production. For 2019, 2020, 2021 and the four months ended April 30, 2022, our average inventory turnover days were 339.3, 309.6, 410.9 and 878.3 days, respectively, and our finished goods turnover days were 165.4, 136.0, 185.6 and 408.0 days, respectively. For more details on our inventories, see "Financial Information—Discussion of Certain Key Balance Sheet Items—Inventories." However, we maintain our inventory and finished goods levels based on our internal forecasts which are inherently uncertain. If our forecast demand is lower than actual demand, we may not be able to maintain an adequate inventory or finished goods level of our products or produce our products in a timely manner, and may lose sales and market share to our competitors. On the other hand, we may be exposed to increased inventory risks due to accumulated excess inventory of raw materials or finished goods. Excess inventory levels may increase our inventory holding costs, risk of inventory obsolescence or write-offs.

The market opportunities for our vaccine candidates may be smaller than we anticipate, which could render some vaccine candidates ultimately unprofitable even if commercialized.

We estimate the incidence and prevalence of target vaccinee populations for particular diseases based on various third-party sources, such as scientific literature, surveys of clinics, patient foundations or market research, as well as internally generated analysis, and we use such estimates in making decisions regarding our vaccine development strategy, including determining on which candidates to focus our resources for preclinical or clinical trials. These estimates may be inaccurate or based on imprecise data. The total addressable market opportunity will depend on, among other things, acceptance of the vaccine by the medical community and vaccinee access, vaccine pricing and reimbursement.

RISK FACTORS

The number of vaccinees in the addressable markets may turn out to be lower than expected, vaccinees may not be amenable to treatment with our vaccines, or new vaccinees may become increasingly difficult to identify or access. Furthermore, new studies may change the estimated incidence or prevalence of the diseases that our vaccine candidates target, and the number of addressable vaccinees for our vaccine candidates in any case may turn out to be lower than expected. In such cases, even if we obtain significant market share for our vaccine candidates, because the potential target populations are small, we may never achieve profitability without obtaining regulatory approval for additional indications. Any of the above unfavorable developments could have a material adverse effect on our business, financial condition and results of operations.

Because some of our vaccines are intended to prevent diseases of major public health concerns, we are at risk of governmental actions detrimental to our business, such as price controls or waivers on vaccine patent, due to which the development and commercialization of such vaccines may suffer.

In response to a pandemic or the perceived risk of a pandemic, governments in China and other countries may take actions to protect their citizens, including but not limited to, intellectual property expropriation, compulsory licenses and/or strict price controls. These actions could affect our ability to control the production and our ability to generate revenue from sales of pandemic vaccines or otherwise impose burdensome regulations on our business. Additionally, we may need to, or we may be required by governmental or non-governmental authorities to, set aside our COVID-19 vaccines, if approved, for designated purposes or geographic areas, and subject to requirements on allocation of supply. We are also likely to face significant public attention and scrutiny over any future business models and pricing decisions with respect to our COVID-19 vaccines. If we are unable to successfully manage these risks, we could face significant reputational harm, which could negatively affect the price of our H Shares.

The recession or eradication of the infectious diseases that our vaccines target and the availability of alternative vaccines or treatment technologies may adversely affect our sales.

If the diseases that any of our vaccine products are indicated to treat or are effectively eradicated, market demand for the relevant vaccine products will consequently diminish. Moreover, medical technologies are evolving and new vaccines or treatment technologies for diseases that our vaccines target may emerge. If these competing new vaccines or technologies are perceived by vaccinees to be more effective than our vaccines, market demand for our vaccines may decline. The occurrence of any of the foregoing could materially and adversely affect our business, financial condition and results of operations.

Risks relating to Our Intellectual Property Rights

If we are unable to protect our intellectual property, our business, financial condition and results of operations could be materially and adversely affected.

Our success depends, in part, on our ability to protect our proprietary technologies and know-how. We try to protect the technology that we consider important to our business by a combination of patent and trade secret protection, as well as employee and third party confidentiality agreements. As of the Latest Practicable Date, we had registered 104 patents and had filed 44 patent applications in the PRC. See “Business—Intellectual Property”.

The process of seeking patent protection in China can be lengthy and expensive and we cannot assure you that our pending patent applications, or any patent applications we may make in the future with respect to other products or production processes, will result in issued patents, or that any patents we already have or that will be issued in the future will be able to provide us with meaningful protection or commercial advantage. Our patent applications may be challenged, invalidated or circumvented in the future.

RISK FACTORS

In addition to patents, we rely on trade secrets and proprietary know-how to protect our intellectual property. We have taken a series of measures to protect our trade secrets and proprietary know-how, including confidentiality agreement entered into with employees who have access to such confidential information. See “Business—Intellectual Property” for details. However, these measures may not provide meaningful protection or adequate remedies in the event of unauthorized use or disclosure of our proprietary information. In addition, it is possible that third parties could independently develop information and techniques substantially similar to ours or otherwise gain access to our trade secrets.

If for any of the above or other reasons we fail to adequately protect our intellectual property, competitors may be able to imitate our products, use our technologies and erode or negate any competitive advantages we may have, which could harm our business and profitability.

Issued patents covering one or more of our products and vaccine candidates could be found invalid or unenforceable.

Despite measures we take to obtain patent and other intellectual property protection with respect to our vaccine candidates, any of our intellectual property rights could be challenged or invalidated. For example, if we were to initiate legal proceedings against a third party to enforce a patent covering one of our vaccine candidates, the defendant could counterclaim that our patent is invalid and/or unenforceable. Grounds for a validity challenge could be an alleged failure to meet any of several statutory requirements, for example, lack of novelty, obviousness or non-enablement. Meanwhile, failure to comply with relevant procedures or regulatory requirements may result in invalidation of patents or patent applications. For example, at various stages over the entire lifespan of a patent, the patent owner is required to pay regular maintenance fees, renewal fees, annuity fees and various other government fees related to patents and patent applications to relevant PRC authorities. Failure to pay such fees in full and in a timely manner may result in invalidation of the patent or the patent application. Furthermore, we may not be able to ensure that there is no invalidating prior act, of which we and the patent examiner were unaware during prosecution. If a defendant were to prevail on a legal assertion of invalidity and/or unenforceability, we would lose at least part, and perhaps all, of the patent protection on a vaccine candidate. Grounds for an unenforceability assertion could be an allegation that someone connected with prosecution of the patent withheld relevant information from China National Intellectual Property Administration or made a misleading statement, during prosecution.

Even if a defendant does not prevail on a legal assertion of invalidity and/or unenforceability, our patent claims may be construed in a manner that would limit our ability to enforce such claims against the defendant and others. Any loss of patent protection could have a material adverse impact on one or more of our vaccine candidates and our business. On the other hand, if third parties file counterclaims against us, we may need to exert significant time and expenses to defend such counterclaims, and failure to successfully defend counterclaims could require us to pay substantial damages, cease the sale of certain vaccines or enter into a license agreement and pay royalties (which may not be possible on commercially reasonable terms or at all).

Claims that our vaccine products or vaccine candidates infringe the patents or other intellectual property rights of third parties, or challenges over ownership of our patents or other intellectual properties, could result in costly litigation or could require substantial time and money to resolve, we may incur substantial liabilities, and we may be unable to sell these products.

Our commercial success depends significantly on our ability to operate without infringing on the patents and other proprietary rights of third parties. Patent applications in China are usually made public 18 months after the filing date. Therefore, the publication of discoveries in the scientific or patent literature frequently occurs substantially later than the date on which the underlying discoveries were made and patent applications were filed. China, as well as many other countries, adopts the first-to-file

RISK FACTORS

system under which the first party to file a patent application (instead of the first to invent the subject invention) may be awarded a patent. Even after reasonable investigation, we may not know with certainty whether we have infringed upon a third party's patent due to the complexity of patent claims, the inadequacy of patent clearance search procedures in China and the fact that a third party may have filed a patent application without our knowledge while that product was under development by us. There may also be technologies licensed to us or acquired by us that are subject to infringement, misappropriation or other claims by others which could damage our ability to rely on such technologies. As of the Latest Practicable Date, we were not involved in any proceedings in respect of, and we had not received written notice of any material claims of infringement of any intellectual property rights, in which we may be a claimant or a respondent. Nonetheless, we cannot guarantee that we will not be involved in intellectual property disputes in the future.

If a third party claims that infringement upon its proprietary rights has taken place, any of the following may occur to us:

- we may become involved in time-consuming and expensive litigation, even if the claim is without merit;
- we may become liable for substantial damages for past infringement if a court decides that our technology infringes upon a third party's patent;
- a court may prohibit us from producing, selling or licensing our product without a license from the patent holder, which may not be available on commercially reasonable terms, if at all, or which may require us to pay substantial royalties; and
- we may have to reformulate our product so that it does not infringe upon others' patent, rights, which may not be possible or could be very expensive and time-consuming.

If any of these events occur, our business, financial condition and results of operation will suffer. Additionally, pending patent applications which have been published can, subject to certain limitations, be later amended in a manner that could intrude our vaccine products or their uses. In order to avoid or settle potential claims with respect to any patent or other intellectual property rights of third parties, we may choose or be required to seek a license from a third party and be required to pay license fees or royalties or both, which could be substantial. Even if we were able to obtain a license, the rights may be nonexclusive, which could result in our competitors gaining access to the same intellectual property. Ultimately, we could be prevented from sales of the related products or commercializing a vaccine candidate, or be forced, by court order or otherwise, to cease some or all aspects of our business operations, if, as a result of actual or threatened patent or other intellectual property claims, we are unable to enter into licenses on acceptable terms.

Unfavorable outcomes in intellectual property litigation could limit our R&D activities and/or our ability to commercialize our vaccine candidates.

There is inevitable uncertainty in any litigation, including intellectual property litigation. There can be no assurance that we would prevail in any intellectual property litigation, even if the case against us is weak or flawed. If we are unsuccessful in defending against allegations that we have infringed, misappropriated or otherwise violated patent or other intellectual property rights of others, we may be forced to pay substantial damage awards to the plaintiff. On the other hand, we may be required to obtain a license from the intellectual property owner in order to continue our R&D programs or to commercialize any resulting product. It is possible that the necessary license will not be available to us on commercially acceptable terms, or at all. If we fail to obtain the necessary license, we might be barred from using certain aspects of our technology, which could affect the development and commercialization of our vaccine candidates or existing vaccine products. Any of the foregoing could limit our R&D activities, our ability to commercialize one or more vaccine candidates, or both.

RISK FACTORS

In addition, any future intellectual property litigation, interference or other administrative proceedings will result in additional expense and distraction of our personnel. An adverse outcome in such litigation or proceedings may expose us or any future strategic partners to loss of our proprietary position or expose us to significant liabilities, each of which could have a material adverse effect on our business. The uncertainties associated with litigation could have a material adverse effect on our ability to raise the funds necessary to conduct our clinical trials, continue our internal research programs, in-license needed technology, or enter into strategic partnerships that would help us bring our vaccine candidates to market.

Intellectual property litigation may lead to unfavorable publicity that harms our reputation and causes the market price of our H Shares to decline.

During the course of intellectual property litigations, there could be public announcements of the results of hearings, rulings on motions and other interim proceedings in the litigation. If the securities analysts or our potential investors regard these announcements as negative, the perceived value of our vaccines, programs or intellectual property could be diminished. Accordingly, the market price of our H Shares may decline. Such announcements could also harm our reputation or the market for our vaccine candidates, which could have a material adverse effect on our business.

Agreements, such as confidentiality agreements, with employees and third parties or confidentiality provisions in agreements may not prevent unauthorized disclosure or use of trade secrets and other proprietary information.

We rely on employee and third-party confidentiality agreements to safeguard our intellectual property, such as trade secrets, know-how and other proprietary information. Such confidentiality agreements are used, for example, when we collaborated with CROs. We also enter into confidentiality agreements with our key employees. We take steps to protect our proprietary information, and our confidentiality agreements and invention assignment agreements are carefully drafted to protect our proprietary interests. Nevertheless, there can be no guarantee that an employee or a third party will not make an unauthorized disclosure of our proprietary confidential information. This might happen intentionally or inadvertently. It is possible that a competitor will make use of such information, in which case our competitive position may be compromised, in spite of any legal action we might take against persons making such unauthorized disclosure and use.

Trade secrets are difficult to protect. Our employees, consultants, contractors or business partners might intentionally or inadvertently disclose our trade secret information to competitors or our trade secrets may otherwise be misappropriated. Enforcing a claim that a third party illegally obtained and is using any of our trade secrets is expensive and time consuming, and the outcome is unpredictable.

We sometimes engage individuals or research institutions to conduct research relevant to our business. The ability of these individuals or research institutions to publish or otherwise publicly disclose data and other information generated during the course of their research is subject to certain contractual limitations. These contractual provisions may be insufficient or inadequate to protect our confidential information. If we do not apply for patent protection prior to such publication, or if we cannot otherwise maintain the confidentiality of our proprietary technology and other confidential information, then our ability to obtain patent protection or to protect our trade secret information may be jeopardized, which could adversely affect our business.

RISK FACTORS

Intellectual property rights do not necessarily protect us from all potential threats to our competitive advantage.

The degree of protection afforded by our intellectual property rights is uncertain because intellectual property rights are subject to inherent limitations. Therefore, intellectual property rights alone may not adequately protect our business or permit us to maintain our competitive advantage. The following examples are illustrative:

- others may independently develop similar or alternative technologies or duplicate any of our technologies without infringing our intellectual property rights;
- we or any future collaborators might not have been the first to make the inventions covered by the issued patents or pending patent applications that we own or may own in the future;
- we might not have been the first to file patent applications covering certain of our inventions;
- it is possible that our pending patent applications will not lead to issued patents;
- others may independently develop similar or alternative technologies or duplicate any of our technologies without infringing, misappropriating or otherwise violating our intellectual property rights;
- issued patents that we own or have exclusively licensed may not provide us with any competitive advantages, or may be held invalid or unenforceable, as a result of legal challenges;
- we may obtain patents for certain technologies many years before we receive NDA approval for vaccines leveraging such technologies, and because patents have a limited life, which may begin to run prior to the commercial sale of the related vaccines, the commercial value of our patents may be limited;
- our competitors might conduct R&D activities in countries where we do not have patent rights and then use the information learned from such activities to develop competitive vaccines for commercialization in our major markets;
- we may fail to apply for or obtain adequate intellectual property protection in all the jurisdictions in which we operate; and
- the patents of others may have an adverse effect on our business, for example by preventing us from commercializing one or more of our vaccine candidates for one or more indications.

Any of the abovementioned events occur, we may regard these as threats to our competitive advantages and subsequently could have a material adverse effect on our business.

RISK FACTORS

Other Risks Relating to Our Business

The COVID-19 outbreak in China and worldwide has adversely affected, and may continue to adversely affect, our business, results of operations and financial condition. Natural disasters, epidemics, acts of war or terrorism or other factors beyond our control in the future may have a material adverse effect on our business operations, financial condition and results of operations.

In December 2019, a respiratory illness known as COVID-19 caused by a novel strain of coronavirus emerged and has spread globally since then. Since early 2020, China has taken various restrictive measures to contain the virus' spread, such as quarantines, travel restrictions and home-office policies. In response to this pandemic, multiple cities in China, including cities where our R&D functions and production lines are located, have been affected by the spread of the virus.

Our R&D and clinical trials of vaccine candidates were affected by the outbreak of COVID-19 and the resulting government measures. For example, some of our R&D staff were unable to work on-site at our R&D facilities in February and March of 2020 due to travel restrictions and home-office policies implemented by the PRC government, which has interrupted our research activities and caused delays in the clinical trials of some of our vaccine candidates. In addition, a number of other factors caused by COVID-19 have also adversely affected our operations, such as the diversion of healthcare resources away from the conduct of clinical trials to focus on pandemic concerns, and the delays in regulatory review of pre-CTA and CTA applications due to prioritization of the review of COVID-19 vaccine candidates. In the second half of 2021, there has been a recurrence of the COVID-19 outbreak in certain cities in China, and CDCs mobilized and focused more resources on COVID-19 vaccination (e.g., cold-chain logistics resources and physicians for vaccination) and delayed certain procurement and vaccination of other vaccines, which had a short-term adverse impact on our sales volume and revenue in the second half of 2021. More recently, since early 2022, the Omicron variant has become the dominant variant and led to a new wave of COVID-19 resurgence in China, causing local outbreaks in various cities and areas, such as Xi'an, Shenzhen, Shanghai, Beijing, Tianjin, and certain cities in Jilin, Zhejiang, Henan, Inner Mongolia and Sichuan provinces. To achieve "dynamic-zero COVID-19 cases" (動態清零), the PRC government has adopted a series of prevention and containment measures, including but not limited to, quarantines, epidemiological investigations on infection sources and close contacts, large-scale community nucleic acid testing, travel restrictions, control on public events, and continuous booster vaccination measures. As a result, CDCs had to continuously allocate and focus major resources on executing these disease containment measures, and lowered procurement levels of non-COVID-19 vaccines. Although we did not experience any shortage of raw materials, nor any material interruptions on our manufacturing and R&D activities, due to this new wave of COVID-19 recurrence in China, together with traditionally lower purchase demand around Chinese New Year holidays, our sales were adversely affected in the first quarter of 2022. See "Summary—Impact of the COVID-19 Outbreak." It is uncertain when and whether COVID-19 could be contained globally. We cannot guarantee you, however, that the COVID-19 outbreak will not further escalate or have a material adverse effect on our results of operations, financial position or prospects.

In addition, natural disasters, power shortages, epidemics, acts of war or terrorism or other factors beyond our control may adversely affect the economy, infrastructure and livelihood of the people in the regions we conduct our business. These regions may be under the threat of typhoon, tornado, snow storm, earthquake, flood, drought, power shortages or failures, or are susceptible to epidemics, such as COVID-19, avian influenza, H1N1 influenza, H5N1 influenza, H7N9 influenza or H3N2 influenza, potential wars or terrorist attacks, riots, disturbances or strikes. For example, in September and October 2021, a number of China's provinces, including many in its industrial heartlands, have suffered power shortages. In certain cases, power cuts were unplanned and indiscriminate. Serious natural disasters may result in a tremendous loss of lives and injury and destruction of assets and disrupt our business and operations. Severe infectious disease outbreaks could result in a widespread health crisis that could

RISK FACTORS

materially and adversely affect business activities in the affected regions, which could therefore materially affect our operations. Acts of war or terrorism, riots or disturbances may also injure or loss of lives to our employees, and disrupt our business network and operations. Any of these factors and other factors beyond our control could have an adverse effect on the overall business environment, and materially and adversely impact our business, financial condition and results of operations.

If the vaccine market does not grow as projected, or at all, our business, financial condition and results of operations could be materially and adversely affected.

This prospectus contains growth forecasts for the vaccine market in China, which are derived from the CIC report. For instance, the market size of the PRC vaccine market by sales revenue (excluding COVID-19 vaccines) is projected to grow at a CAGR of 12.3% from 2021, reaching RMB215.7 billion in 2030. The PRC vaccine market may not grow at the rates projected by respective market data, or at all. For example, the slowdown of the economic growth in China may affect the increasing affordability of and willingness to pay for the Class II vaccines. Furthermore, the number of newborns in China may not continue to grow at the rate as fast as projected. If the vaccine market in general or its sub-markets for our products does not grow at the projected rates, demand for our products could decrease significantly, our business, financial condition and results of operations could be materially and adversely affected.

In addition, growth forecasts are subject to significant uncertainty and are based on assumptions and estimates which may not prove to be accurate. For example, growth forecasts made in the CIC report have been based on assumptions, including, during forecast periods:

- with the rising of economic development, more and more families in China will have pets, like pet dogs, and therefore, more population in China will be subject to dog bites;
- the global human rabies vaccination rate will increase, due to increasing healthcare awareness and rising income;
- the PRC healthcare market will grow as expected due to rising healthcare demand and supply;
- the PRC government will continue to support healthcare reform; and
- the social, economic and political environments of the PRC will remain stable, which will ensure a sustainable and steady development of the PRC healthcare industry.

In light of the significant uncertainties caused by the rapidly changing nature of the vaccine market, any or all of such or similar assumptions may turn out to be inaccurate, thus causing forecasts relating to the projected growth of the PRC vaccine market, or particular sub-sections of this market, also to be inaccurate.

We may not achieve our projected development goals in the time frames we announce and expect, or at all, which could materially and adversely affect our business and prospects.

Similar to many other companies in the vaccine industry, we set goals for the accomplishment of objectives critical to our success, such as the commencement and completion of clinical trials, and anticipated regulatory submission and approval dates and timing of product launches and other milestones. We have a series of vaccine candidates in different phases of clinical trials and also the preclinical or research development stage. For current status and expected milestones of our vaccine candidates, see “Business—Our Vaccine Products and Vaccine Candidates—Our Vaccine Candidates.”

RISK FACTORS

However, the successful implementation of our product development programs is subject to significant business, economic and competitive uncertainties and contingencies, including product development risk, the availability of funds, competition, regulation and government policies, and the continued growth of the vaccine market. The actual timing of these events may vary dramatically due to factors beyond our control, such as delays or failures in clinical trials, the uncertainties inherent in the regulatory approval process and delays in achieving manufacturing or marketing arrangements sufficient to product commercialization.

We cannot assure you that these preclinical studies or clinical trials will be completed, that we will make regulatory submissions or receive regulatory approvals as planned or that we will be able to adhere to our currently anticipated schedule for the launch of any products. If we fail to achieve one or more milestones in the time frames we announce and expect, or at all, our business and prospects could be materially and adversely affected.

We depend on the continuing efforts of our senior management, as well as key scientific employees.

Our future success depends heavily upon the continued service of our key senior management members. In particular, the industry experience, management expertise, professional knowledge and contributions of our key members of our senior management are crucial to our success. We are led by the chairman of our Board and CEO, Mr. Yan ZHOU, who leads our businesses along with other members of our core management team. Under the leadership of Mr. Yan ZHOU and our core management team, we have also assembled leading scientists joining or collaborating with us to support our vaccine development and manufacturing. See “Business—Competitive Strengths—Visionary founder with strong support from experienced execution team and industry-leading scientists” for details. We do not maintain key man insurance for members of our management team or key scientific employees. If we lose the services of any senior management or key scientific employees, we may not be able to locate suitable or qualified replacements, and may incur additional expenses to recruit and train new personnel, which could severely disrupt our business and prospects.

In addition, we also rely on our key scientific employees for, among other things, R&D, production, to develop new products, technologies and applications, to enhance our existing products, to ensure quality and safety control in production. Our ability to attract and retain key scientific employees is a critical aspect of our competitiveness. Competition for these individuals could require us to offer higher compensation and other benefits in order to attract and retain them, which would increase our operating expenses and, in turn, could materially and adversely affect our results of operations and financial condition. Failure to attract or retain any key scientific employees required to achieve our business objectives could severely disrupt our business and prospects. We compete for qualified personnel with other biotechnology companies and research institutions, and we may be unable to locate a suitable replacement for any key personnel that we lose.

We may implement our growth strategy through acquisitions, partnerships, collaboration or other strategic arrangement, which may fail to produce anticipated benefits and adversely affect our business.

Our growth strategy may involve the acquisition of new products, technologies, and businesses, or strategic partnership, collaboration or alliances. Any such acquisitions, partnership, collaboration and alliances will be dependent upon the continued availability of suitable targets at favorable prices and upon advantageous terms and conditions. However, even if such opportunities are present, we may not be able to successfully identify such targets or convince them to enter into transactions with us. New acquisitions, partnership, collaboration and alliances may require significant attention from our management, and the diversion of our management’s attention and resources could have a material adverse effect on our ability to manage our business.

RISK FACTORS

In May 2021, we acquired Liverna, a clinical-stage innovative biotech company focusing on the R&D of mRNA drugs with patented mRNA platform technologies covering drug design, production and delivery. We cannot assure you that we will realize the anticipated benefits of, and successfully pursue synergy from, such acquisition or any other partnership, collaboration, alliances or investment. We may face risks, uncertainties and disruptions to our existing operation during or associated with the integration process, including difficulties in the integration of the operations of an acquired company, integration of acquired technology with our products, diversion of our management's attention from other business concerns, the potential loss of key employees or customers of the acquired business, the potential involvement in any litigation related to the acquired company, potential ongoing financial obligations and unforeseen or hidden liabilities of our acquisition targets, and impairment charges if acquisitions are not as successful as we originally anticipate. Any failure to successfully integrate other companies, products or technologies that we may acquire may have a material adverse effect on our business, financial condition and results of operations.

We have incurred net losses in 2021 and the four months ended April 30, 2022, and may experience net losses in the foreseeable future.

We had a profit of RMB119.8 million, RMB400.4 million and RMB57.7 million in 2019, 2020 and the four months ended April 30, 2021, respectively. However, we recorded a net loss of RMB674.0 million in 2021, which was primarily attributable to our share-based compensation expenses totaling RMB952.1 million (including a one-off share-based compensation expense of RMB896.9 million and other share-based compensation expenses of RMB55.2 million for other share awards and options granted to our employees) and increase in R&D expenses. We also recorded a net loss of RMB95.8 million in the four months ended April 30, 2022, mainly because of a slowdown in sales amid COVID-19 outbreaks in China and as we rapidly advanced clinical trials of our COVID-19 vaccine candidates, which drove up our research and development costs. See “Financial Information—Consolidated Statements of Profit or Loss” for a discussion of our financial performance during the Track Record Period. Moreover, we expect to record net loss for the year ending December 31, 2022, which is primarily attributable to a forecast significant increase in our research and development costs driven by the advancement of multiple pipeline products, especially the clinical development of our major vaccine candidates. Various factors may affect our revenue and profitability, many of which are beyond our control. For example, the PRC government policies and regulations may have impact on selling prices of our products as well as our costs and expenses. In addition, we may face increasing competition from new entrants to the PRC vaccine markets, in particular human rabies vaccine (Vero cell) and recombinant HBV vaccines (Hansenula Polymorpha), from which we generated the majority of our income during the Track Record Period. See “—Risks Relating to the Sales and Marketing of Our Vaccine Products and Commercialization of Our Vaccine Candidates—Our market-leading key commercialized vaccine products generate a significant portion of our profits and cash flows. Any decrease in their revenue or market share would adversely affect our business, financial condition, results of operations and prospects.” Any of our vaccine candidates, if commercialized, may not contribute as much revenue as we expected for various reasons.

We have limited insurance coverage, which could expose us to significant costs and business disruption.

Insurance companies in China may not offer business insurance products that suit our needs. As a result, we may not be able to acquire insurance for all types of risks we face in our operations. We maintain insurance policies that are required under PRC laws and regulations as well as based on our assessment of our properties, manufacturing activities, material machinery and inventories. Each of AIM Honesty, AIM Kanghuai, Rong'an Bio and AIM Weixin maintains product liability insurance policies for their respective vaccine products, in compliance with relevant PRC laws and regulations. However, we have elected not to maintain certain types of insurances, such as business interruption insurance or key man insurance. See “Business—Insurance” for details of our insurances. In addition, the insurances we maintain are subject to payment limits and coverage exceptions. Consequently, any occurrence of an uninsured loss or losses in excess of our insurance coverage, litigation expenses in relation to potential product liability claims, or business disruption, may result in substantial costs to us and the diversion of our resources, which could have a material adverse effect on our financial condition and results of operations.

RISK FACTORS

Failure to comply with any applicable anti-bribery laws by us, our employees, third-party suppliers, or commercial partners could subject us to investigations, litigations, penalties, or fines, which may harm our reputation and materially and adversely affect our business, financial condition and results of operations.

The PRC government has taken strong anti-corruption and anti-bribery measures to correct corrupt and bribery practices. In the vaccine industry, such practices may include, among others, payment of kickbacks, bribery or other illegal gains or benefits by vaccine manufacturers and enterprises to CDCs, medical institutions or physicians in connection with public tender or purchase of vaccines or to governmental authorities that are responsible for the grant of required licenses and permits. Any violation of these laws or any such illegal practices conducted by vaccine manufacturers could result in damages, fines, suspension of licenses or even criminal liabilities, which could materially and adversely affect such company's financial condition and results of operations. If our officers, employees or third-party CSOs either knowingly or unknowingly, engage in bribery or other improper conducts in connection with the marketing, promotion or sales of our products or otherwise in connection with our businesses, it could harm our reputation and expose us to regulatory investigations, costs and liabilities. We could also be held liable for such actions taken by our employees or third-party marketing companies.

Furthermore, if we are involved in criminal, investigational or administrative procedure for commercial bribery, we will be included on the negative list of commercial bribes by provincial health and family planning administrative department, as a result of which our products cannot be purchased by public medical institutions as well as medical and health institutions receiving financial subsidies of specific territorial scope in two years, pursuant to the Provisions on the Establishment of Adverse Records of Commercial Briberies in the Medicine Purchase and Sales Industry. See "Regulatory Overview—PRC Regulation—Regulatory Provisions—Regulations Relating to Taxation—Anti-Corruption Laws" for details.

We may be involved in litigation, arbitration, administrative or other legal proceedings from time to time that require extensive management attention and resources and may be costly, time-consuming and disruptive.

We have been and may from time to time be involved in litigation, arbitration, administrative or other legal proceedings in our ordinary course of business, as the development and commercialization of vaccine products entail a series of inherent risks relating to, among others, product liability, adverse events following immunization, environmental matters, breach of contracts, employment or labor disputes, infringement of intellectual property and investment activities in line with business expansion. For example, we were subject to a civil lawsuit in the PRC brought by a former CSO, which arose from disputes over certain service contracts with the CSO, for which we had recorded liabilities of RMB4.5 million as of April 30, 2022; the first instance judgment for this lawsuit was made in July 2022, under which we were ordered to pay RMB4.5 million to the CSO. In December 2021 and January 2022, we received court notices relating to two lawsuits brought by third parties against AIM Honesty, claiming total damages of approximately RMB91.5 million. Our legal counsel for these lawsuits advised us that based on the evidence currently available, the likelihood of the court finding against AIM Honesty in either case is remote. See "Business—Legal Proceedings and Regulatory Compliance" and "Financial Information—Contingent Liabilities" for details.

Ongoing or threatened litigation, arbitration, administrative or other legal proceedings may divert our management's attention and consume their time and our other resources. In addition, any similar claims, disputes or legal proceedings involving us or our employees may result in damages or liabilities, as well as legal and other costs and may cause a distraction to our management. If any verdict or award is rendered against us or if we settle with any third parties, we could be required to pay significant monetary damages and assume other liabilities, which could materially and adversely affect our reputation, business, financial condition and results of operations.

RISK FACTORS

Negative publicity may impact the public confidence in our products or vaccine products in general, lead to lower demand of vaccination, and result in more stringent regulations.

We were, and may be in the future, subject to the implications of negative publicity regarding vaccine products or the vaccine industry in general. For example, in March 2016, media reported on improperly stored vaccines illegally sold by distributors in the Shandong province and all across China. The illegal distribution resulted in sales to CDCs of a large amount of vaccine products, including rabies vaccines, that might be ineffective or less effective due to improper storage in distributions. Although this scandal was a result of illegal distributions and had no indication of any quality issues of vaccine manufacturers, this caused panic and public concerns over the safety of vaccines in general. Such incidents led to an overall downturn in the vaccine market in China, and promoted the PRC government to introduce more stringent legislations and regulations for the vaccine industry. The State Council amended the Regulation on the Administration of Circulation and Vaccination of Vaccines and required direct sale of vaccines by vaccine manufacturers to county-level CDCs and tightened the requirements and standards of transportation and storage of vaccines.

In July 2018, the NMPA found that Changchun Changsheng, a company unrelated to us, had violated GMP standards, including falsifying production data of its human rabies vaccines. After further investigation, NMPA uncovered additional violations, and terminated Changchun Changsheng's relevant drug production license, among others. This incident caused great public concerns on the safety of vaccine products and integrity of vaccine makers in general. NMPA subsequently launched a nation-wide investigation on all vaccine manufacturers with respect to the whole production process, from procurement of raw materials to lot releases. This incident may also result in changes in market preferences and regulatory requirements.

Any such negative publicity may shake the public confidence in vaccine products or industry in general, including our products, and lead to lower demand for vaccines in China, which in turn could affect our business and performance adversely. Investigations or more stringent governmental regulations after such negative publicity, if any, may require time and attention of our management team that would otherwise be devoted to operation of our business, or may cause more compliance expenses. In the event that any negative publicity is regarding our own products or our own business, the adverse impact on our financial condition or results of operation will be more significant. The market price of our H Shares could also suffer dramatically as a result of such negativity.

If we suffer failure or disruption in our information systems, our ability to effectively manage our business operations could be adversely affected.

We rely on information systems to obtain, process, analyze and manage data. We use these systems to, among other things, monitor the daily operations of our business, maintain operating and financial data, manage our sales network as well as manage our production operations and quality control systems. Any system damage or failure that interrupts data input, retrieval or transmission or increases service time could disrupt our normal operations. There can be no assurance that we will be able to effectively handle a failure of our information systems, or that we will be able to restore our operational capacity in a timely manner to avoid disruption to our business. The occurrence of any of such events could adversely affect our ability to effectively manage our business operations. In addition, if the capacity of our information systems fails to meet the increasing needs of our expanding operations, our ability to expand may be constrained.

RISK FACTORS

Expirations or unavailability of existing government incentives could have an adverse effect on our profitability.

Our business benefits from certain government incentives, such as reduced enterprise income tax rates and government grants. Our subsidiaries AIM Honesty, AIM Kanghuai, AIM Weixin and Rong'an Bio were granted the status of High and New Technology Enterprise with certificates dated November 16, 2018, November 22, 2019, November 27, 2018 and November 27, 2018, respectively, for a validity period of three years each. AIM Honesty, AIM Weixin and Rong'an Bio also renewed their High and New Technology Enterprise status and certificates on November 19, 2021, December 10, 2021 and December 10, 2021, respectively. As of the Latest Practicable Date, we have also made an application to renew the certification of AIM Kanghuai, which we expect to receive in late 2022. These subsidiaries of ours are entitled to a concessionary enterprise income tax rate of 15% instead of a statutory rate of 25% in the PRC during the period of validity of the certificate. See note 11 in the Accountants' Report set out in Appendix I to this prospectus for further information regarding the amount of tax reduced due to the preferential tax treatment in the Track Record Period. If any of our subsidiaries fails to renew such status and it ceases to be a High and New Technology Enterprise, it will be subject to the then prevailing statutory rate, which will possibly result in a higher income tax rate and increased expenses and thus adversely affect its financial condition and results of operations. In addition, we received government grants from time to time during the Track Record Period. Government grants recorded as other income and gains amounted to RMB20.9 million, RMB20.8 million, RMB37.3 million, RMB14.8 million and RMB3.3 million in 2019, 2020, 2021 and the four months ended April 30, 2021 and 2022, respectively, representing 2.1%, 1.2%, 2.4%, 3.2% and 1.2% of our revenue over the same periods.

In order to remain classified as a High and New Technology Enterprise and continue to qualify for the above reduced tax rate incentives, we also have to meet a number of financial and non-financial criteria, see “Regulatory Overview—PRC Regulation—Regulatory Provisions—Regulations Relating to Taxation—Enterprise Income Tax” for details. Moreover, the government could determine at any time to eliminate or reduce the scale of such preferential tax policy. Similarly, the availability and size of government grants depend, to a large extent, on political and policy developments that would be out of our control. Government grants and subsidies are inherently non-recurring in nature. Changes in policies could lead to a significant reduction in or a discontinuation of such government support we received, resulting in an adverse impact on our business, financial condition and results of operations.

RISKS RELATING TO OUR FINANCIAL POSITION

We had net operating cash outflows during the Track Record Period, and we may need to obtain additional financing to fund our operations.

We had net cash flows used in operating activities of RMB91.3 million and RMB123.3 million in the four months ended April 30, 2021 and 2022, respectively. See “Financial Information—Liquidity and Capital Resources”. Although in all of 2019, 2020 and 2021, we generated net cash inflow from operating activities, we cannot guarantee that we will not experience net cash outflows from our operating activities in the future. If we are unable to maintain adequate working capital, we may default in our payment obligations and may not be able to meet our capital expenditure requirements, which may have a material adverse effect on our business, financial condition, results of operations and prospects.

We expect to continue to incur significant expenses relating to R&D, production facilities and commercialization of our vaccine candidates and enhanced marketing and sales efforts for existing products on the market. We plan to primarily use the cash and cash equivalents on hand, unutilized bank facilities, expected cash inflows from operations and net proceeds from the Global Offering and to fund our near future operations. If any changes on these funding sources or increases in the funding requirements, we will need to obtain substantial additional financing in connection with our continuing

RISK FACTORS

operations through public or private equity offerings, debt financing or other sources. Our ability to raise funds will depend on the worldwide financial, economic and market conditions and other factors, many of which are beyond our control. If adequate funds are not available to us on a timely basis, we may be required to tighten up the budget for existing products or delay, limit, reduce or terminate R&D activities, production facilities set-ups or commercialization for one or more of our vaccine candidates, and in turn will adversely affect our business prospects, financial conditions and results of operations.

An impairment in the carrying value of goodwill and/or other intangible assets could have a material adverse effect on our financial condition and results of operations.

We had goodwill valued at RMB234.6 million, RMB234.6 million, RMB482.9 million and RMB482.9 million as of December 31, 2019, 2020, 2021 and April 30, 2022, respectively. In addition, we had other intangible assets of RMB390.8 million, RMB356.9 million, RMB2,192.7 million and RMB2,211.7 million as of December 31, 2019, 2020, 2021 and April 30, 2022, respectively. Our other intangible assets primarily consist of patents and proprietary know-how, brand, deferred development costs and software. The Group determines the estimated useful lives and related amortization charges for its intangible assets. The useful lives of intangible assets are assessed to be finite. Intangible assets with finite lives are amortized over the useful economic lives and assessed for impairment whenever there is an indication that the intangible asset may be impaired. The amortization period and the amortization method for an intangible asset with a finite useful life are reviewed at least at the end of each of the relevant periods.

Our goodwill and other intangible assets included goodwill and deferred development costs relating to mRNA drug candidates and mRNA technologies amounting to RMB248.3 million and RMB1,869.4 million, respectively, that we acquired as a result of the Liverna Acquisitions in 2021. The goodwill and deferred development costs not available for use are subject to mandatory impairment test. After initial recognition, we determine whether the goodwill and intangible assets are impaired at the end of each reporting period if events or changes in circumstance indicate that the carrying amount of these assets exceeds their recoverable amount. Determination of recoverable amount requires considerable judgment and is sensitive to inherent uncertainties and changes in estimates and assumptions. Declines in market conditions, weak trends in anticipated financial performance of reporting units or declines in revenue projections are examples of indicators that carrying values of intangible assets may not be recoverable, and in turn result in impairment losses. While we did not recognize substantial impairment loss for intangible assets during the Track Record Period, we cannot assure you that there will be no such charges in the future. In particular, any failure to develop and commercialize vaccine candidates developed using our mRNA platform technologies, or failure to generate financial results that commensurate with our current deferred development cost estimates, may adversely affect the recoverability of such goodwill or intangible assets, and in turn result in impairment losses. Any significant impairment losses recorded against our goodwill or deferred development cost could have a material adverse effect on our financial condition and results of operations.

Fluctuation of fair value change in wealth investments may affect our results of operations.

Our financial assets at fair value through profit or loss include wealth investment product investments at fair value. As of December 31, 2019, 2020, 2021 and April 30, 2022, we had financial assets at fair value through profit or loss of RMB50.0 million, nil, RMB100.0 million and nil, respectively. We generally do not invest in wealth investment products other than principal-guaranteed, fixed income products. The financial assets at fair value through profit or loss as of December 31, 2021 represented certain wealth investment products of Liverna which we recognized upon and after completion of the Liverna Acquisitions. We have disposed of the entire holding of such wealth investment products as of April 30, 2022. Changes in the fair value of the wealth investment products are reflected in our consolidated statements of profit or loss. The methodology that we use to assess the fair value of our

RISK FACTORS

wealth investment products involve a significant degree of management judgment and are inherently uncertain. We cannot assure you that market conditions will create fair value gains on our wealth investment product investments or we will not incur any fair value losses on wealth investment product investments in the future. If we incur such fair value losses, our results of operations and financial condition may be adversely affected.

Share-based compensation may cause shareholding dilution to our existing Shareholders and have an adverse effect on our financial performance.

We adopted the Pre-IPO ESOP for the benefit of our employees (including directors and supervisors) as remuneration for their services provided to us to incentivize and reward the eligible persons who have contributed to the success of our Company. For details, see “Appendix VI—Statutory and General Information—6. Pre-IPO ESOP.” In 2019, 2020, 2021 and the four months ended April 30, 2021 and 2022, we incurred share-based compensation expenses of RMB7.8 million, RMB23.5 million, RMB952.1 million, RMB30.5 million and RMB27.7 million respectively. To further incentivize our employees and non-employees to contribute to us, we may grant additional share-based compensation in the future. Issuance of additional Shares with respect to such share-based payment may dilute the shareholding percentage of our existing Shareholders. Expenses incurred with respect to such share-based payment may also increase our operating expenses and therefore have a material and adverse effect on our financial performance. For example, we had a loss of RMB675.9 million in 2021 primarily due to our share-based compensation expenses totaling RMB952.1 million (including a one-off share-based compensation expense of RMB896.9 million and other share-based compensation expenses of RMB55.2 million for other share awards and options granted to our employees) and increase in R&D expenses.

We may not be able to timely fulfill our obligations in respect of contract liabilities to our customers or at all, which may have an impact on our financial condition and results of operations.

Our contract liabilities represent the advance payment received from customers in respect of sales of our vaccines before delivery of products, which primarily include advance payments by CDCs for the purchase of our Class I vaccine products. We had contract liabilities of RMB30.8 million, RMB14.7 million, RMB41.1 million and RMB46.4 million, respectively, as of December 31, 2019, 2020, 2021 and April 30, 2022. Our ability to timely deliver vaccine products to CDCs may be affected by unforeseeable events. See “—The COVID-19 outbreak in China and worldwide has adversely affected, and may continue to adversely affect, our business, results of operations and financial condition. Natural disasters, epidemics, acts of war or terrorism or other factors beyond our control in the future may have a material adverse effect on our business operations, financial condition and results of operations.” If we fail to timely deliver vaccine products to our customers or at all, we may be subject to claims to refund a portion or all of our contract liabilities, which could materially and adversely affect our business, financial condition and results of operations.

RISKS RELATING TO DOING BUSINESS IN CHINA

Any failure to comply with applicable law or regulations, or failure to maintain governmental licenses or permits could jeopardize our reputation and business.

The vaccine industry in China and overseas is highly regulated and subject to extensive government regulation and supervision. In particular, the regulatory framework addresses all aspects of operations in the vaccine industry, ranging from clinical trials, product registration, production, transportation and storage, quality control to permission for sales, or lot releases, and requires various licensing, certification and satisfaction of regulatory or industry standards in relation to these aspects of operations, as well as compliance with GMP requirements. We are also subject to environmental protection, safety and health laws and regulations. See “Regulatory Overview” for details. Failure to comply with these regulations may

RISK FACTORS

result in penalties, fines, governmental sanctions, proceedings and/or suspension or revocation of our licenses or permits to conduct our business, or cause our failure to obtain lot releases for products, which would make those products unsellable. In addition, we are also subject to periodic inspections, examinations or inquiries by the regulatory authorities. We cannot assure that we may be able to detect or prevent all potential in compliance, violations or misconducts beforehand, or that our remedial measures taken to resolve the problems identified by the regulatory authorities are always perceived as satisfactory to them. In such cases, an adverse outcome of such inspections, examinations or inquiries may happen, which could result in loss or non-renewal of the relevant permits, licenses and certificates, or an order to suspend or cease production.

Given the number and complexity of these regulations, compliance may be difficult and may cost us significant financial and other resources in setting up efficient compliance and monitoring systems. As of the Latest Practicable Date, we had obtained all the material licenses, approvals and permits from, and completed registrations with the relevant government authorities that are material for our current business operations in the PRC pursuant to the relevant laws and regulations or the requirements of the competent authority. However, these regulations constantly evolve, and the criteria used in reviewing applications for, or renewals of licensing and certification in the vaccine industry may change and be more restrictive, and the regulatory regime over the vaccine industry, or any particular aspect thereof, may change from time to time or tighten or become more restrictive. For example, the NMPA updated certain standards in the National Pharmacopoeia for human rabies vaccines in late 2020. In order to comply with such new standards, we spent more time to communicate with the competent authorities from January to April 2021 on the relevant testing methods and procedures before lot release approval. This prolonged the lot release approval process of our human rabies vaccines in the first half of 2021, and we mobilized our inventories for sale during such period. Any enhanced regulatory requirements related to our business may make us bear higher compliance costs and we may face more severe administrative penalties for failure of compliance.

As a result, if we fail to, or are perceived to fail to, comply with applicable regulatory requirements at any stage during the R&D, manufacturing, transportation and storage process, including following any product approval, we may lose access to the market that only allows sales of products meeting those standards or requirements and may also be subject to sanctions which could have a material and adverse effect on our business, financial condition and results of operations, such as:

- monetary penalties;
- product recalls or seizure;
- injunctions;
- total or partial suspension of production;
- refusal of regulatory agencies to review approval applications or supplements to approval applications;
- withdrawals, revocation or non-renewal of approvals, license or permits previously issued; and
- criminal prosecution.

RISK FACTORS

The recently enacted PRC Vaccines Administration Law may impose unprecedented regulatory compliance challenges encompassing our business in China.

On June 29, 2019, the Standing Committee of the National People's Congress of the PRC promulgated the PRC Vaccines Administration Law (《中華人民共和國疫苗管理法》) (the "Vaccines Administration Law"). The Vaccines Administration Law, together with the newly revised PRC Drug Administration Law (《中華人民共和國藥品管理法》) promulgated on August 26, 2019 (the "Revised Drug Administration Law"), came into effect on December 1, 2019. With this new enactment, vaccines development, production and circulation, vaccination and supervision and administration within the territory of the PRC are all subject to this Vaccines Administration Law. Among others, the Vaccines Administration Law imposes us obligations on mandated manufacturing, safekeeping of sales records, setting up electronic traceability system of vaccines, purchasing compulsory vaccines liability insurance, post-market management of vaccines, mandatory disclosure system as well as increasingly severe regulatory punishment in cases of non-compliance.

Adhering to strong safety awareness, stringent risk management and control methods, concurrent scientific supervision, as well as a societal co-governance scheme, this Vaccines Administration Law is considered as, arguably, the strictest regulatory framework for vaccine business in China. As we strive to provide the utmost protection to human safety while conducting our business, our compliance cost under the current vaccine regulatory framework may be unprecedentedly high. For example, under the new Vaccines Administration Law, we are required to establish vaccines electronic traceability system to be linked with the national vaccine electronic traceability collaboration platform, for the purpose of integrating whole process traceability information on vaccine production, circulation and vaccination so as to realize the traceability of vaccines. Setting up and maintaining the smooth running of such a system would cause us additional costs in not only gathering resources and developing the system, but also sourcing data and statistics management experts. Our management and in-house experts might need to spend additional time on decoding and integrating the new rules into our day-to-day operations, which could potentially distract their attention on ongoing essential corporate affairs.

Changes in the political and economic policies of the PRC government may materially and adversely affect our business, financial condition and results of operations and may result in our inability to sustain our growth and business development strategies.

Substantially all of our operations are located in the PRC and substantially all of our revenue is generated in the PRC. Accordingly, our business, financial condition and results of operations and prospects are affected to a significant extent by economic, political and legal developments in the PRC.

The PRC economy differs from the economies of most developed countries in many respects, including but not limited to the extent of government involvement, level of development, growth rate, control of foreign exchange, allocation of resources and the level of transparency in the regulatory process. Although the PRC government has implemented measures emphasizing the utilization of market forces for economic reform, the reduction of state ownership of productive assets, and the establishment of improved corporate governance in business enterprises, a substantial portion of productive assets in China is still owned by the government. In addition, the PRC government continues to play a significant role in regulating industry development by imposing industry-specific policies. The PRC government also exercises significant control over China's economic growth by allocating resources, controlling payment of foreign currency-denominated obligations, setting monetary policy, regulating financial services and institutions and providing preferential treatment to particular industries or companies.

RISK FACTORS

While the PRC economy has experienced significant growth in the past four decades, such growth has been uneven, geographically, sector-specifically or during different periods. The PRC government has implemented various measures to encourage economic growth and guide the allocation of resources. Some of these measures may benefit the overall PRC economy, but may also have a negative impact on us. Our financial condition and results of operation could be materially and adversely affected by government control over capital investments or changes in tax regulations that are applicable to us. In addition, the PRC government has implemented in the past certain measures, including interest rate increases, to control the pace of economic growth. Such measures may deter economic activities in general, which could in turn decrease the demand for our products and consequently have a material adverse effect on our business, financial condition and results of operations.

There are uncertainties relating to the legal system of China that may affect the protection afforded to our business and our Shareholders.

We and all of our current operating subsidiaries are organized under the laws of the PRC, therefore are subject to the legal system of the PRC. The PRC legal system is based on written statutes; prior court decisions may be cited for reference but have limited precedential value. Since the late 1970s, the PRC government has promulgated laws and regulations in relation to matters such as corporate organization and governance, issuance and trading of securities, shareholders' rights, foreign investment, commerce, taxation and trade. Nevertheless, many of these laws and regulations are still relatively new and evolving and subject to differing interpretations that could be inconsistent from time to time. Additionally, many laws, regulations, policies and legal requirements have only been recently adopted by the PRC central government or local government agencies, whose implementation, interpretation and enforcement may contain uncertainties due to the lack of established practices available as guidance. The PRC administrative and judiciary authorities also have significant discretion when interpreting and enforcing statutory terms, which makes it more difficult for us to evaluate the potential outcome of administrative and court proceedings, as well as the level of legal protection available to us. Such uncertainties may impede our ability to enforce the legal documents that we enter into with our customers and affiliates. We cannot predict the trend of future legal developments in the PRC, including the promulgation of new laws, changes in existing laws or their interpretation or enforcement, or the preemption of local regulations by national laws.

PRC laws and regulations govern our operations in China. These regulations contain provisions that are required to be included in the articles of association of PRC companies and are intended to regulate the internal affairs of these companies. PRC company law and regulations, in general, and the provisions for the protection of shareholders' rights and access to information, in particular, may be considered less developed than those applicable to companies incorporated in Hong Kong, the United States and other developed countries or regions. As such, our minority shareholders may not have the same protections afforded to them by companies incorporated under the laws of the United States and certain other jurisdictions. Uncertainties relating to the interpretation, implementation and enforcement of the PRC laws and regulations and a system of jurisprudence that gives only limited precedential value to prior court decisions can affect the legal remedies and protections available to us and our investors.

You may experience difficulties in effecting service of legal process or enforcing foreign judgments against us and our management.

We are incorporated under the laws of the PRC, with most of our business and operations located in the PRC. In addition, a substantial majority of our directors, supervisors and officers reside in the PRC, so are substantially all of their assets. As a result, it may be difficult or even impossible to effect service of process within the United States or elsewhere outside the PRC upon us or most of our directors, supervisors and officers. Further, the PRC does not have treaties providing for the reciprocal recognition and enforcement of judgments of courts with the United States, the United Kingdom, Japan and many other countries. In addition, Hong Kong has no arrangement for the reciprocal enforcement of judgments with the United States. As a result, recognition and enforcement in the PRC or Hong Kong of judgments of a court in any of these jurisdictions may be difficult or even impossible.

RISK FACTORS

On July 14, 2006, the Supreme People's Court of the PRC and the Government of the Hong Kong Special Administrative Region entered into the Arrangement on Reciprocal Recognition and Enforcement of Judgments in Civil and Commercial Matters (《最高人民法院關於內地與香港特別行政區法院相互認可和執行當事人協議管轄的民商事案件判決的安排》) (the "2006 Arrangement"). Under the 2006 Arrangement, where any designated PRC court or any designated Hong Kong court has made an enforceable final judgment requiring payment of money in a civil or commercial case pursuant to a choice of court agreement in writing, any party concerned may apply to the relevant PRC court or Hong Kong court for recognition and enforcement of the judgment. It is not possible to enforce a judgment rendered by a Hong Kong court in the PRC if the parties in dispute have not explicitly agreed to enter into a choice of court agreement in writing. In addition, the 2006 Arrangement has expressly provided for "enforceable final judgment," "specific legal relationship" and "written form." A final judgment that does not comply with the 2006 Arrangement may not be recognized and enforced in a PRC court.

Further, on January 18, 2019, the Supreme People's Court of the PRC and the government of the Hong Kong Special Administrative Region entered into the Arrangement on Reciprocal Recognition and Enforcement of Judgments in Civil and Commercial Matters by the Courts of the Mainland and of the Hong Kong Special Administrative Region (《關於內地與香港特別行政區法院相互認可和執行民商事案件判決的安排》) (the "2019 Arrangement"). Under the 2019 Arrangement, any party concerned may apply to the relevant PRC court or Hong Kong court for recognition and enforcement of the effective judgments in civil and commercial cases subject to the conditions set forth in the 2019 Arrangement. Although the 2019 Arrangement has been entered into, its effective date has yet to be announced. Therefore, there are still uncertainties about the outcomes and effectiveness of enforcement or recognition of judgements under the 2019 Arrangement. We therefore cannot assure you that an effective judgment that complies with the 2019 Arrangement can be recognized and enforced in a PRC court.

Payment of dividends is subject to restrictions under PRC law.

Under PRC law, dividends may be paid only out of distributable profit. Distributable profit is our profit as determined under PRC GAAP or IFRS, whichever is lower, less any recovery of accumulated losses and appropriations to statutory and other reserves that we are required to make. As a result, we may not have sufficient or any distributable profit that enables us to make dividend distributions to our shareholders, including in periods in which we are profitable. Any distributable profit not distributed in a given year is retained and available for distribution in subsequent years.

In addition, we are required to comply with the dividend distribution rules prescribed by the PRC regulatory authorities when determining our dividend payout ratios. The CSRC may further amend the dividend distribution rules for listed companies in China in the future, which could significantly affect the amount of capital available to support the development and growth of our business.

Fluctuation of RMB could materially affect our financial condition and results of operations.

Other than the revenue we received from our sales to overseas markets, we collect most of our revenue in RMB, some of which will need to be converted into foreign currencies to pay dividends to our Shareholders. The value of the RMB fluctuates, is subject to changes in the government policies (including those of the PRC government) and depends to a large extent on domestic and international economic and political developments as well as supply and demand in the local market.

In July 2005, the PRC government has adopted a managed floating exchange rate system to allow the value of the RMB to fluctuate within a regulated band based on market supply and demand and with reference to a basket of currencies. In April 2012, the PBOC expanded the floating range of RMB against the U.S. dollar in the inter-bank spot foreign exchange market from 0.5% to 1.0% and further expanded it to 2.0% in March 2014. In August 2015, the PBOC announced that the mid-point exchange rate for the floating range of the RMB against the U.S. dollar will be determined based on market maker submissions that take into account the RMB-U.S. dollar exchange rate at the previous day's closing of the inter-bank spot foreign exchange market, the supply and demand dynamics and the movements of other major currencies. The RMB depreciated against the U.S. dollar by 6.7% by June 2017 following this August 2015

RISK FACTORS

announcement by the PBOC. With an increased floating range of the RMB's value against foreign currencies and a more market-oriented mechanism for determining the mid-point exchange rates, the RMB may further appreciate or depreciate significantly in value against the Hong Kong dollar and the U.S. dollar or other foreign currencies in the long-term, depending on the fluctuation of the basket of currencies against which it is currently valued, or it may be permitted to enter into a full float, which may also result in a significant appreciation or depreciation of the RMB against the U.S. dollar or other foreign currencies. We cannot assure you that the RMB will not experience significant appreciation or depreciation against the U.S. dollar or other foreign currencies in the future.

In the event of significant change in the exchange rates of Hong Kong dollars and/or U.S. dollars against RMB, our ability to pay dividends in foreign currencies may be adversely affected. In addition, any dividends in respect of our H Shares will be declared in RMB and paid in Hong Kong dollars. Accordingly, holders of H Shares in countries other than China are subject to risks arising from adverse movements in the value of the RMB against the Hong Kong dollar, which may reduce any dividends paid in respect of the H Shares. Furthermore, following the Global Offering, our exposure to risks associated with foreign currency fluctuations may further increase as the net proceeds from the Global Offering are expected to be denominated in currencies other than RMB and we may consider overseas expansion or development plans from time to time. Any appreciation of the RMB against the U.S. dollar, the Hong Kong dollar or any other foreign currencies may result in a decrease in the value of our proceeds from the Global Offering and our foreign currency-denominated assets, if any.

There are limited instruments available for us to reduce our foreign currency risk exposure at reasonable cost in China, and we have not utilized, and may not in the future utilize, any such instrument. Furthermore, we are also currently required to obtain SAFE's approval before converting significant sums of foreign currencies into RMB. All of these factors could materially and adversely affect our business, results of operations, financial condition and prospects, and could reduce the value of, and dividends payable on, our H Shares in foreign currency terms.

We may be subject to additional housing provident fund contributions and penalties or fines imposed by relevant regulatory authorities.

Under the relevant PRC laws and regulations, we are required to make social insurance fund and housing provident fund contributions for our employees. During the Track Record Period, we did not make in full the housing provident fund contributions for our employees. In 2019, the total outstanding amount of our housing provident fund contributions was RMB1.15 million. Pursuant to relevant PRC laws and regulations, with respect to a failure to pay the full amount of housing provident fund as required, the housing provident fund management center in China may require payment of the outstanding amount within a prescribed period. If the payment is not made within such time limit, an application may be made to the PRC courts for compulsory enforcement. As of the Latest Practicable Date, we had not received any notification from the relevant PRC regulatory authorities requiring us to pay shortfalls or late payments with respect to housing provident fund contributions, nor had we been subject to any related administrative penalties. Our Controlling Shareholder has provided an indemnity to indemnify our Group against any claims, fines and other liabilities arising from such incidences.

According to the interviews our PRC Legal Advisor conducted with the relevant PRC regulatory authorities, the risk that the relevant regulatory authorities would require us to pay shortfalls with respect to housing provident fund contributions is remote. However, we cannot guarantee that we will not be required to pay any shortfalls or be subject to any penalties or fines.

Increases in labor costs could slow our growth and affect our financial condition.

China's overall economy and the average wage level in China have increased in recent years and are expected to continue to grow. The average wage level for our employees has also increased in recent years. We expect that our labor costs, including wages and employee benefits, will continue to increase. If there is a significant increase in our labor cost, our operations and financial condition may be adversely affected.

RISK FACTORS

Failure to comply with PRC property-related laws and regulations regarding certain of our owned and leased properties may adversely affect our business, financial condition and results of operations.

We occupy certain properties in the PRC in connection with our business operations. Some of these properties do not meet certain property-related requirements under PRC laws and regulations. For example, as of the Latest Practicable Date, leasing agreements of our 11 leased properties for operation had not been registered and filed with the competent PRC government authorities as required by applicable PRC laws and regulations. We cannot assure you that the lessors will cooperate and complete the registration in a timely manner. Our PRC Legal Advisor has advised us that failure to complete the registration and filing of lease agreements will not affect the validity of such leases or impede our use of the relevant properties but could result in the imposition of fines up to RMB10,000 for each leased property that is unregistered if we fail to rectify the non-compliance within the time frame prescribed by the relevant authorities. Furthermore, as of the Latest Practicable Date, our four operating subsidiaries have not obtained building ownership certificates for certain ancillary buildings and facilities with a total GFA of 4,990.12 sq.m., for most of which we were in the process of obtaining relevant property ownership certificates. We conducted interviews with the relevant PRC government authorities with respect to such matter. Based on the interviews, our PRC Legal Advisor is of the view that the risk of the relevant government authorities requiring our operating subsidiaries to dismantle the relevant ancillary buildings and facilities for failing to obtain the requisite building ownership certificates is low. See “Business—Properties—Owned Properties.”

RISKS RELATING TO THE GLOBAL OFFERING

There has been no prior public market for our H Shares, an active trading market for our H Shares may not develop, and their trading price may fluctuate significantly.

Prior to the completion of the Global Offering, there was no public market for our H Shares. The initial offering to the public for our H Shares is the result of negotiations between us and the Joint Global Coordinators on behalf of the underwriters, and the offer price may differ significantly from the market price for our H Shares following the Global Offering. In addition, pursuant to the applicable PRC laws, all of the Shares in issue as of the date of this Prospectus will be subject to a lock-up period of one year from the Listing Date. Therefore, upon completion of the Global Offering and assuming the Over-allotment Option and the options under the Pre-IPO ESOP are not exercised, approximately 99.2% of our issued Shares will be subject to lock-up, and a listing on the Stock Exchange does not guarantee that an active and liquid trading market for our H Shares will develop, or if it does develop, that it will be sustained following the Global Offering, or that the market price of the Shares will not decline below the Offer Price following the Global Offering.

The trading volume and market price of our H Shares may be volatile, which could result in substantial losses for investors who purchase our H Shares in the Global Offering.

The price and trading volume of our H Shares may be highly volatile. Factors, some of which are beyond our control, such as variations in our revenue, earnings and cash flow, changes in our pricing policy as a result of competition, the emergence of new technologies, strategic alliances or acquisitions, the addition or departure of key personnel, changes in ratings by financial analysts and credit rating agencies, litigation, fluctuations in the market prices and demand for our products or services, unexpected business interruptions resulting from natural disasters or power shortages, our inability to obtain or maintain regulatory approval for our operations, or political, economic, financial and social developments in China, Hong Kong and the global economy, could cause large and sudden changes in the volume and price at which our H Shares will trade. In addition, the Stock Exchange and other securities markets have, from time to time, experienced significant price and volume fluctuations that are not related to the operating performance of any particular company. These fluctuations may also materially adversely affect the market price of our H Shares.

RISK FACTORS

You may experience immediate and substantial dilution as a result of the Global Offering.

The Offer Price of our H Shares is higher than our net tangible asset value per Share immediately prior to the Global Offering. Therefore, you and other purchasers of our H Shares in the Global Offering will experience an immediate and substantial dilution in pro forma net tangible asset value to HK\$2.93 per H Share (assuming an Offer Price of HK\$16.16 per H Share), and existing holders of our Shares will receive an increase in net tangible asset value per share of their Shares. See “Unaudited Pro Forma Financial Information” in Appendix II to this prospectus. In addition, holders of our H Shares may experience a further dilution of their interest if the Joint Global Coordinators (on behalf of the underwriters) exercise the Over-allotment Option or if we issue additional H Shares or equity-linked securities at a price lower than our net tangible asset value per H Share at the time of issuance.

PRC government’s control of currency conversion may limit our foreign exchange transactions, including dividend payments on our H Shares.

We receive most of our revenue in RMB, which generally cannot be freely converted into any foreign currencies. In the meanwhile, a portion of our revenue must be converted into other currencies in order to meet our foreign currency obligations such as payment of dividends to holders of our H Shares. Under the current foreign exchange regulations in the PRC, following completion of the Global Offering, we will be permitted to undertake foreign exchange transactions under the current account subject to certain procedures, including the payment of dividends in foreign currencies, without prior approval from the SAFE. However, there is no assurance that these foreign exchange policies permitting payment of dividends in foreign currencies will continue, and in the circumstance of a policy change, we may no longer be able to pay dividends in foreign currencies to holders of our H Shares. Foreign exchange transactions under the capital account, including principal payments in respect of foreign currency-denominated obligations, continue to be subject to limitations and require prior approval of the SAFE. The PRC government authorities may further implement rules and regulations in the future, which could restrict the use of foreign currency under current account and capital account in certain circumstances. These restrictions could affect our ability to obtain foreign currency through debt financing, or to obtain foreign exchange needed for our capital expenditures, and could materially adversely affect our business, financial condition and results of operations.

Holders of H Shares may be subject to PRC taxation.

Non-PRC resident individuals and non-PRC resident enterprises are subject to different tax obligations with respect to dividends received from us or gains realized upon the sale or other disposition of our H Shares in accordance with applicable PRC tax laws, rules and regulations.

Pursuant to the PRC Individual Income Tax Law (《中華人民共和國個人所得稅法》), non-PRC resident individuals are subject to a 20% PRC individual income tax on their dividend income derived from the PRC and we are required to withhold such tax from our dividend payments. If there is an applicable tax treaty to avoid double taxation and taxation evasion between China and the jurisdiction where the foreign individual resides, the applicable tax rate shall be determined in accordance with such tax treaty. Considering that the applicable tax rate on dividends is usually 10% according to tax treaties or tax agreements and that the number of stockholders is large for a listed company, to simplify the tax administration, generally a domestic non-foreign-investment enterprise with shares listed in Hong Kong can withhold dividend income tax at a rate of 10%. There remains uncertainty as to whether gains realized by non-PRC resident individuals on disposition of H Shares are subject to PRC individual income tax.

RISK FACTORS

For non-PRC resident enterprises that do not have establishments or premises in the PRC, or that otherwise have establishments or premises in the PRC but their income is not related to such establishments or premises, such non-PRC resident enterprises are subject to a 10% PRC enterprise income tax rate on dividend income received from a PRC company and gains realized upon the sale or other dispositions of equity interest in a PRC company. The 10% tax rate is subject to reduction under any special arrangements or applicable treaties between China and the jurisdiction where the non-resident enterprise domiciles.

There remains substantial uncertainties as to the interpretation and implementation of the PRC EIT Law and other applicable PRC tax rules and regulations by the PRC tax authorities, including whether and how non-PRC resident H shareholders are subject to enterprise income tax rate on gains realized upon the sale or other dispositions of their H shares. In addition, the value of your investment in our H Shares may be materially affected by unfavorable changes in the applicable tax rates currently stipulated by the PRC tax authorities.

For additional information, see “Taxation and Foreign Exchange” in Appendix III to this prospectus.

Future financing may cause a dilution in your shareholding or place restrictions on our operations.

We may raise additional funds in the future to finance the expansion of our capacity, the enhancement of our R&D capabilities, the development of our operations, acquisitions or strategic partnerships. If additional funds are raised through the issuance of our new equity or equity-linked securities other than on a pro rata basis to the existing holders of our H Shares, the percentage ownership of such holders in us may be reduced and they may experience a dilution in their net tangible asset value per H Share, and such new securities may confer rights and privileges that may take priority over those conferred by the H Shares.

Alternatively, if we meet such funding requirements by way of additional debt financing, we may have restrictions placed on us through such debt financing arrangements which may:

- limit our ability to pay dividends or require us to seek consent for the payment of dividends;
- increase our vulnerability to general adverse economic and industry conditions;
- require us to dedicate a substantial portion of our cash flows from operations to service our debt, thereby reducing the availability of our cash flow to fund capital expenditure, working capital requirements and other general corporate needs; and
- limit our flexibility in planning for, or reacting to, changes in our business and our industry.

Dividends declared in the past may not be indicative of our dividend policy in the future.

Our Company did not declare any dividend during the Track Record Period. Our historical dividends may not be indicative of the amount of our future dividends. We cannot guarantee when, if and in what form or size our dividends will be paid in the future. The determination of whether to pay a dividend and in what amount is based on our business and financial performance, capital and regulatory requirements, general business conditions and other factors that our Board of Directors deems relevant. We may not have sufficient or any profits for dividend distributions in the future, even if our financial statements indicate that our operations have been profitable. Please see “Financial Information—Dividend Policy.” There is no assurance that we will adopt the same dividend policy as we adopted in the past.

RISK FACTORS

Our Controlling Shareholder has substantial influence over our Company and his interests may not be aligned with the interests of holders of H Shares.

Immediately following completion of the Global Offering and the Conversion of Domestic Shares into H Shares, assuming the Over-allotment Option and the options under the Pre-IPO ESOP are not exercised, our Controlling Shareholder will be entitled to exercise voting rights of 35.83% of our issued share capital. For details of our Controlling Shareholder, see “Relationship with Controlling Shareholder” in this prospectus. Accordingly, our Controlling Shareholder will, through his voting power, be able to exercise substantial influence over our operations and business affairs, including our overall strategy and investment plan, election of directors, assessment of executives and senior management before they take office and other significant corporate actions. This concentration of ownership may deprive holders of H Shares of an opportunity to receive a premium for their H Shares as part of a sale of our Company and might reduce the price of our Shares. In addition, the interests of our Controlling Shareholder may differ from the interests of the holders of H Shares and he has no obligation to consider the interests of our other Shareholders. It is possible that our Controlling Shareholder may exercise its substantial influence over us and cause us to enter into transactions or take, or fail to take, other actions or make decisions which conflict with the best interests of holders of H Shares.

Future possible conversion of our unlisted shares, including domestic shares into H Shares might negatively impact the market price of our H Shares.

Potential conversion of Domestic Shares into H Shares may result in an increase in the number our H Shares available in the market, which in turn may affect the price of our H Shares.

Subject to approval by the CSRC, Domestic Shares may be listed or traded on an overseas securities exchange. Any listing or trading of the abovementioned Shares on an overseas securities exchange shall also comply with the regulatory procedures, rules and requirements of the relevant overseas securities exchange. Unless otherwise required by the overseas securities exchange, there is no requirement of the listing and trading of the abovementioned Shares to be approved in a class meeting of our Company. For details, see “Share Capital—Conversion of Domestic Shares into H Shares.” Potential conversion of a substantial amount of Domestic Shares into H Shares could further increase the supply of H Shares in the market and could have a material and adverse impact on the market price of H Shares.

You should rely on this prospectus in making investment decisions with respect to our H Shares.

Prior to the publication of this prospectus, there has been press and media coverage regarding us and the Global Offering, which may include certain information not contained in this prospectus. We have not authorized disclosure of any such information in the press or other media. Such information, whether or not accurate or applicable, may materially and adversely affect our reputation, business, financial condition and the price of our H Shares. We make no representation as to the appropriateness, accuracy, completeness or reliability of such information, and disclaim responsibility for such information. Accordingly, prospective investors are cautioned to make their investment decisions with respect to our H Shares on the basis of the information contained in this prospectus only and should not rely on any other information. By applying to purchase our H Shares in the Global Offering, you will be deemed to have agreed that you will not rely on any information other than that contained in this prospectus.

WAIVERS FROM STRICT COMPLIANCE WITH THE LISTING RULES AND EXEMPTIONS FROM THE COMPANIES (WINDING UP AND MISCELLANEOUS PROVISIONS) ORDINANCE

In preparation for the Listing, we have sought the following waivers from strict compliance with the relevant provisions of the Listing Rules and exemptions from the Companies (Winding Up and Miscellaneous Provisions) Ordinance.

WAIVER IN RESPECT OF MANAGEMENT PRESENCE IN HONG KONG

According to Rule 8.12 of the Listing Rules, except as otherwise permitted by the Stock Exchange at its discretion, all applicants applying for a primary listing on the Stock Exchange must have sufficient management presence in Hong Kong. This would normally mean that at least two of an applicant's executive directors must be ordinarily resident in Hong Kong.

Rule 19A.15 of the Listing Rules further provides that the requirement in Rule 8.12 may be waived by having regard to, among other considerations, the applicant's arrangements for maintaining regular communication with the Stock Exchange.

The Group is a vaccine company in China. As disclosed in this prospectus, the headquarters and its business operations are based, managed and conducted in the PRC. Currently, all of the executive Directors ordinarily reside in the PRC where they manage the Group's business operations from the PRC. As these executive Directors play very important roles in our Company's business operations, our Company considers that it is in the best interests of the Company for them to be based in the places where the Group has significant operations.

As such, our Company does not, and will not for the foreseeable future, have a sufficient management presence in Hong Kong for the purpose of satisfying the requirements under Rules 8.12 and 19A.15 of the Listing Rules.

Accordingly, we have applied for, and the Stock Exchange has granted, a waiver from strict compliance with the requirements of Rules 8.12 and 19A.15 of the Listing Rules. The Company will adopt the following arrangements in order to maintain regular communication with the Stock Exchange:

- (1) both of our authorized representatives, namely Mr. Yan ZHOU (周延) and Ms. Wing Chi LAM (林穎芝) (“**Ms. Lam**”) (who is ordinarily resident in Hong Kong), will act as our principal channel of communication with the Stock Exchange. Each of our authorized representatives can be readily contactable by the Stock Exchange by phone, facsimile and/or email to deal promptly with enquiries from the Stock Exchange and can meet with the Stock Exchange to discuss any matters within a reasonable period of time upon request of the Stock Exchange;
- (2) each of our authorized representatives has means to contact all the Directors (including our independent non-executive Directors) promptly at all times as and when the Stock Exchange wishes to contact the Directors on any matter;
- (3) each Director has provided his or her phone number, e-mail address and facsimile number (if available) to each of our authorized representatives and the Stock Exchange;
- (4) we will endeavor to ensure that each Director who is not ordinarily resident in Hong Kong possesses or is able to apply for valid travel documents to visit Hong Kong and is able to meet with the Stock Exchange within a reasonable period upon the request of the Stock Exchange; and
- (5) we have appointed Somerley Capital Limited pursuant to Rules 3A.19 of the Listing Rules to act as our compliance adviser, who will act as our additional channel of communication with the Stock Exchange.

WAIVERS FROM STRICT COMPLIANCE WITH THE LISTING RULES AND EXEMPTIONS FROM THE COMPANIES (WINDING UP AND MISCELLANEOUS PROVISIONS) ORDINANCE

WAIVER IN RELATION TO JOINT COMPANY SECRETARY

Rule 8.17 of the Listing Rules provides that the issuer must appoint a company secretary who satisfies the requirements under Rule 3.28 of the Listing Rules.

According to Rule 3.28 of the Listing Rules, the secretary of the issuer must be a person who, by virtue of his/her academic or professional qualifications or relevant experience, is, in the opinion of the Stock Exchange, capable of discharging the functions of company secretary.

Note 1 to Rule 3.28 of the Listing Rules provides that the Stock Exchange considers the following academic or professional qualifications to be acceptable:

- a member of The Hong Kong Institute of Chartered Secretaries;
- a solicitor or barrister as defined in the Legal Practitioners Ordinance (Chapter 159 of the Laws of Hong Kong); and
- a certified public accountant as defined in the Professional Accountants Ordinance (Chapter 50 of the Laws of Hong Kong).

Note 2 to Rule 3.28 of the Listing Rules provides that in assessing “relevant experience”, the Stock Exchange will consider the individual’s:

- length of employment with the issuer and other issuers and the roles he or she played;
- familiarity with the Listing Rules and other relevant law and regulations including the Securities and Futures Ordinance, the Companies Ordinance, the Companies (Winding Up and Miscellaneous Provisions) Ordinance and the Codes on Takeovers and Mergers and Share Buy-backs;
- relevant training taken and/or to be taken in addition to the minimum requirement under Rule 3.29 of the Listing Rules; and
- professional qualifications in other jurisdictions.

In the Guidance Letter HKEX-GL-108-20, the Stock Exchange stated that it has in the past granted waivers to issuers proposing to appoint a company secretary who does not have the qualification and experience required under Rule 3.28 of the Listing Rules for a specified period. In considering waiver applications under Rule 3.28 of the Listing Rules, it will consider, among others, the following factors:

- whether the issuer has principal business activities primarily outside Hong Kong;
- whether the issuer was able to demonstrate the need to appoint a person who does not have the acceptable qualification nor “relevant experience” as a company secretary; and
- why the directors consider the individual to be suitable to act as the issuer’s company secretary.

WAIVERS FROM STRICT COMPLIANCE WITH THE LISTING RULES AND EXEMPTIONS FROM THE COMPANIES (WINDING UP AND MISCELLANEOUS PROVISIONS) ORDINANCE

The Stock Exchange stated that a waiver under Rule 3.28 of the Listing Rules, if granted, will be for a fixed period of time (the “**Waiver Period**”) and on the following conditions:

- the proposed company secretary must be assisted by a person who possesses the qualifications or experience as required under Rule 3.28 of the Listing Rules and is appointed as a joint company secretary throughout the Waiver Period; and
- the waiver can be revoked if there are material breaches of the Listing Rules by the issuer.

Further, the length of the waiver period will depend on the following factors but in any case, will not exceed three years as the proposed company secretary is expected to have acquired the relevant qualification or experience required under Rule 3.28 of the Listing Rules within such period:

- the proposed company secretary’s experience in handling company secretarial matters and his/her relevant professional qualifications and/or academic background;
- the measures and systems in place to facilitate the proposed company secretary in discharging his/her duties as a company secretary; and
- the issuer’s regulatory compliance and/or material deficiencies/weaknesses in internal controls.

Circumstances of the Company and the Proposed Joint Company Secretaries

The Company has appointed Ms. Ling LIU (劉靈) (“**Ms. Liu**”) and Ms. Lam as the joint company secretaries of the Company. Our Company is of the view that with the assistance of Ms. Lam, Ms. Liu is capable of discharging the functions of a company secretary of the Company.

The Company has principal business activities primarily outside Hong Kong. It is established under the laws of the PRC and a significant part of its business operations are conducted in the PRC. The Directors of the Company believe that its company secretary should, apart from being able to meet the professional qualifications or the relevant experience requirements under the Listing Rules, have sufficient knowledge of (a) the operations and the business of the Group and the Group’s corporate culture; and (b) the regulatory requirements in the PRC.

Ms. Liu, as the secretary of the Board, is in charge of the management of the general office of the Board. Her main responsibilities include such matters as information disclosure, investor relations, equity management and corporate governance of our Company. Her biographical details are set out in “Directors, Supervisors and Senior Management” in this prospectus. Although Ms. Liu does not possess the qualifications set out in Note 1 to Rule 3.28 of the Listing Rules nor the “relevant experience” set out in Note 2 to Rule 3.28 of the Listing Rules, the Directors consider Ms. Liu to be suitable to act as one of the Company’s company secretaries due to her past work experience in the Group and her understanding of the internal administration and business operations of the Group. Further, Ms. Liu has a close nexus and working relationship with the Directors and management team of the Company, and will be able to perform the function of a company secretary and to take the necessary actions in the most effective and efficient manner.

In order to provide support for Ms. Liu on an ongoing basis, the Company has appointed Ms. Lam, as a joint company secretary for a period of three years from the Listing Date so as to enable Ms. Liu to acquire the relevant experience (as required under Note 2 to Rule 3.28 of the Listing Rules) and to duly discharge the functions of a company secretary of a listed issuer.

WAIVERS FROM STRICT COMPLIANCE WITH THE LISTING RULES AND EXEMPTIONS FROM THE COMPANIES (WINDING UP AND MISCELLANEOUS PROVISIONS) ORDINANCE

As shown from Ms. Lam's biographical information set out in "Directors, Supervisors and Senior Management" in this prospectus, Ms. Lam is a chartered secretary, a chartered governance professional and an associate member of both The Hong Kong Chartered Governance Institute (formerly The Hong Kong Institute of Chartered Secretaries) and The Chartered Governance Institute in the United Kingdom and she meets the requirements under Rules 3.28 and 8.17 of the Listing Rules. Ms. Lam is, in the Company's opinion, a suitably qualified person to render assistance to Ms. Liu so as to enable Ms. Liu to acquire the "relevant experience" as required of a company secretary under Note 2 to Rule 3.28 of the Listing Rules. Further, pursuant to Rule 3.29 of the Listing Rules, Ms. Liu and Ms. Lam will also attend in each financial year no less than 15 hours of relevant professional training courses to familiarize themselves with the requirements of the Listing Rules and other regulatory requirements of Hong Kong.

It is expected that Ms. Lam will assist Ms. Liu for an initial three-year period from the Listing Date and will provide training and guidance to Ms. Liu to familiarize herself with the Listing Rules and the duties required for a joint company secretary up to three years from the Listing Date. Upon expiry of the three-year period, the Company will liaise with the Stock Exchange to enable it to assess whether Ms. Liu will have acquired the relevant experience within the meaning of Rule 3.28 of the Listing Rules so that a further waiver will not be necessary.

In addition, the Company has appointed Somerley Capital Limited as its compliance adviser under Rule 3A.19 of the Listing Rules, to provide the Company with professional advice on continuing obligations under the Listing Rules and to act as an additional channel of communication with the Stock Exchange. Ms. Liu will have access to such compliance adviser during the term of appointment, which will provide her with an additional source of guidance to assist her to familiarize herself with the functions of a company secretary of a company listed on the Stock Exchange.

We have applied to the Stock Exchange for, and the Stock Exchange has granted, a waiver from strict compliance with the requirements under Rules 3.28 and 8.17 of the Listing Rules such that Ms. Liu may be appointed as a joint company secretary of our Company.

WAIVER AND EXEMPTION IN RELATION TO THE PRE-IPO ESOP

Requirements under the Listing Rules

Rule 17.02(1)(b) of the Listing Rules requires a listing applicant to, *inter alia*, disclose in the prospectus full details of all outstanding options and their potential dilution effect on the shareholdings upon listing as well as the impact on the earnings per share arising from the exercise of such outstanding options.

Paragraph 27 of Appendix 1A to the Listing Rules requires a listing applicant to disclose, *inter alia*, particulars of any capital of any member of the group which is under option, or agreed conditionally or unconditionally to be put under option, including the consideration for which the option was or will be granted and the price and duration of the option, and the name and address of the grantee, or an appropriate negative statement, provided that where options have been granted or agreed to be granted to all the members or debenture holders or to any class thereof, or to employees under a share option scheme, it shall be sufficient, so far as the names and addresses are concerned, to record that fact without giving the names and addresses of the grantees.

WAIVERS FROM STRICT COMPLIANCE WITH THE LISTING RULES AND EXEMPTIONS FROM THE COMPANIES (WINDING UP AND MISCELLANEOUS PROVISIONS) ORDINANCE

Requirements under the Companies (Winding Up and Miscellaneous Provisions) Ordinance

Under section 342(1)(b) of the Companies (Winding Up and Miscellaneous Provisions) Ordinance, the prospectus must state the matters specified in Part I of the Third Schedule.

Under paragraph 10 of Part I of the Third Schedule, the number, description and amount of any shares in or debentures of the company which any person has, or is entitled to be given, an option to subscribe for, together with the particulars of the option, that is to say, (a) the period during which it is exercisable; (b) the price to be paid for shares or debentures subscribed for under it; (c) the consideration (if any) given or to be given for it or for the right to it; and (d) the names and addresses of the persons to whom it or the right to it was given or, if given to existing shareholders or debenture holders as such, the relevant shares or debentures, must be specified in the prospectus.

(collectively, the “**Share Option Disclosure Requirements**”)

Pre-IPO ESOP

As of the Latest Practicable Date, our Company has granted options under the Pre-IPO ESOP to 88 grantees, including 4 members of the senior management and 84 other employees of our Group, to subscribe for an aggregate of 12,106,666 Shares, representing approximately 1.00% of the total issued share capital immediately after completion of the Global Offering and the Conversion of Domestic Shares into H Shares (assuming the Over-allotment Option and the options under the Pre-IPO ESOP are not exercised). The principal terms of the Pre-IPO ESOP are set out in “Appendix VI—Statutory and General Information—A. Further Information about Our Company—6. Pre-IPO ESOP” to this prospectus.

We have applied to (i) the Stock Exchange for a waiver from strict compliance with the requirements under Rule 17.02(1)(b) of the Listing Rules and paragraph 27 of Appendix 1A to the Listing Rules and (ii) the SFC for an exemption from strict compliance with paragraph 10(d) of Part I of the Third Schedule pursuant to section 342A of the Companies (Winding Up and Miscellaneous Provisions) Ordinance in connection with the disclosure of certain details relating to the share options and certain grantees in the prospectus on the ground that the waiver and the exemption will not prejudice the interest of the investing public and strict compliance with the above requirements would be unduly burdensome for the Company for the following reasons:

- (a) given that 88 grantees are involved, strict compliance with such disclosure requirements in setting out full details of all the grantees on an individual basis under the Pre-IPO ESOP in this prospectus would require substantial number of pages of additional disclosure that does not provide any additional material information to the investors and would significantly increase the cost and time for information compilation and prospectus preparation;
- (b) as of the Latest Practicable Date, among all the grantees, 4 are members of the senior management of our Company and the remaining 84 grantees are only employees of the Group. Strict compliance with the applicable Share Option Disclosure Requirements to disclose names, addresses, and entitlements on an individual basis in this prospectus will require a number of additional pages of disclosure that does not provide any material information to the investing public;
- (c) the grant and exercise in full of the options under the Pre-IPO ESOP will not cause any material adverse impact in the financial position of the Company;

**WAIVERS FROM STRICT COMPLIANCE WITH THE LISTING
RULES AND EXEMPTIONS FROM THE COMPANIES (WINDING UP
AND MISCELLANEOUS PROVISIONS) ORDINANCE**

- (d) lack of full compliance with the above disclosure requirements would not prevent the Company from providing its potential investors with an informed assessment of the activities, assets, liabilities, financial position, management and prospects of the Company; and
- (e) material information relating to the options under the Pre-IPO ESOP will be disclosed in this prospectus, including the total number of Shares subject to the Pre-IPO ESOP, the exercise price per Share, the potential dilution effect on shareholding, and impact on earnings per Share upon full exercise of the options granted under the Pre-IPO ESOP. The Directors consider that the information that is reasonably necessary for the potential investors to make an informed assessment of the Company in their investment decision making process has been included in the prospectus.

The Stock Exchange has granted to us a waiver under the Listing Rules on the conditions that:

- (a) full details of the options under the Pre-IPO ESOP granted to (i) each of the Directors, Supervisors, senior management and connected persons of the Company; (ii) other grantees who have been granted options to subscribe for 300,000 or more shares; and (iii) consultant(s) of the Group will be disclosed in “Appendix VI—Statutory and General Information—A. Further Information about Our Company—6. Pre-IPO ESOP” to this prospectus, on an individual basis, as required under the applicable Share Option Disclosure Requirements;
- (b) for the remaining grantees (other than those referred to in (a) above), disclosure will be made, on an aggregate basis, (1) the aggregate number of grantees and the number of Shares underlying the options granted to them under the Pre-IPO ESOP, (2) the consideration paid for the grant of the options under the Pre-IPO ESOP, (3) the exercise period and (4) the exercise price for the options granted under the Pre-IPO ESOP;
- (c) there will be disclosure in this prospectus for the aggregate number of Shares underlying the options under the Pre-IPO ESOP and the percentage of our Company’s total issued share capital represented by such number of Shares as of the Latest Practicable Date;
- (d) the dilutive effect and impact on earnings per Share upon full exercise of the options under the Pre-IPO ESOP will be disclosed in “Appendix VI—Statutory and General Information—D. Pre-IPO ESOP” to this prospectus;
- (e) a summary of the major terms of the Pre-IPO ESOP will be disclosed in “Appendix VI—Statutory and General Information—A. Further Information about Our Company—6. Pre-IPO ESOP” to this prospectus;
- (f) the particulars of the waiver and the exemption will be disclosed in the prospectus;
- (g) a full list of all the grantees (including the persons referred to in (a) above) under the Pre-IPO ESOP, containing all the particulars as required under the applicable Share Option Disclosure Requirements be made available for public inspection in accordance with the section headed “Appendix VII—Documents Delivered to the Registrar of Companies and Available on Display—Documents on Display” to this prospectus;
- (h) further information relating to the grantees who have been granted options is provided to the Stock Exchange; and

**WAIVERS FROM STRICT COMPLIANCE WITH THE LISTING
RULES AND EXEMPTIONS FROM THE COMPANIES (WINDING UP
AND MISCELLANEOUS PROVISIONS) ORDINANCE**

- (i) the grant of a certificate of exemption under the Companies (Winding Up and Miscellaneous Provisions) Ordinance from the SFC exempting our Company from the disclosure requirements provided in paragraph 10(d) of Part I of the Third Schedule to the Companies (Winding Up and Miscellaneous Provisions) Ordinance.

The SFC has agreed to grant to our Company the certificate of exemption under section 342A of the Companies (Winding Up and Miscellaneous Provisions) Ordinance from strict compliance with paragraph 10(d) of Part I of the Third Schedule to the Companies (Winding Up and Miscellaneous Provisions) Ordinance on the conditions that:

- (a) full details of the options under the Pre-IPO ESOP granted to (i) each of the Directors, Supervisors, senior management and connected persons of the Company; (ii) other grantees who have been granted options to subscribe for 300,000 or more shares; and (iii) consultant(s) of the Group will be disclosed in “Appendix VI—Statutory and General Information—A. Further Information about Our Company—6. Pre-IPO ESOP” to this prospectus, on an individual basis, as required under paragraph 10 of Part I of the Third Schedule to the Companies (Winding Up and Miscellaneous Provisions) Ordinance;
- (b) for the remaining grantees (other than those referred to in (a) above), disclosure will be made, on an aggregate basis, (1) the aggregate number of grantees and the number of Shares underlying the options granted to them under the Pre-IPO ESOP, (2) the consideration paid for the grant of the options under the Pre-IPO ESOP, (3) the exercise period and (4) the exercise price for the options granted under the Pre-IPO ESOP;
- (c) a full list of all the grantees (including the persons referred to in (a) above) under the Pre-IPO ESOP, containing all the particulars as required under paragraph 10 of Part I of the Third Schedule to the Companies (Winding Up and Miscellaneous Provisions) Ordinance, will be made available for public inspection in accordance with the section headed “Appendix VII—Documents Delivered to the Registrar of Companies and Available on Display—Documents on Display” to this prospectus; and
- (d) the particulars of the exemption will be disclosed in this prospectus and this prospectus will be issued on or before September 23, 2022.

Further details of the Pre-IPO ESOP are set forth in “Appendix VI—Statutory and General Information—A. Further Information about Our Company—6. Pre-IPO ESOP” to this prospectus.

INFORMATION ABOUT THIS PROSPECTUS AND THE GLOBAL OFFERING

DIRECTORS' RESPONSIBILITY FOR THE CONTENTS OF THIS PROSPECTUS

This prospectus includes particulars given in compliance with the Companies (Winding Up and Miscellaneous Provisions) Ordinance (Chapter 32 of the Laws of Hong Kong (as amended or supplemented from time to time)), the Securities and Futures (Stock Market Listing) Rules (Chapter 571V of the Laws of Hong Kong) (as amended or supplemented from time to time) and the Listing Rules for the purpose of giving information to the public with regard to our Company. Our Directors (including any proposed director who is named as such in this Prospectus) collectively and individually accept full responsibility for the accuracy of the information contained in this prospectus. Our Directors confirm, having made all reasonable enquiries, that, to the best of their knowledge and belief, the information contained in this prospectus is accurate and complete in all material respects and not misleading or deceptive, and there are no other matters the omission of which would make any statement in this prospectus misleading.

APPROVAL OF THE CSRC

The Company obtained approval from the CSRC on November 8, 2021, for the making of the application to list the H Shares on the Stock Exchange and the Global Offering. In granting such approval, CSRC shall not accept any responsibility for the Company's financial soundness, nor for the accuracy of any of the statements made or opinions expressed in this prospectus or on the **GREEN** Application Form.

INFORMATION ON THE GLOBAL OFFERING

The Hong Kong Offer Shares are offered solely on the basis of the information contained and representations made in this prospectus and the **GREEN** Application Form and on the terms and subject to the conditions set out herein and therein. No person is authorized to give any information in connection with the Global Offering or to make any representation not contained in this prospectus and the **GREEN** Application Form, and any information or representation not contained herein and therein must not be relied upon as having been authorized by our Company, the Joint Sponsors, the Joint Global Coordinators, the Joint Bookrunners, the Joint Lead Managers, the Underwriters, any of their respective directors, agents, employees or advisers or any other party involved in the Global Offering. Neither the delivery of this prospectus nor any offering, sale or delivery made in connection with the Offer Shares should, under any circumstances, constitute a representation that there has been no change or development reasonably likely to involve a change in our affairs since the date of this prospectus or imply that the information contained in this prospectus is correct as of any date subsequent to the date of this prospectus.

Details of the structure of the Global Offering, including its conditions, are set out in "Structure of the Global Offering," and the procedures for applying for Hong Kong Offer Shares are set out in "How to Apply for Hong Kong Offer Shares" and in the **GREEN** Application Form.

UNDERWRITING

This prospectus is published solely in connection with the Hong Kong Public Offering, which forms part of the Global Offering. For applicants under the Hong Kong Public Offering, this prospectus and the **GREEN** Application Form set out the terms and conditions of the Hong Kong Public Offering.

The Hong Kong Public Offering is fully underwritten by the Hong Kong Underwriters under the terms of the Hong Kong Underwriting Agreement.

INFORMATION ABOUT THIS PROSPECTUS AND THE GLOBAL OFFERING

RESTRICTIONS ON OFFER OF THE OFFER SHARES

Each person acquiring the Hong Kong Offer Shares under the Hong Kong Public Offering will be required to, or be deemed by his acquisition of Offer Shares to, confirm that he is aware of the restrictions on offers of the Offer Shares described in this prospectus and the **GREEN** Application Form.

No action has been taken to permit a public offering of the Offer Shares in any jurisdiction other than in Hong Kong, or the distribution of this prospectus and/or the **GREEN** Application Form in any jurisdiction other than Hong Kong. Accordingly, this prospectus and/or the **GREEN** Application Form may not be used for the purpose of, and does not constitute an offer or invitation in any jurisdiction or in any circumstances in which such an offer or invitation is not authorized or to any person to whom it is unlawful to make such an offer or invitation. The distribution of this prospectus and the offering of the Offer Shares in other jurisdictions are subject to restrictions and may not be made except as permitted under the applicable securities laws of such jurisdictions pursuant to registration with or authorization by the relevant securities regulatory authorities or an exemption therefrom.

APPLICATION FOR LISTING ON THE STOCK EXCHANGE

Listing is sponsored by the Joint Sponsors. We have applied to the Stock Exchange for the granting of the listing of, and permission to deal in, the H Shares in issue and to be issued pursuant to the Global Offering (including pursuant to the exercise of the Over-allotment Option) and the H Shares to be converted from 481,111,111 Domestic Shares.

No part of our Company's Share or loan capital is listed on or dealt in on any other stock exchange and no such listing or permission to list is being or proposed to be sought in the near future.

SHARES WILL BE ELIGIBLE FOR ADMISSION INTO CCASS

All necessary arrangements have been made enabling the Shares to be admitted into CCASS.

If the Stock Exchange grants the listing of, and permission to deal in, the H Shares and our Company complies with the stock admission requirements of HKSCC, the H Shares will be accepted as eligible securities by HKSCC for deposit, clearance and settlement in CCASS with effect from the date of commencement of dealings in the H Shares on the Stock Exchange or any other date HKSCC chooses. Settlement of transactions between participants of the Stock Exchange is required to take place in CCASS on the second settlement day after any trading day.

All activities under CCASS are subject to the General Rules of CCASS and CCASS Operational Procedures in effect from time to time.

H SHARE REGISTER OF MEMBERS AND STAMP DUTY

Our Company's principal register of members will be maintained by our Company's headquarters in the PRC and our Company's H Share register of members will be maintained by our H Share Registrar, Tricor Investor Services Limited, in Hong Kong.

All Offer Shares will be registered on the H Share register of members of our Company in Hong Kong. Dealings in the H Shares registered on our H Share register of members will be subject to Hong Kong stamp duty.

DIVIDENDS PAYABLE TO HOLDERS OF H SHARES

Unless determined otherwise by the Company, dividends payable in Hong Kong dollars in respect of our H Shares will be paid to the Shareholders as recorded on the H Share register of the Company in Hong Kong and sent by ordinary post, at the Shareholders' risk, to the registered address of each Shareholder.

INFORMATION ABOUT THIS PROSPECTUS AND THE GLOBAL OFFERING

According to the Guide to the Program for “Full Circulation” of H shares promulgated by China Securities Depository and Clearing Corporation Limited (“CSDC”) on February 7, 2020, cash dividends to domestic investors of H-share “full circulation” shall be distributed through CSDC. An H-share listed company shall transfer RMB cash dividends to the designated bank account of the Shenzhen subsidiary of CSDC, who shall complete the clearing of cash dividends by distributing the cash dividends to investors through domestic securities companies.

REGISTRATION OF SUBSCRIPTION, PURCHASE AND TRANSFER OF H SHARES

We have instructed Tricor Investor Services Limited, our H Share Registrar, and it has agreed, not to register the subscription, purchase or transfer of any H Shares in the name of any particular holder unless and until the holder delivers a signed form to our H Share Registrar in respect of those H Shares bearing statements to the effect that the holder:

- (i) agrees with us and each of the Shareholders, and we agree with each of the Shareholders, to observe and comply with the PRC Company Law, the Special Regulations and the Articles of Association;
- (ii) agrees with us, each of the Shareholders, Directors, Supervisors, managers and officers, and we, acting for ourselves and for each of the Directors, Supervisors, managers and officers, agree with each of the Shareholders, to refer all differences and claims arising from the Articles of Association or any rights or obligations conferred or imposed by the PRC Company Law or other relevant laws and administrative regulations concerning our affairs to arbitration in accordance with the Articles of Association, and any reference to arbitration shall be deemed to authorize the arbitration tribunal to conduct hearings in open session and to publish its award. Such arbitration shall be final and conclusive;
- (iii) agrees with us and each of the Shareholders that the H Shares are freely transferable by the holders thereof; and
- (iv) authorizes us to enter into a contract on his behalf with each of the Directors and officers whereby such Directors and officers undertake to observe and comply with their obligations to the Shareholders as stipulated in the Articles of Association.

PROFESSIONAL TAX ADVICE RECOMMENDED

Potential investors in the Global Offering are recommended to consult their professional advisers if they are in any doubt as to the taxation implications of subscribing for, purchasing, holding or disposal of, and dealing in our Shares (or exercising rights attached to them). None of us, the Joint Sponsors, the Joint Global Coordinators, the Joint Bookrunners, the Joint Lead Managers, the Underwriters, any of their respective directors, officers, employees, agents, or representatives or any other person or party involved in the Global Offering accepts responsibility for any tax effects on, or liabilities of, any person resulting from the subscription, purchase, holding or disposal of, dealing in, or the exercise of any rights in relation to, our H Shares.

EXCHANGE RATE CONVERSION

Solely for your convenience, this prospectus contains translations of certain Renminbi amounts into Hong Kong dollars, of Renminbi amounts into U.S. dollars and of Hong Kong dollars into U.S. dollars at specified rates.

INFORMATION ABOUT THIS PROSPECTUS AND THE GLOBAL OFFERING

Unless we indicate otherwise, the translation of Renminbi into Hong Kong dollars, of Renminbi into U.S. dollars and of Hong Kong dollars into U.S. dollars, and vice versa, in this prospectus was made at the following rate:

RMB0.88297	to HK\$1.00
RMB6.93050	to US\$1.00
HK\$7.82752	to US\$1.00

No representation is made that any amounts in Renminbi, Hong Kong dollars or U.S. dollars can be or could have been at the relevant dates converted at the above rates or any other rates or at all.

LANGUAGE

If there is any inconsistency between this prospectus and the Chinese translation of this prospectus, this prospectus shall prevail. Translated English names of Chinese laws and regulations, governmental authorities, departments, entities, institutions, natural persons, facilities, certificates, titles and the like included in this prospectus and for which no official English translation exists are unofficial translations for identification purposes only. In the event of any inconsistency, the Chinese name prevails.

ROUNDING

Certain amounts and percentage figures included in this prospectus have been subject to rounding adjustments. Accordingly, discrepancies in any table or chart between totals and sums of amounts listed therein are due to rounding.

DIRECTORS, SUPERVISORS AND PARTIES INVOLVED IN THE GLOBAL OFFERING

DIRECTORS

Name	Address	Nationality
Executive Directors		
Yan ZHOU (周延)	#1-24-1, No. 600-1 Shen Shui Road Shenhe District Shenyang Liaoning Province PRC	Chinese
Wen GUAN (關文)	Room 1202, #1399-10 Binjiang Ave Pudong Shanghai PRC	Chinese
Shaojun JIA (賈紹君)	Room 303, No. 11, Lane 298 Wenshui East Road Shanghai PRC	Chinese
Non-executive Directors		
Jie ZHOU (周杰)	#3-1-1 25 Wenyi Road Shenhe District Shenyang Liaoning Province PRC	Chinese
Xin ZHOU (周欣)	#1-13-2, No. 45-9 Zhenxing Street Heping District Shenyang Liaoning Province PRC	Chinese
Jichen ZHAO (趙繼臣)	#3311, No. 5 Jinxu Road Pudong Shanghai PRC	Chinese
Aijun WANG (王愛軍)	T6-3, Golden Elephant Guangyang District Langfang Hebei Province PRC	Chinese

DIRECTORS, SUPERVISORS AND PARTIES INVOLVED IN THE GLOBAL OFFERING

Name	Address	Nationality
------	---------	-------------

Independent Non-executive Directors

Ker Wei PEI	9457 E. Windrose Drive Scottsdale AZ 85260 U.S.	American
Xiaoguang GUO (郭曉光)	#88, No. 24-1402 Dong Xin Road Putuo District Shanghai PRC	Chinese
Jie WEN (文潔)	Room 608 41 Lincui Xili Chaoyang District Beijing PRC	Chinese
Hui OUYANG (歐陽輝)	Unit B, 11/F Tower 5, One SilverSea 18 Hoi Fai Road Kowloon Hong Kong	Chinese

SUPERVISORS

Name	Address	Nationality
------	---------	-------------

Tingfeng SONG (宋廷鋒)	Unit 5018, No. 47-1 Yi Cheng Xi Shan Hua Fu Malianwa North Road Haidian District Beijing PRC	Chinese
Lun MA (馬倫)	No. 888 Shengli South Street Heping District Shengyang PRC	Chinese
Jiashuai SONG (宋嘉帥)	#No. 2-4-1 1-34 Yinka East Road Hunnan District Shenyang PRC	Chinese

Please see “Directors, Supervisors and Senior Management” for further details.

DIRECTORS, SUPERVISORS AND PARTIES INVOLVED IN THE GLOBAL OFFERING

PARTIES INVOLVED IN THE GLOBAL OFFERING

Joint Sponsors, Joint Global Coordinators

Goldman Sachs (Asia) L.L.C.

68/F, Cheung Kong Center
2 Queen's Road Central
Hong Kong

China International Capital Corporation

Hong Kong Securities Limited

29/F, One International Finance Centre
1 Harbour View Street
Central
Hong Kong

China Securities (International) Corporate

Finance Company Limited

18/F, Two Exchange Square
8 Connaught Place
Central, Hong Kong

Macquarie Capital Limited

Level 18, One International Finance Centre
1 Harbour View Street
Central
Hong Kong

Joint Bookrunners

Goldman Sachs (Asia) L.L.C.

68/F, Cheung Kong Center
2 Queen's Road Central
Hong Kong

China International Capital Corporation

Hong Kong Securities Limited

29/F, One International Finance Centre
1 Harbour View Street
Central
Hong Kong

China Securities (International) Corporate

Finance Company Limited

18/F, Two Exchange Square
8 Connaught Place
Central, Hong Kong

Macquarie Capital Limited

Level 18, One International Finance Centre
1 Harbour View Street
Central
Hong Kong

DIRECTORS, SUPERVISORS AND PARTIES INVOLVED IN THE GLOBAL OFFERING

BOCI Asia Limited

26th Floor
Bank of China Tower
1 Garden Road
Central, Hong Kong

ICBC International Capital Limited

37/F, ICBC Tower
3 Garden Road
Hong Kong

CMB International Capital Limited

45/F, Champion Tower
3 Garden Road
Central, Hong Kong

Futu Securities International (Hong Kong) Limited

Unit C1-2, 13/F, United Centre
No. 95 Queensway
Admiralty
Hong Kong

Tiger Brokers (HK) Global Limited

Whole of 18th Floor
Central 88
88 Des Voeux Road Central
Hong Kong

Joint Lead Managers**Goldman Sachs (Asia) L.L.C.**

68/F, Cheung Kong Center
2 Queen's Road Central
Hong Kong

**China International Capital Corporation
Hong Kong Securities Limited**

29/F, One International Finance Centre
1 Harbour View Street
Central
Hong Kong

**China Securities (International) Corporate
Finance Company Limited**

18/F, Two Exchange Square
8 Connaught Place
Central, Hong Kong

Macquarie Capital Limited

Level 18, One International Finance Centre
1 Harbour View Street
Central
Hong Kong

BOCI Asia Limited

26th Floor
Bank of China Tower
1 Garden Road
Central, Hong Kong

ICBC International Securities Limited

37/F, ICBC Tower
3 Garden Road
Hong Kong

CMB International Capital Limited

45/F, Champion Tower
3 Garden Road
Central, Hong Kong

**Futu Securities International
(Hong Kong) Limited**

Unit C1-2, 13/F, United Centre
No. 95 Queensway
Admiralty
Hong Kong

Tiger Brokers (HK) Global Limited

Whole of 18th Floor
Central 88
88 Des Voeux Road Central
Hong Kong

Livermore Holdings Limited

Unit 1214A, 12/F
Tower II Cheung Sha Wan Plaza
833 Cheung Sha Wan Road
Kowloon
Hong Kong

DIRECTORS, SUPERVISORS AND PARTIES INVOLVED IN THE GLOBAL OFFERING

Legal Advisors to the Company

as to Hong Kong and U.S. laws:

Sullivan & Cromwell (Hong Kong) LLP

20th Floor, Alexandra House

18 Chater Road

Central, Hong Kong

as to PRC law:

Jingtian & Gongcheng

34/F, Tower 3, China Central Place

77 Jianguo Road

Beijing, China

Legal Advisors to the Joint Sponsors and the Underwriters

as to Hong Kong and U.S. laws:

Latham & Watkins LLP

18th Floor, One Exchange Square

8 Connaught Place

Central, Hong Kong

as to PRC law:

JunHe LLP

26/F, HKRI Centre One

HKRI Taikoo Hui

288 Shimen Road (No. 1)

Shanghai, China

Auditors and Reporting Accountants

Ernst & Young

Certified Public Accountants

Registered Public Interest Entity Auditor

27/F, One Taikoo Place

979 King's Road

Quarry Bay, Hong Kong

Industry Consultant

China Insights Industry Consultancy Limited

10/F, Block B, Jing'an International Center

88 Puji Road, Jing'an District

Shanghai, China

Receiving Banks

Bank of China (Hong Kong) Limited

1 Garden Road

Central

Hong Kong

CMB Wing Lung Bank Limited

45 Des Voeux Road Central

Hong Kong

CORPORATE INFORMATION

Registered Office	Room 218, 2/F Xinghai Building 16 Yingshun Road, Yinghai Town Daxing District, Beijing PRC
Headquarters	25/F, Building A 91 Jianguo Road Chaoyang, Beijing PRC
Principal Place of Business in Hong Kong	5/F, Manulife Place 348 Kwun Tong Road Kowloon Hong Kong
Company's Website	<u>www.aimbio.com</u> <i>(Information contained in this website does not form part of this prospectus)</i>
Joint Company Secretaries	Ms. Ling LIU (劉靈) 3-5-2, 12-4 Quanyuan Third Road Shenhe District Shenyang Liaoning Province PRC Ms. Wing Chi LAM (林穎芝) (ACG, HKACG) 5/F, Manulife Place 348 Kwun Tong Road Kowloon Hong Kong
Authorized Representatives	Mr. Yan ZHOU #1-24-1, No. 600-1 Shen Shui Road Shenhe District Shenyang Liaoning Province PRC Ms. Wing Chi LAM (林穎芝) 5/F, Manulife Place 348 Kwun Tong Road Kowloon Hong Kong

CORPORATE INFORMATION

Audit Committee	Mr. Ker Wei PEI (<i>Chairman</i>) Mr. Hui OUYANG Mr. Xiaoguang GUO Mr. Jie ZHOU Mr. Xin ZHOU
Nomination Committee	Mr. Hui OUYANG (<i>Chairman</i>) Mr. Xiaoguang GUO Mr. Yan ZHOU
Remuneration Committee	Mr. Xiaoguang GUO (<i>Chairman</i>) Mr. Ker Wei PEI Ms. Jie WEN Mr. Yan ZHOU Mr. Wen GUAN
Strategy Committee	Ms. Jie WEN (<i>Chairman</i>) Mr. Yan ZHOU Mr. Jichen ZHAO Mr. Hui OUYANG Mr. Ker Wei PEI
Compliance and Risk Control Committee	Mr. Yan ZHOU (<i>Chairman</i>) Mr. Wen GUAN Mr. Shaojun JIA Mr. Jie ZHOU Ms. Aijun WANG
H Share Registrar	Tricor Investor Services Limited 17/F, Far East Finance Centre 16 Harcourt Road Hong Kong
Compliance Advisor	Somerley Capital Limited 20/F, China Building 29 Queen's Road Central Central Hong Kong
Principal Banks	China Merchants Bank Outlet of Shenyang Branch 25 Shiyiwei Road Heping District, Shenyang Liaoning Province China Everbright Bank Shenyang Huanggu Sub-branch 126 Changjiang Street Huanggu District, Shenyang Liaoning Province

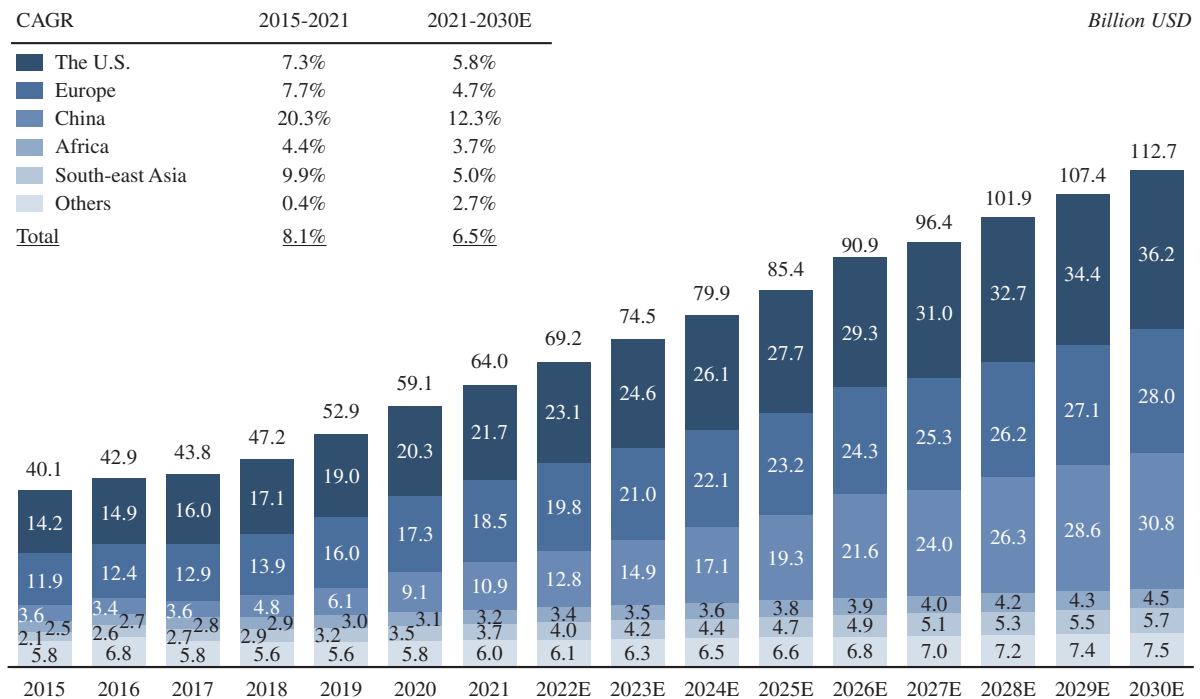
INDUSTRY OVERVIEW

The information and statistics set out in this section and other sections of this prospectus were extracted from the CIC Report prepared by CIC, an independent industry consultant which was commissioned by us, and from various official government publications and other publicly available publications. We engaged CIC to prepare the CIC Report, an independent industry report, in connection with the Global Offering. The information and statistics from official government and other public sources have not been independently verified by us, the Joint Sponsors, the Joint Global Coordinators, the Joint Bookrunners, the Joint Lead Managers, the Underwriters, any of our or their respective directors and advisers, or any other persons or parties involved in the Global Offering, and no representation is given as to the accuracy or completeness of such information and statistics.

OVERVIEW OF THE GLOBAL VACCINE MARKET

Since the emergence in the late 18th century, vaccines have been one of the most important innovations in the science of public health. They have significantly reduced the threat of a wide variety of diseases that were once widespread and oftentimes fatal. In terms of sales revenue, the global vaccine market grew from US\$40.1 billion in 2015 to US\$64.0 billion in 2021, and is expected to reach US\$112.7 billion in 2030 (excluding COVID-19 vaccines). The growth is predominantly driven by the popularization of innovative vaccines, growing healthcare expenditure in both developed and developing countries, and growth in the awareness of vaccination especially after the COVID-19 pandemic. If COVID-19 vaccines are also taken into account, the global vaccine market size would be further scaled up. In 2021, the global market size of COVID-19 vaccines was approximately US\$90.0 billion. The following chart sets forth the historical and forecast market size of the global vaccine market for the periods indicated (excluding COVID-19 vaccines):

Market size and forecast of global vaccine market, by sales revenue, 2015-2030E⁽¹⁾



Source: CIC Report

Note:

(1) Excluding COVID-19 vaccines

INDUSTRY OVERVIEW

Despite their manifold benefits to both public and individual health, the development of vaccines is fraught with unique challenges, including long development timelines, high rates of clinical trial failure, a challenging regulatory environment (as vaccines are given to healthy individuals) and uncertainties of market recognition and actual addressable market. As a result, vaccine platform technologies have become increasingly critical infrastructure to vaccine companies, as they would offer the potential for far greater speed and flexibility in vaccine development. Regardless of the technical approach employed, platform vaccine technologies can use a common system to generate multiple separate antigens to serve as potential pipeline candidates. This process itself is already an important potential means of improving vaccine development, especially during a pandemic situation. There are currently five proven human vaccine platform technologies worldwide, namely bacterial, viral, genetically engineered, combination and mRNA vaccine platform technologies. These platform technologies form the basis for companies to develop and produce new and better vaccines.

Platform technologies of vaccine

Platform	Description	Advantages	Representative product
Bacterial vaccine	<ul style="list-style-type: none"> Bacterial vaccine is directed against the pathogenic bacteria causing the infection Bacterial vaccine contains killed or attenuated bacteria that activate the immune system, which antibodies are built against the particular bacteria, and prevents bacterial infection later 	<ul style="list-style-type: none"> Simple manufacturing process Strong immune response can be triggered 	<ul style="list-style-type: none"> MCV4, PCV13
Viral vaccine	<ul style="list-style-type: none"> Viral vaccine contains either inactivated viruses or attenuated viruses which include the live form of the viruses The viruses are not pathogenic but can induce an immune response 	<ul style="list-style-type: none"> Simple manufacturing process Strong immune response can be triggered 	<ul style="list-style-type: none"> Human rabies vaccine
Combination vaccine (combined bacteria and virus together)	<ul style="list-style-type: none"> Combination vaccine take two or more vaccines that could be given individually and put them into one shot in order to prevent several disease simultaneously Bacteria vaccine and viral vaccine can be combined together 	<ul style="list-style-type: none"> Prevent infection from different diseases simultaneously Prevent infection caused by different strains of the same pathogen or different serotypes Simplified vaccination procedure 	<ul style="list-style-type: none"> DTP-Hib combination vaccine
Genetically engineered vaccine	<ul style="list-style-type: none"> Genetically engineered vaccine is produced through recombinant technology It involves inserting the DNA encoding an antigen (such as a bacterial surface protein) that stimulates an immune response into bacterial or mammalian cells, expressing the antigen in these cells and then purifying it from them 	<ul style="list-style-type: none"> Suitable for people with weakened immune system Strong and long-lasting immune response can be triggered Without risk of being infected by bacteria or virus 	<ul style="list-style-type: none"> Recombinant HBV vaccine (Hansenua Polymorpha)
mRNA vaccine	<ul style="list-style-type: none"> mRNA vaccines provide the cells with a blueprint to construct the protein, and the process allows the host to mount an immune response against the constructed foreign protein 	<ul style="list-style-type: none"> Cost-effective Mass production is achievable High efficiency against mutant virus Without risk of gene integration 	<ul style="list-style-type: none"> COVID-19 mRNA vaccine

Source: CIC Report

In 2021, the top 10 global blockbuster vaccines accounted for an aggregate 66.2% global market share in terms of sales revenue, of which five were COVID-19 vaccines. Out of the global top 10 vaccines, half are not available on PRC market to date. The following chart illustrates the details of the global top 10 vaccines by sales revenue in 2021, including COVID-19 vaccines:

Top 10 vaccines of the globe, by sales revenue⁽¹⁾, 2021

Rank	Product name	Indication	Company	Revenue ⁽¹⁾ (billion USD)	Global first approval year	NMPA approval year	Corresponding pipeline/product of AIM Vaccine
1	BNT162b2	COVID-19	Pfizer	36.78	2020	N/A	☑ mRNA COVID-19 candidates
2	CoronaVac	COVID-19	Sinovac	23.00	2021	2021	☑ Inactivated COVID-19 candidates
3	mRNA-1273	COVID-19	Moderna	17.58	2020	N/A	☑ mRNA COVID-19 candidates
4	Gardasil/Gardasil 9	HPV	MSD	5.67	2006/2014	2017/2018	☑ HPV2/HPV9 candidates
5	Prevnar 13	Pneumococcal disease	Pfizer	5.27	2011	2017	☑ PCV13 candidate
6	AZD1222	COVID-19	AstraZeneca	3.74	2020	N/A	☑ Adenoviral vector-based broad-spectrum COVID-19 candidate
7	Vaxigrip, Fluzone	Influenza	Sanofi	2.89	2009	N/A	☑ Tetravalent influenza and universal influenza candidates
8	Ad26.COV2-S	COVID-19	Johnson & Johnson	2.39	2020	N/A	☑ Adenoviral vector-based broad-spectrum COVID-19 candidate
9	Pentacel/Pentaxim	DTP-Hib-IPV	Sanofi	2.37	2008	2011	☑ DTP-Hib combination candidate
10	Shingrix	Herpes zoster	GSK	2.24	2017	2020	☑ Shingles/Herpes Zoster candidate
Total				101.93			

INDUSTRY OVERVIEW

Source: CIC Report

Note:

(1) Sales revenue in 2021 is calculated based on the ex-factory price.

The following chart illustrates the details of the global top 10 vaccines by sales revenue in 2021 (excluding COVID-19 vaccines), half of which are not available on PRC market to date:

Top 10 vaccines of the globe, by sales revenue⁽¹⁾, 2021 (excluding COVID-19 vaccines)

Rank	Product name	Indication	Company	Revenue ⁽¹⁾ (billion USD)	Global first approval year	NMPA approval year	Corresponding pipeline/product of AIM Vaccine
1	Gardasil/Gardasil 9	HPV	MSD	5.67	2006/2014	2017/2018	√ HPV2/HPV9 candidates
2	Prevnam 13	Pneumococcal disease	Pfizer	5.27	2011	2017	√ PCV13 candidate
3	Vaxigrip, Fluzone	Influenza	Sanofi	2.89	2009	N/A	√ Tetravalent influenza and universal influenza candidates
4	Pentacel/Pentaxim	DTP-Hib-IPV	Sanofi	2.37	2008	2011	√ DTP-Hib combination candidate
5	Shingrix	Herpes zoster	GSK	2.24	2017	2020	√ Shingles/Herpes Zoster candidate
6	ProQuad, M-M-R II and Varivax	Measles, mumps, rubella, varicella	MSD	2.14	2005	N/A	√ Mumps vaccine product
7	Pneumovax 23	Pneumococcal disease	MSD	0.89	1983	2005	√ PPSV23 candidate
8	Fluarix, FluLaval	Influenza	GSK	0.88	2005	N/A	√ Tetravalent influenza and universal influenza candidates
9	Bexsero	Meningitis	GSK	0.85	2015	N/A	√ MPSV4 vaccine product and MCV4 candidate
10	Infanrix/Pediarix	DTaP vaccines	GSK	0.71	2003	N/A	√ DTaP vaccine candidate
Total				23.91			

Source: CIC Report

Note:

(1) Sales revenue in 2021 is calculated based on the ex-factory price.

OVERVIEW OF THE PRC VACCINE MARKET⁽¹⁾

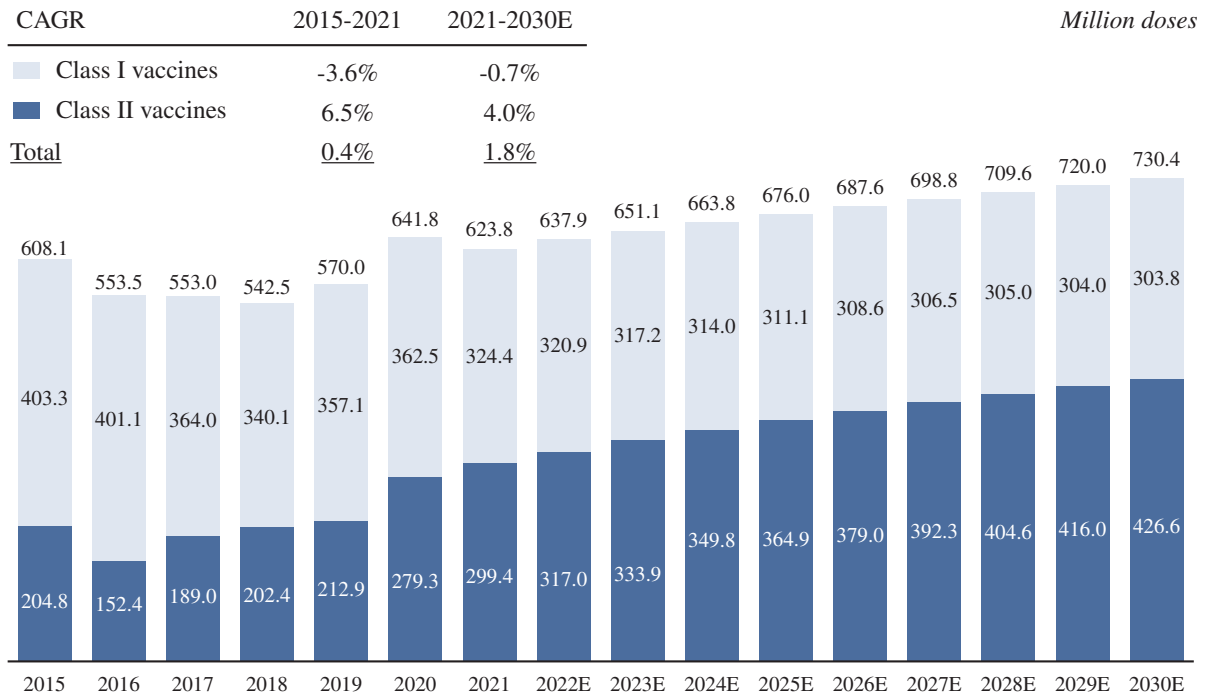
The PRC vaccine market⁽¹⁾ grew from RMB25.1 billion in 2015 to RMB76.1 billion in 2021, and is expected to further grow to RMB215.7 billion in 2030 (excluding COVID-19 vaccines), which is significantly more rapid than the global market. By adding up the COVID-19 vaccine market, the overall PRC vaccine market is expected to increase from RMB303.6 billion in 2021 to RMB431.4 billion in 2030.

In the PRC, vaccines are categorized into Class I and Class II vaccines. Class I vaccines are vaccines provided free of charge to citizens. They are procured at relatively low prices under government procurement programs, which are managed by CDCs. Class II vaccines are paid for by vaccinees themselves. At present, newborns and children in the PRC are required to receive several Class I vaccines against a variety of infectious diseases. Offering Class I vaccines free of charge to citizens under government immunization programs has significant social value, as vaccines could prevent infection against some widely spread infectious diseases, leading to great protection on public health and the eventual elimination of such diseases. For example, since the implementation of national immunization programs in the PRC, smallpox has been completely eliminated; no indigenous polio cases have occurred since 1994; and the incidence of pertussis, diphtheria, tetanus, meningitis and other diseases has been significantly reduced. On the other hand, in the PRC, a majority of new vaccines enter the market as Class II vaccines. Class II vaccines accounted for 95.2% of vaccines sold in the PRC in 2021 in terms of sales revenue, and are expected to account for 98.7% in 2030. The following charts set forth the historical and forecast approved lot release volume and sales revenue of vaccines in the PRC for the period indicated.

(1) Unless otherwise indicated, the industry data related to any vaccine market size in terms of approved lot release volume or sales revenue in the PRC in this section excludes COVID-19 vaccines.

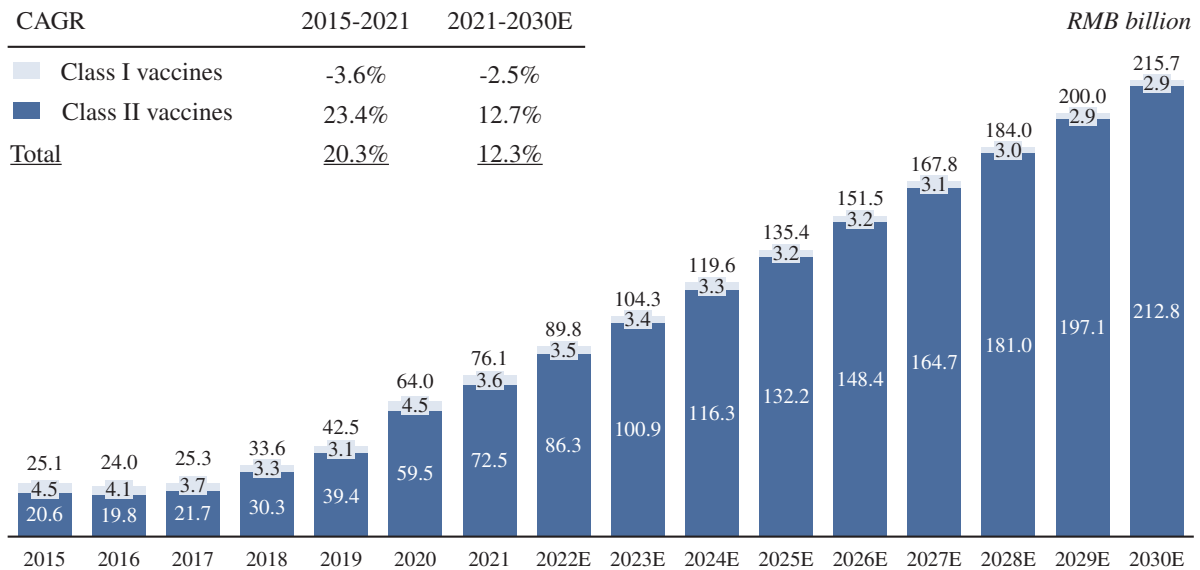
INDUSTRY OVERVIEW

Market size of the vaccine market in the PRC, by approved lot release volume, 2015-2030E⁽¹⁾



Source: CIC Report

Market size of the vaccine market in the PRC, by sales revenue, 2015-2030E⁽¹⁾



Source: CIC Report

Note:

(1) Excluding COVID-19 vaccines.

INDUSTRY OVERVIEW

As the number of target vaccinees of the majority of Class I vaccines, newborns in China, is expected to continue to decrease in the near future, approved lot release volume and sales revenue of Class I vaccines are projected to decrease from 2021 to 2030.

While the PRC market size is vast, it is still significantly underserved. The per capita expenditure on vaccines (US\$8.4 in 2021) in China is much lower than that of developed countries, such as the U.S. (US\$65.0 in 2021), and Japan (US\$21.8 in 2021), which is primarily due to the lack of new and better vaccines. A large number of the widely used vaccines in the PRC are still older generation vaccines that have been replaced by new vaccines in developed countries. See “—Overview of the Global Vaccine Market.” Therefore, there is strong market potential for high-quality and innovative vaccines in the PRC.

Growth Drivers and Future Trends of the PRC Vaccine Market

The main growth drivers and trends of the PRC vaccine market include:

- *Continuing innovation in vaccine development.* Continuous R&D investment in vaccines and vaccine platform technologies enable vaccine companies to develop better and innovative vaccines. For example, mRNA platform technologies have brought about mRNA COVID-19 vaccines, which have the highest protective efficacy rates (94% to 95%) amongst all commercialized COVID-19 vaccines and become global the largest vaccine type in terms of 2021 sales revenue. With continuous application of vaccine platform technologies, such as vaccine conjugation, genetically engineered and combination technologies, it is expected that more technologically innovative vaccines with improved clinical benefits and blockbuster potential would come in the future.
- *Increasing demand from all age groups for high-quality vaccines.* The increasing awareness of the necessity and benefits of vaccination amongst the Chinese population is expected to drive demand from all age groups for vaccines of higher quality. For example, in the PRC, there are only three PCV13 products indicated for children below six years old and the penetration rate for approved age groups in 2021 was only around 11%, and the only MCV4 product in the PRC was recently approved in December 2021. As Chinese parents become more inclined to purchase better vaccines for their children, demand for PCV13 is projected to increase, and is expected to drive the future demand for its upgrade, PCV20 once available, same trend for MCV4 products. In addition, with the increasing aging population and awareness of vaccination importance among adults, there is likely going to be a growing demand for adult vaccines such as HPV, HFMD, influenza and herpes.
- *Increasing purchasing power of vaccinees.* As the public are paying increasing attention to personal healthcare, there is a growing recognition of the value of preventive vaccines and a willingness to spend more on vaccine products. The average annual disposable income of the PRC residents is also rising. As a result, Chinese households will be able to buy better and new vaccines at higher prices.
- *Increasing awareness of vaccination.* Marketing campaigns of vaccine manufacturers and the PRC government’s health education campaigns have helped to further raise awareness of the importance and necessity of high-quality vaccines and vaccination strategies, thereby promoting vaccine consumption in the PRC. The outbreak of COVID-19 further enhanced the awareness of the disease prevention and control. As a result, the penetration rate of vaccines is likely to increase.

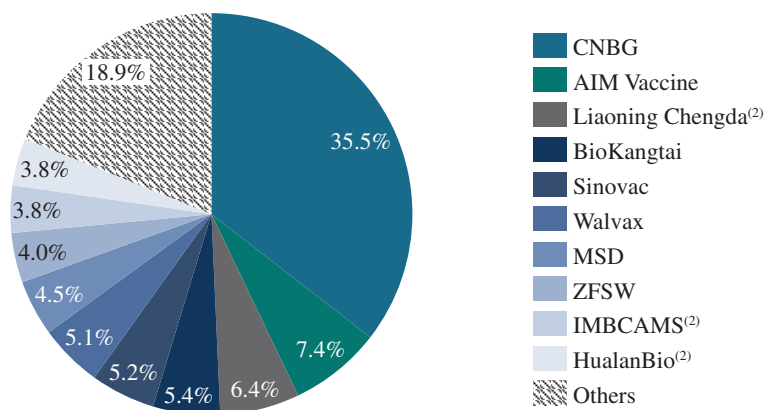
INDUSTRY OVERVIEW

- Increasing market consolidation.** Among all 27 vaccine manufacturers or manufacturer groups that had approved lot releases in 2021, more than half of them had only one or two vaccine products with approved lot releases. Market players with strong R&D and commercialization capabilities that can steadily produce a wide variety of products are likely to take a growing share in the market. In addition, the implementation of the Vaccine Administration Law with more stringent requirements on the safety, effectiveness and quality control of vaccine products and on vaccine production permit issuance, is expected to further consolidate the PRC vaccine market by weeding out subpar market players.
- Favorable Government Policies.** In terms of healthcare, the PRC's 14th Five-Year Plan sets out the principle of putting disease prevention first. On the other hand, an increasing number of innovative vaccines are expected to emerge in the future, driven by relevant policy reforms. For example, the Opinions of the General Office of the State Council on Further Strengthening Management of Vaccine Circulation and Vaccination issued in 2017 (國務院辦公廳關於進一步加強疫苗流通和預防接種管理工作的意見) (the "**2017 Opinions**") direct the PRC government to gradually promote the inclusion of Class II vaccines that are safe, effective and financially affordable into the national immunization program and provide the PRC people with better vaccination services. Furthermore, the 2017 Opinions direct the PRC government to offer support to the R&D and industrialization of innovative vaccines, especially polyvalent vaccines.

Competition and Entry Barriers of the PRC Vaccine Market

In 2021, in terms of approved lot release volume (excluding COVID-19 vaccines), we took up a 7.4% market share, ranking the second largest among all market players and the largest privately-owned vaccine company in the PRC vaccine market. The player that took up the largest market share in the PRC in terms of approved lot release volume in 2021 (35.5%) is CNBG, a state-owned vaccine conglomerate. Compared to privately-owned companies, CNBG has significantly more resources at its disposal. The following chart sets forth the top 10 players in the PRC's vaccine market by approved lot release volume in 2021 (excluding COVID-19 vaccines).

Top 10 vaccine manufacturers in the PRC, by approved lot release volume⁽¹⁾, 2021



INDUSTRY OVERVIEW

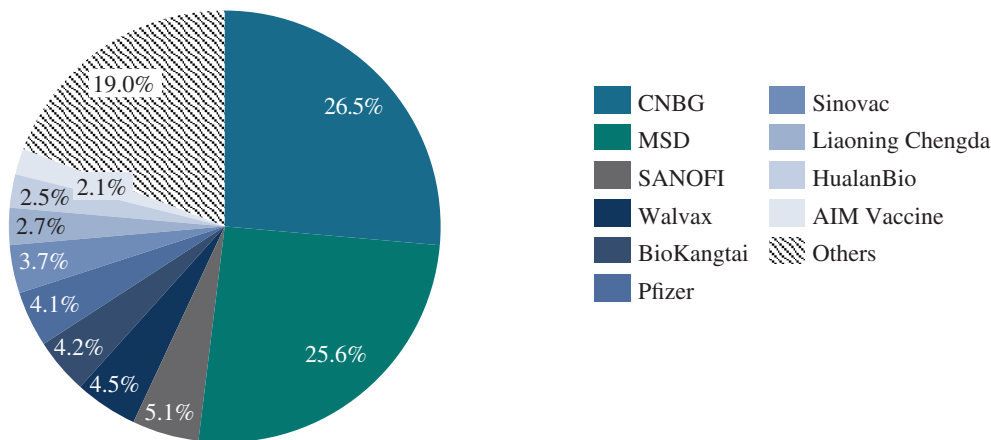
Source: CIC Report

Notes:

- (1) Approved lot release volume refers to the volume of vaccines produced by a vaccine manufacturer approved for sale and distribution by the National Institutes for Food and Drug Control of the PRC. It is different from the production volume of a particular vaccine manufacturer. The National Institutes for Food and Drug Control would only approve the sale and distribution of vaccines that have passed its inspection. Therefore, the production volume of a vaccine manufacturer may not be the same as its lot approved release volume, as some vaccines may not pass inspection. Furthermore, as approved lot release volume is public information (and production volume is not), it is widely used as a benchmark to assess the market share of a vaccine manufacturer.
- (2) Liaoning Chengda refers to Liaoning Chengda Biotechnology Co., LTD. (遼寧成大生物股份有限公司); IMBCAMS refers to Institute of Medical Biology, Chinese Academy of Medical Sciences (中國醫學科學院醫學生物學研究所); and HualanBio refers to Hualan Biological Bacterin Inc. (華蘭生物疫苗股份有限公司).

In terms of 2021 sales revenue (excluding COVID-19 vaccines), CNBG is also the latest vaccine company in the PRC with a market share of 26.5%, whereas we accounted for 2.1%. The following chart sets forth the top 10 players in the PRC's vaccine market by sales revenue in 2021 (excluding COVID-19 vaccines).

Top 10 vaccine manufacturers in the PRC, by sales revenue⁽¹⁾, 2021

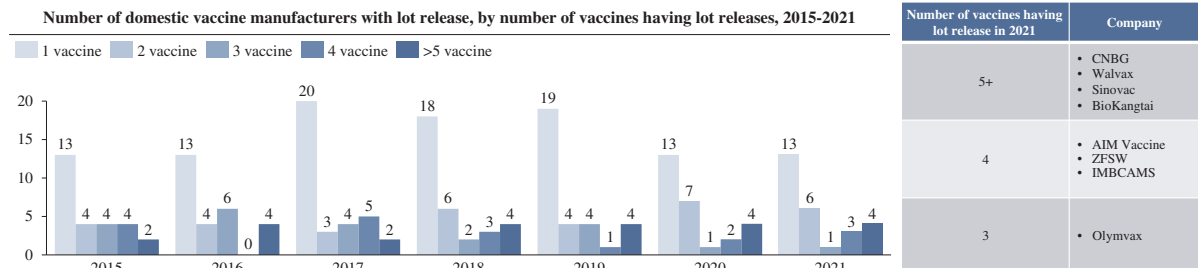


Source: CIC Report

Note:

- (1) Only include revenues from in house developed vaccines.

According to CIC, as of the Latest Practicable Date, a total of 45 production permits were granted by the NMPA to 33 vaccine manufacturers or manufacturer groups in China, of which only 27 had approved lot release record in 2021. Out of the 27 manufacturers or manufacturer groups, 19 had approved lot releases for only one or two products, and only seven had approved lot releases for four or more products in 2021, including our Group. By obtaining four production permits (with active lot releases under each in 2021), our Group is the second largest holder of production permits in the PRC among all vaccine companies and the largest holder among all privately-owned vaccine companies.



Source: CIC Report

INDUSTRY OVERVIEW

The following are major entry barriers in the vaccines market in the PRC:

- *Long R&D cycle and uncertainty of the approval.* In order to obtain the approval from government authorities, vaccine companies must conduct proof-of-concept assessments, preclinical safety and immunogenicity studies and multiple clinical trials before obtaining final NDA approvals, and the whole process can last more than a decade. International companies need to face different development requirements in the PRC and abroad, and may also lack of understanding of local policies and vaccine registration processes, which can affect their ability to develop qualified products.
- *Complexity of R&D.* From the study of genomes to the design of new antigens and to production process formulation and validation, the process of vaccine development is highly complex. Key research and development capabilities include platform technologies and state-of-the-art and adequate R&D facilities and equipment.
- *Talents with professional knowledge and adequate experience.* The successful launch of a vaccine heavily depends on the knowledge and experience of experts. New entrants of the vaccine industry usually find it difficult to recruit enough experts and talents with adequate know-how and industry insights and knowledge necessary to successfully conduct vaccine research and development.
- *Complexity of vaccine production.* Chinese vaccine companies are required to produce their own vaccines and are prohibited from outsourcing them to CMOs. The production of vaccine requires sufficient expertise with adequate knowledge of the techniques. The production process takes 6 to 12 months and can take hundreds to thousands of steps to get the final product. Vaccine products are sensitive to the setting of each production parameter, even if the mechanisms of action or antigen components are the same. The vaccine developers with mass-scale production capacity and experience of multi-category products manufacturing can obtain vaccines for different age groups by adjusting production steps and parameters, or different vaccines with different serotype coverage and antigen composition.
- *Quality control and safety requirements.* Safety and efficacy are the most important factors in determining the success of a vaccine product, so vaccine companies must implement rigorous quality control and ensure the safety of their products, and experienced technicians and comprehensive quality management systems are essential. For new entrants of the industry, it is difficult to achieve the two conditions.
- *Regulatory barrier.* The Chinese government has formulated a series of laws and regulations over the vaccine industry, from industry access restrictions to product licensing, marketing, and vaccination norms. In particular, the Vaccine Administration Law imposes more clear and stringent regulatory requirements on vaccine companies, making it more difficult for small and medium-sized vaccine companies only having the production capacity of a limited category of products to obtain the production approval in the future.
- *Capital-intensive industry.* Companies need to commit heavy investment in the development of a new vaccine. The construction of R&D facilities and production facilities requires a large amount of capital expenditures. In addition, the development of vaccines requires extensive testing and clinical trials, as well as significant funding.

INDUSTRY OVERVIEW

The following are the major challenges faced by the market players in the PRC's vaccine market:

- *Maintaining stable vaccine manufacturing capacity and ensuring high quality standards.* The Vaccine Administration Law imposes a series of strict quality control requirements for vaccine manufacturers, such as safety control measures of the microbes and strains. Vaccine manufacturers are required to stably produce large batches of vaccines that meet standards for approved lot release. Manufacturers that fail to have a stable lot release output could be forbidden from the production of vaccine products. Therefore, vaccine manufacturers need to have production lines and quality control systems in full compliance with the relevant laws and regulations to guarantee adequate output of vaccine products. Smaller manufacturers may find it difficult to sustain such high standards due to the high costs involved.
- *Continuous investment in R&D and innovation.* Leading companies in the vaccine industry have always been investing heavily in R&D. As a result, platform technologies for vaccine development and production have continuously been upgrading. In the long term, vaccines produced using traditional technologies, such as inactivated and live attenuated vaccines, are expected to be gradually substituted by the innovative types such as recombinant and mRNA vaccines. By the same token, univalent vaccines are gradually being substituted by multivalent vaccines. Thus, the continuous investment in R&D and innovation have been a key for vaccine manufacturers to keep their market share. For smaller vaccine manufacturers with limited capital resources and professional research staff, their products risk being substituted by the more advanced vaccines of the competitors with more resources invested in R&D and innovation.

HEPATITIS B VACCINE IN THE PRC

Overview

Hepatitis B is a widespread and infectious liver disease in the PRC and worldwide, which is caused by hepatitis B virus (HBV). HBV is typically transmitted through horizontal infection, such as through blood, wounded mucosa and sexual contact with infected patients, and neonatal infection from mother to infants. Hepatitis B can be acute or chronic, and there is currently no functional cure for either type of hepatitis B. Among the population with HBV infection in China, 15% to 25% may turn into liver cirrhosis or liver cancer without proper treatment. As a result, the vaccination program is critically important to the public health in China. In 2021, the HBV vaccine market was the fourth largest vaccine segment globally, accounting for 7% of the global vaccine sales volume.

Types of HBV Vaccines

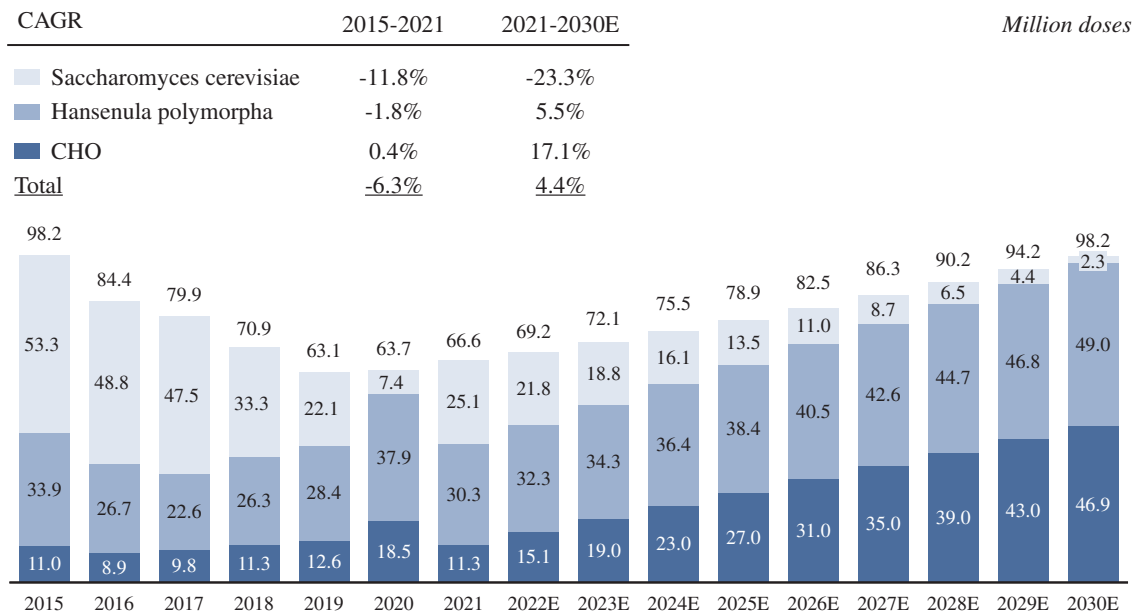
All HBV vaccines in the PRC are recombinant HBV vaccines that express the antigens of HBV on other cells through genetic technology and allow long-run protection. There are three types of recombinant HBV vaccines on the PRC market, the *Hansenula Polymorpha*-based, the *Saccharomyces cerevisiae*-based and the Chinese hamster ovary (CHO) cell-based. Compared with *Saccharomyces cerevisiae* (酿酒酵母) and CHO cells, *Hansenula Polymorpha* has better genetic stability, higher purity and stronger antigen expression capabilities and therefore is a well-recognized better manufacturing technology route for recombinant HBV vaccines.

INDUSTRY OVERVIEW

Market for HBV Vaccines

In the PRC, HBV vaccines for newborns are Class I vaccines, while those for all other groups of vaccinees are Class II vaccines. The PRC HBV vaccine market in terms of sales revenue grew from RMB1.5 billion in 2015 to RMB2.2 billion in 2021. The market is expected to further grow to RMB5.2 billion in 2030 at a CAGR of 10.1% from 2021 to 2030, driven by the increasing vaccination of Class II vaccines especially among adults. Studies have shown that although all newborns in China are required to receive HBV vaccines and therefore retain a high vaccination rate of over 99%, the vaccination positive rate of anti-HBs is only 47.3% in Chinese population aged between 15 to 59 years old, indicating a significant opportunity for HBV vaccines in adults. In particular, the market of Class II HBV vaccines is expected to grow at a CAGR of 10.3% and 11.3% from 2021 to 2030 in terms of approved lot release volume and sales revenue, respectively. Such projections are supported by the historical sales increases of HBV vaccines (Hansenula polymorpha) and HBV (CHO) vaccines from 2015 to 2021, two major Class II HBV vaccine types in China. The following charts set forth the historical and forecast market size of the HBV vaccine market in terms of approved lot release volume and sales revenue for the period indicated.

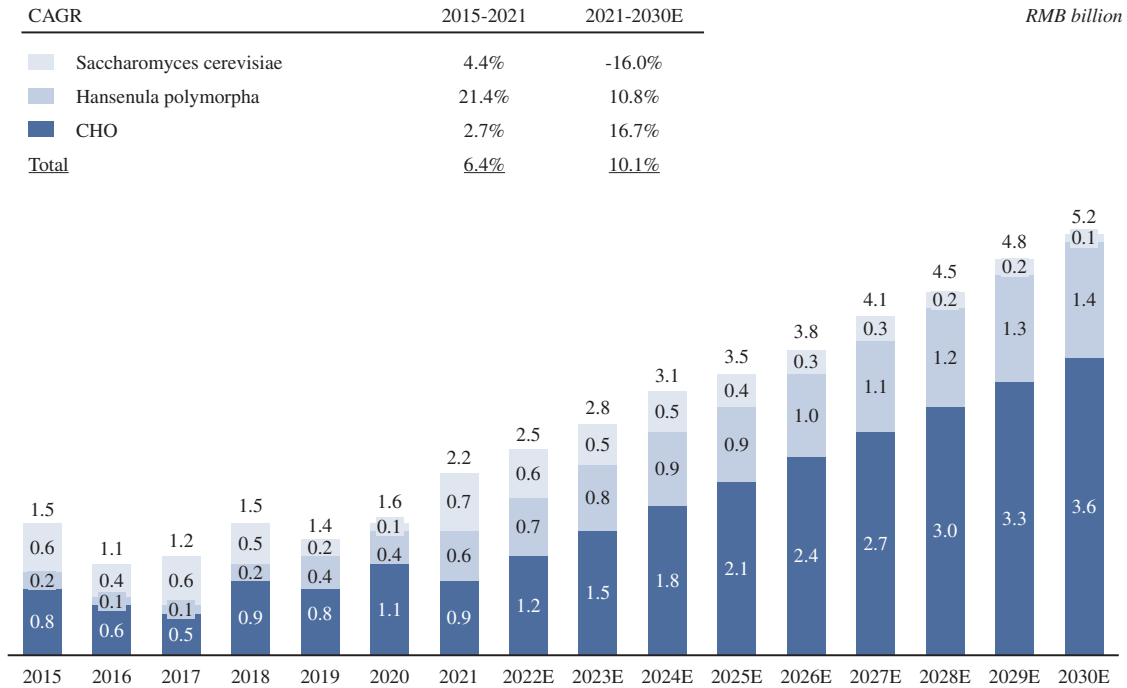
Market size of HBV vaccine market in the PRC, by approved lot release volume, 2015-2030E



Source: CIC Report

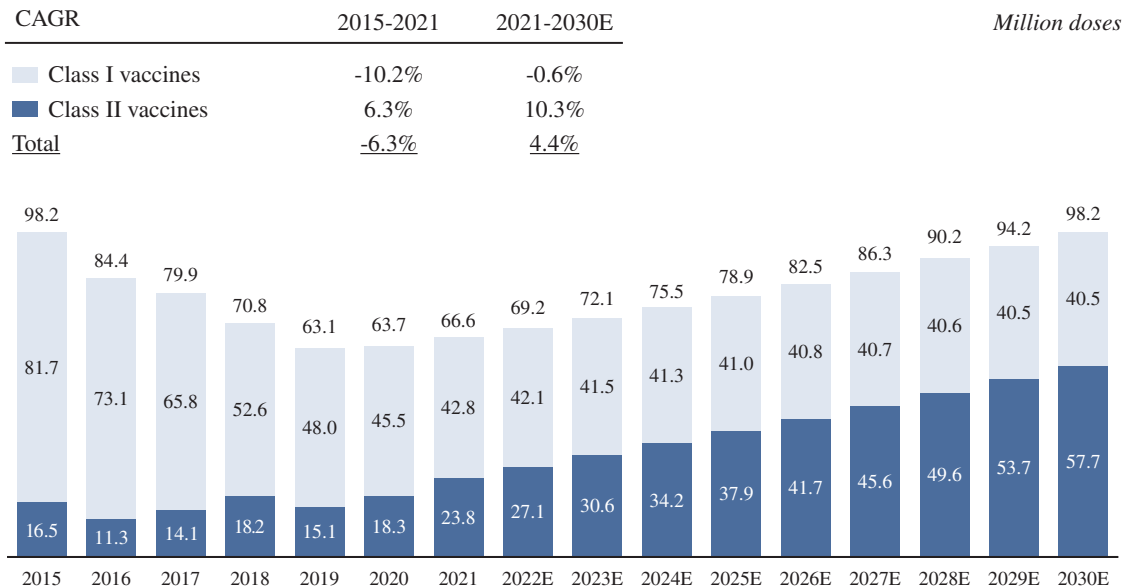
INDUSTRY OVERVIEW

Market size of HBV vaccine market in the PRC, by sales revenue, 2015-2030E



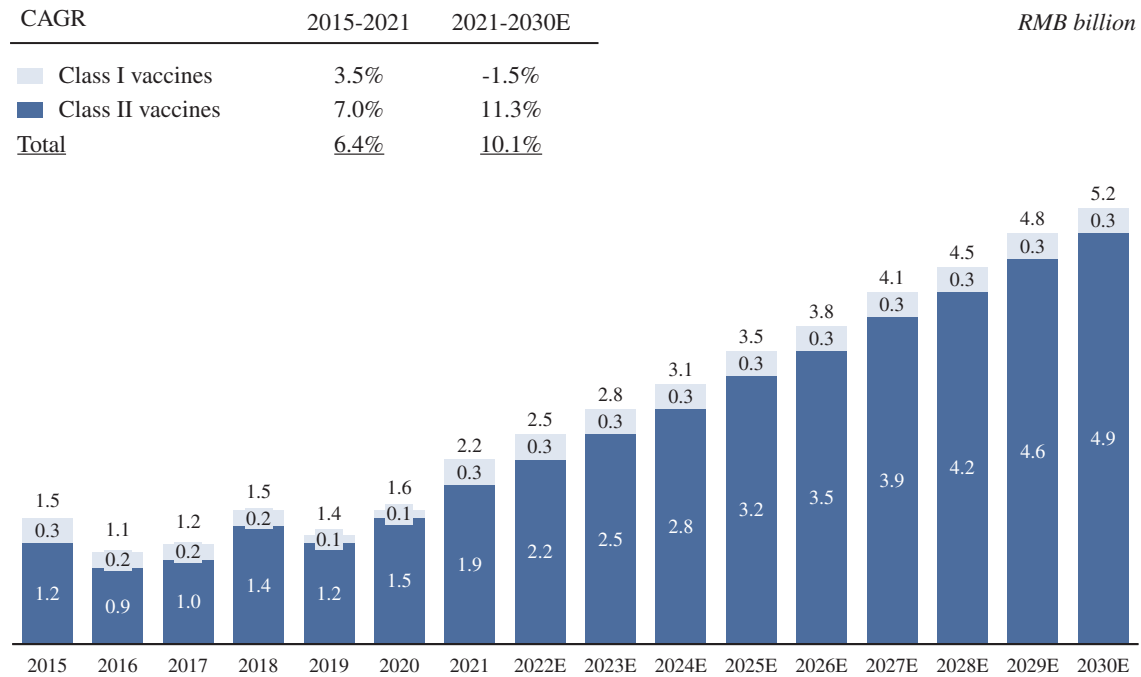
Source: CIC Report

Market size of HBV vaccine market in the PRC, by approved lot release volume, 2015-2030E



INDUSTRY OVERVIEW

Market size of HBV vaccine market in the PRC, by sales revenue, 2015-2030E



Note:

- (1) The decreased approved lot release volume from 2015 to 2020 was primarily due to the decrease in the Class I vaccine market segment, which was associated with the decreased number of newborns in China. Such decrease also led to the decreased sales revenue from the Class I vaccine market segment and partially offset the overall increase of the whole market in terms of sales revenue during the same period.

Source: CIC Report

Competitive Landscape

According to CIC, we have been the largest HBV vaccine manufacturer in the PRC as well as globally from 2015 to 2021 in terms of approved lot release volume. According to the same source, in 2021, our HBV vaccine products were the only *Hansenula Polymorpha*-based HBV vaccine receiving approved lot releases in the PRC, ranking the first by taking up 45.4% of total approved lot release volumes. In terms of sales revenue, we were the third largest HBV vaccine supplier in the PRC in 2021, taking up a market share of 24.0%. The following table sets forth the details of HBV vaccine products with approved lot releases in 2021.

HBV vaccines with approved lot release volume in the PRC, 2021

Company	Product name	Antigen expressed cell	Antigen	Immune procedure	Storage	Approval Date	Lot release in 2021 (million doses)	Market share (based on lot release)	Market share (based on revenue)
AIM Honesty	Recombinant hepatitis B vaccine (<i>Hansenula polymorpha</i>)	<i>Hansenula polymorpha</i>	HBsAg	3 doses	2~8°C, 36 months	2015/8/15	~30.3	45.4%	24.0%
Ncpc Genetech Biotechnology Co., Ltd.	Recombinant hepatitis B vaccine (CHO)	CHO	HBsAg	4 doses	2~8°C, 36 months	2010/9/20	~11.3	16.9%	43.5%
GlaxoSmithKline Biologicals	Recombinant hepatitis B vaccine (<i>Saccharomyces cerevisiae</i>)	<i>Saccharomyces cerevisiae</i>	HBsAg	4 doses	2~8°C, 18 months	2012/10/30	~0.8	1.2%	0.8%
Shenzhen Kangtai Biological Products Co., Ltd.	Recombinant hepatitis B vaccine (<i>Saccharomyces cerevisiae</i>)	<i>Saccharomyces cerevisiae</i>	HBsAg	4 doses	2~8°C, 36 months	2011/12/31	~24.3	36.5%	31.6%

Source: CIC Report

HUMAN RABIES VACCINE MARKET IN THE PRC

Overview

Rabies is an acute encephalitis caused by the rabies virus, which usually enters the human body through bites by infected animals. Typical symptoms include pain or extreme discomfort caused by the wound, fever, paralysis, obtundation, convulsion, and fear of water. The incubation period of the rabies virus typically lasts from one to three months. After seizure, it usually causes death within seven to ten days. Rabies is a high-risk disease with no effective treatment, while it is vaccine-preventable post exposure to the virus. The incidence of rabies infection in the PRC has been decreasing over the years because of increasing vaccination.

Types of Human Rabies Vaccines

In 2021, rabies vaccines with approved lot releases in the PRC can be categorized into three types based on the manufacturing technology route under which the rabies virus strain is cultured: the HKC rabies vaccine, the Vero cell inactivated rabies vaccine and the HDC rabies vaccine. HKC is an older generation technology. It is directly obtained from hamsters. Although it has high reproduction, it is hard to conduct quality control on the cell culture process due to the highly differentiated cells, and the cells can be contaminated by the pathogens of other infectious diseases present in the hamsters. Vero cell is the current mainstream manufacturing technology route for human rabies vaccines worldwide. It is sensitive to virus, which means it can be used to culture virus strain with high titer. Also, the strain can be produced massively through the highly stable serial passage with low unit cost and high level of quality control. HDC is safer than animals' cells with fewer adverse effects, and it also allows production of the virus strain with high level of quality control. However, it is more difficult and more expensive to culture virus strain in HDC.

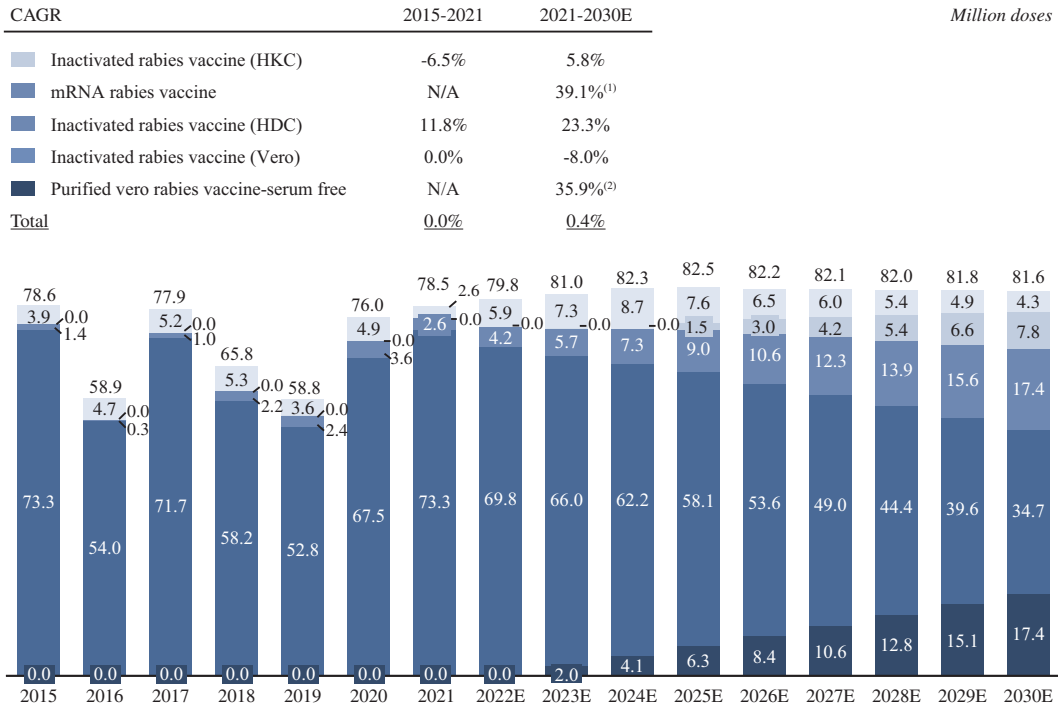
Market for Human Rabies Vaccines

All human rabies vaccines sold in the PRC are Class II vaccines. The PRC human rabies vaccine market is the largest one in the world. It grew from RMB5.2 billion in 2015 to RMB5.6 billion in 2021, and is expected to further grow to RMB14.8 billion in 2030. The collapse of Changchun Changsheng in the PRC human rabies vaccine market following Changsheng Incident in July 2018 caused a quite tight supply of human rabies vaccine since 2018. According to CIC, Changchun Changsheng had supplied approximately 10 million doses of human rabies vaccines in the PRC every year from 2014 to 2017 before its collapse, and its market share has now been taken up by manufacturers of truly quality vaccines.

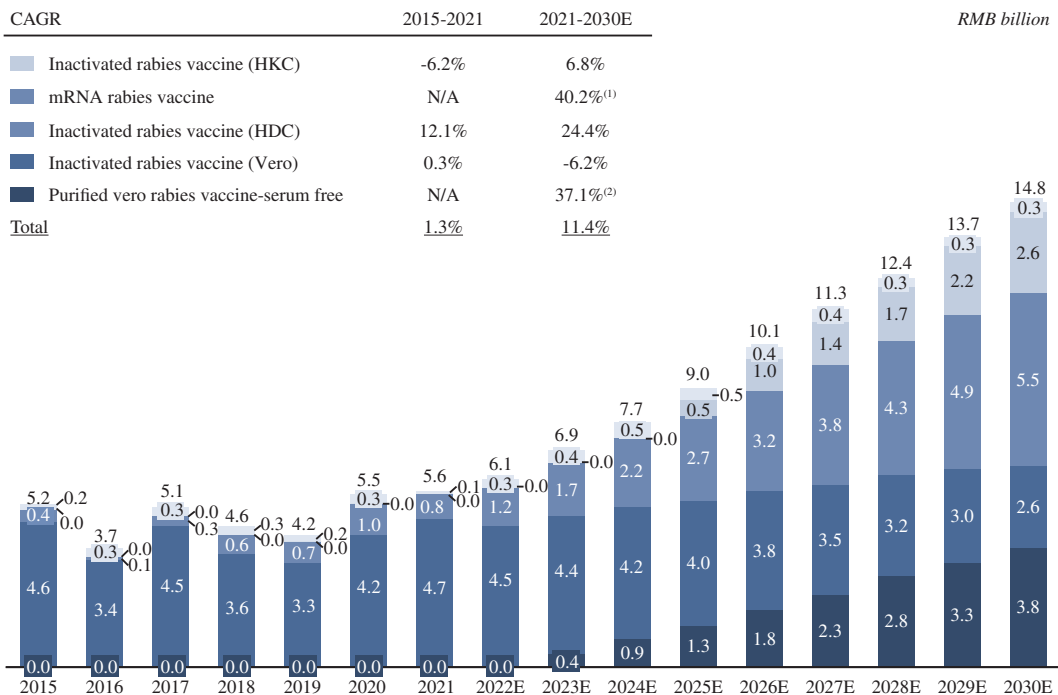
Vero cell human rabies vaccine is expected to continue to be the mainstream type of human rabies vaccines up to 2030 in terms of approved lot release volume and up to 2026 in terms of sales revenue. However, the market of Vero cell human rabies vaccines is expected to experience negative CAGRs from 2021 to 2030 in terms of approved lot release and sales revenue, due to increasingly intensive competition with other technology routes especially new ones with more advanced technology, clinical benefits and potentially higher pricing. Major competing technology routes include (i) HDC-based vaccines that are expected to take up an increasing amount of market share and become the most primary type of human rabies vaccines in China from 2027 in terms of sales revenue; (ii) Vero cell serum free vaccines that allows a more controlled bioprocess with improved safety profile and are expected to be launched in 2023 becoming a fast-growing human rabies vaccine type in the next decade, with the approved lot release volume increasing at a CAGR of 35.9% and sales revenue increasing at a CAGR of 37.1% from 2023 to 2030; and (iii) mRNA human rabies vaccines that are expected to be launched in 2025 and begin to capture meaningful market share due to technology and efficacy advantages, with the approved lot release volume increasing at a CAGR of 39.1% and sales revenue increasing at a CAGR of 40.2% from 2025 to 2030. The following chart set forth the historical and forecast market size of the human rabies vaccine market in terms of approved lot release volume and sales revenue for the period indicated.

INDUSTRY OVERVIEW

Market size of human rabies vaccine market in the PRC, by approved lot release volume, 2015-2030E



Market size of human rabies vaccine market in the PRC, by sales revenue, 2015-2030E



INDUSTRY OVERVIEW

Source: CIC Report

Notes:

- (1) The CAGR of the mRNA rabies vaccine market refers to the CAGR from 2025 to 2030.
- (2) The CAGR of the purified Vero cell serum free rabies vaccine market refers to the CAGR from 2023 to 2030.

We believe our Vero cell-based human rabies vaccine will remain as one of our major sources of revenue in the next three to five years considering its dominant market position in the near future. In addition, we are in the process of upgrading and expanding our human rabies vaccine portfolio under other technology routes, i.e., Vero cell serum free, HDC and mRNA, which are expected to take increasing market share with improved clinical benefits and higher pricing in the long run. These three human rabies vaccine candidates are currently in preclinical stage, and we expect to commence clinical trial (a Phase III clinical trial without having to undertake Phase I or II trials first) for the Vero cell serum free candidate in the first half of 2023, and file CTAs for the mRNA and HDC candidates in 2022 and 2023, respectively. We expect to launch these new human rabies vaccine products in or after 2025. Through such product upgrade, we believe we can further solidify our market-leading position and increase our market share in China's human rabies vaccine market.

In 2021, human rabies vaccine, with 78.5 million doses of approved lot release, had the highest approved lot release volume amongst all vaccines in China. The rabies vaccine also accounted for 7.3% of the total vaccine sales revenue in 2021 in China, ranking as the fifth top selling vaccine type by targeted disease area in terms of sales revenue. According to China CDC, rabies is the third leading infectious disease cause of death. Every year, over tens of millions of people are exposed to rabies due to injuries caused by animal bites and scratches, making China the largest market for rabies vaccine. The main reasons are low human and veterinary rabies vaccination rates and a lack of an effective animal surveillance system.

Although the human rabies vaccine market in China fluctuated from 2015 to 2019 primarily due to the impact of the Changsheng Incident and changes in the market player, CIC estimates that the market size of PRC human rabies vaccine market to increase from RMB5.6 billion in 2021 to RMB14.8 billion in 2030 at a CAGR of 11.4%, and the respective approved lot release volume to increase from 78.5 million doses to 81.6 million doses from 2021 to 2030, based on the following assumptions: (i) increasing price due to the advancing vaccine technologies and their iterative rabies vaccine product upgrades with better protection rate and simpler immunization procedure; (ii) the expected increase in vaccination rate among citizens especially in rural areas of China. According to the national CDC, currently the vaccination rate among people with exposure to rabies virus was only 22% in China. 40% of the people are not aware that bite injuries caused by animals other than dogs also require rabies vaccination. With increasing public awareness of vaccination necessity, it is expected the vaccination rate will increase; and (iii) the increasing exposure risks associated with increasing number of dogs and other pets. The number of pets in China increased by over 8% per year from 2018 to 2021, and the number of pet dogs and cats reached over 100 million in 2021, indicating potential increasing demand due to increasing exposure risk. The assumptions do not incorporate the abovementioned specific isolated incidents. Moreover, as illustrated in the above charts, the approved lot release volume and sales revenue of human rabies vaccines increased by 15.5% and 15.6%, respectively, from 2019 to 2021, which is in line with the increases projection from 2021 to 2030.

INDUSTRY OVERVIEW

The current projections also take into account of the national initiative to eliminate the rabies and recently revised animal immunization law in the PRC. It is believed that the impact would be limited given complete elimination of rabies in China may take years and the demand for human rabies vaccine is likely to sustain. Currently the veterinary vaccination rate is low especially in the rural areas, and the surveillance capabilities of animal rabies are very limited. For example, stray dogs are a major source of infection of rabies virus but the numbers of stray dogs' shelters are very limited in China, meaning there is a large stray dog population which is not under surveillance or management. Furthermore, the vast majority of warm-blooded animals can be infected and carry rabies virus, and there is no wild animal rabies surveillance system in China to monitor animals other than pets which carry rabies virus. Additionally, it is difficult to identify animals infected with rabies, which implies the difficulty of eradication of rabies solely through animal vaccination. Moreover, given the high fatality upon rabies infection, it is expected that people may still opt to be administered with rabies vaccines after being bitten by vaccinated pets, which may drive a continuous demand for human rabies vaccines in China. Recent animal immunization law requires all pet dogs to be immunized with rabies vaccine, but the risk of rabies infection comes from not only pets, but also from stray animals and wild animals which implies the difficulty of eradication of rabies solely through pet vaccination.

Competitive Landscape

According to CIC, in 2021 we were the second largest human rabies vaccine manufacturer in the PRC as well as globally in terms of both approved lot release volume and sales revenue. The following chart sets forth the details of human rabies vaccine products with approved lot releases in 2021.

Human rabies vaccines with approved lot release volume in the PRC, 2021

Company	Product name	Medium	Virus strain	Immune procedure	Storage	Approval date	Lot release in 2021 (million doses)	Market share (based on lot release)	Market share (based on revenue)
Liaoning Chengda Co., Ltd.	Rabies Vaccine (Vero Cell) for Human Use, Freeze-dried	Vero cell	PV2061	2-1-1	2-8℃, 36 months	2015/8/15	~39.9	50.8%	45.5%
Rong'an Bio	Rabies Vaccine (Vero Cell) for Human Use, Freeze-dried	Vero cell	aG	Standard 5 doses	2-8℃, 36 months	2012/9/4	~14.2	18.1%	16.2%
Changchun Zhuoyi Biological Co., Ltd.	Rabies Vaccine (Vero Cell) for Human Use, Freeze-dried	Vero cell	CTN-1V	Standard 5 doses	2-8℃, 12 months	2016/11/23	~8.6	10.9%	9.8%
Yisheng Biopharma	Rabies Vaccine (Vero Cell) for Human Use, Freeze-dried	Vero cell	Unknown	Standard 5 doses	2-8℃, 36 months	2015/8/15	~5.9	7.4%	6.7%
Dalian Aleph Biomedical Co., Ltd.	Rabies Vaccine (Vero Cell) for Human Use	Vero cell	CTN-1V	Standard 5 doses	2-8℃, 18 months	2016/9/28	~5.7	5.8%	5.2%
Chengdu KangHua	Rabies Vaccine (Human diploid cell) for Human Use, Freeze-dried	Human diploid cell	Unknown	Standard 5 doses	2-8℃, 36 months	2017/3/3	~2.6	3.4%	13.7%
Henan Grand Biopharmaceutical Co., Ltd.	Rabies Vaccine (Hamster kidney cell) for Human Use	Hamster kidney cell	Unknown	Standard 5 doses	2-8℃, 18 months	2010/12/31	~2.4	3.1%	2.5%
Zhongke Biopharm Co., Ltd.	Rabies Vaccine (Hamster kidney cell) for Human Use	Hamster kidney cell	aG	Standard 5 doses	2-8℃, 18 months	2000/2/2	~0.2	0.3%	0.2%
Changchun Institute of Biological Products Co., Ltd.	Rabies Vaccine (Vero Cell) for Human Use, Freeze-dried	Vero cell	aG	Standard 5 doses	2-8℃, 36 months	2021/5	~0.2	0.3%	0.3%

Source: CIC Report

According to CIC, as of the Latest Practicable Date, there were 20 clinical-stage human rabies vaccine candidates in the PRC, including three HDC-based candidates and two serum-free Vero cell-based candidate. Out of these 20 human rabies vaccine candidates, 17 were in Phase III clinical trials or a later stage.

INDUSTRY OVERVIEW

COVID-19 VACCINE IN THE PRC

Overview

COVID-19 is a single-stranded RNA virus consisting of four glycoproteins and RNA nucleic acid chains on the membrane surface. Interaction between S protein of the virus and the host receptor ACE2 promotes the infection of COVID-19 in host cells. Respiratory tract droplets and close contact transmission is the main transmission way of COVID-19. The COVID-19 pandemic has had a severe social and economic impact in the PRC, with over 248.0 thousand confirmed infections and over 5.2 thousand deaths in the PRC alone as of the Latest Practicable Date. According to a report of the Asian Development Bank, the global negative economic impact of the COVID-19 pandemic is estimated to be US\$5.8 trillion to US\$8.8 trillion, accounting for 6.4% to 9.7% of the global GDP in 2020 even after the implementation of quarantine measures. Although social-distancing and other transmission mitigation strategies implemented in most countries have temporarily prevented most citizens from being infected, these strategies have left them without immunity to COVID-19 and thus susceptible to additional waves of infection. It is widely recognized that safe and effective vaccines are essential to control the COVID-19 pandemic.

Types of COVID-19 Vaccines

COVID-19 vaccines are developed using a number of classic and innovative technologies, of which four technology routes have generated approved products, i.e., mRNA, inactivated virus, recombinant adenoviral vector and recombinant protein. These technology routes have different benefits and limitations in terms of safety, efficacy, supply and storage conditions, and therefore are suitable to different population segments with different vaccination history and needs, immunity conditions and technology preferences.

Technical classification of COVID-19 vaccines⁽¹⁾

Classification	Advantage	Disadvantage	Representative product	Efficacy	Approval status in the PRC
mRNA vaccine	<ul style="list-style-type: none">• Low cost• Mass production is achievable• High efficiency against mutant virus	<ul style="list-style-type: none">• Lack of safety validation	BNT162b2 (Pfizer & BioNTech)	94% to 95%	Not approved
Inactivated vaccine	<ul style="list-style-type: none">• Manufacturing process is simple and rapid• Low incidence of adverse reactions	<ul style="list-style-type: none">• Large vaccination dose• Short immunization period• Single immunization route• Adjuvant is needed	SARS-CoV2 Vaccine (Vero cell), inactivated (Beijing Institute of Biological Products Co., Ltd)	72.5%	Conditional approval
Recombinant adenoviral vector	<ul style="list-style-type: none">• Simple vaccination procedure• Strong and long-lasting immune response can be triggered	<ul style="list-style-type: none">• The effectiveness of vaccine may be affected by pre-existing immunity	Recombinant COVID-19 Vaccine (CanSino Biologics Inc.)	74.8%	Conditional approval
Recombinant subunit protein vaccine	<ul style="list-style-type: none">• Safe and efficient without using live virus• Mass production is achievable• Suitable for people with weakened immune system	<ul style="list-style-type: none">• Antigenicity is affected by the selected expression system• Adjuvant and is needed	Recombinant Novel Coronavirus Vaccine (CHO Cell) (ZFSW)	81.8%	Conditional approval

Source: CIC Report

Note:

(1) Only consider vaccine candidates developed under technology routes validated by approved COVID-19 vaccine products.

Massive and Sustained Demand for COVID-19 Vaccines

There is a massive and sustainable demand for effective and safe COVID-19 vaccines globally and in China. At first, herd immunity is critical to control the current pandemic, for which approximately 80% of the total population in the globe and PRC, or approximately 6,300 million and 1,134 million people will require vaccination, respectively. In addition, different variants of the SARS-CoV-2 virus have emerged and are circulating globally including in China, such as the Delta variant strain (first identified in India), Alpha variant strain (first identified in the UK), Beta variant strain (first identified in South Africa) and Gamma variant strain (first identified in Brazil/Japan), of which the Delta variant strain has led to a new outbreak wave worldwide in the second half of 2021, and the Omicron variant, although milder in terms of symptoms, has become the dominant variant in China's latest COVID-19 outbreak in the first quarter of 2022. Given the nature of SARS-CoV-2 virus replication, it is believed additional variants will inevitably emerge as the virus is transmitted. New information about the characteristics of these variants is rapidly emerging with differences from the Original Strain revealed, and there is a growing public awareness of the necessity to receive vaccination against emerging variant strains especially the Delta strain. Moreover, additional boosting might be required because of waning immunity to the primary vaccination. Some recent studies have shown that the antibody concentration declined in the third month after administration of two doses of inactivated vaccines, and the protection rate of currently approved mRNA vaccines declined to approximately 40% in six months. These indicate a significantly larger and longer-term market demand for booster shots and re-vaccination of COVID-19 vaccines.

Assuming 80% of the total population need to be vaccinated to achieve herd immunity and additional one to two dose(s) of vaccines are needed each year to boost immunity against different strains, the number of vaccinees of COVID-19 vaccines in the PRC is estimated to increase from 1,150 million in 2021 to more than 1,300 million in 2025, and will remain stable at approximately 1,400 million per year from 2026 to 2030, creating a market that is worth hundreds of billions of US dollars every year from 2021 to 2030. The market projection also takes into account of the recently developed COVID-19 drug named Molnupiravir. According to CIC, although this drug shows promising results on reducing the hospitalization rate of COVID-19 patients in its trials, it is expected to have limited impact on China's COVID-19 vaccine market. Molnupiravir is for patients infected with COVID-19, while COVID-19 vaccines are targeted for healthy population, which means their target population do not overlap. More importantly, the overarching government policy and attitude toward the COVID-19 pandemic in China is strict prevention and control on any possible COVID-19 cases (嚴防嚴控), therefore the number of COVID-19 patients is expected to be limited and the majority of Chinese population demands vaccines instead of therapeutic drugs. In addition, Post-COVID conditions among recovered patients have been reported and may be severe, including but not limited to, difficulties in breathing or shortness of breath, fatigue and headache, which may still exist after treating with Molnupiravir. Currently a majority of Chinese population have very low risk of infection and it is believed that people are more willing to take vaccines to prevent infection considering the post-recovery side effects.

Moreover, the shortage of COVID-19 vaccines on the global market presents an opportunity for PRC vaccine manufacturers. Such shortage is caused by the limited supply capacity as compared to the vast global population to be vaccinated and uneven access to COVID-19 vaccines among nations, with around 70% of global COVID-19 vaccines supply being allocated to a few high or upper-middle income countries, whereas other less developed countries with large populations were only allocated around 5%. While COVID-19 continues to spread and as new variants emerge in countries without access to adequate supply of COVID-19 vaccines, there is a huge market gap that needs to be met urgently in order to achieve herd immunity against COVID-19 globally. This indicates a great opportunity for PRC vaccine manufacturers with stable manufacturing capacity to enter the global market.

INDUSTRY OVERVIEW

Competitive Landscape

According to CIC, as of the Latest Practicable Date, there were nine COVID-19 vaccines having been conditionally approved or granted for emergency use in the PRC, of which five were inactivated vaccines, two are recombinant protein vaccine and two are recombinant adenovirus viral vector-based. All of them target the Original Strain only. As of the same date, there were 16 COVID-19 pipeline candidates undergoing clinical trials in the PRC, of which two use the inactivated virus route, two use the recombinant protein route, two are recombinant adenoviral vector-based, eight are mRNA vaccine candidates and the other two are DNA and virus-like particle-based vaccine candidates.

The charts below illustrate the COVID-19 vaccine competitive landscape in the PRC as of the Latest Practicable Date.

mRNA COVID-19 vaccines

Company	Candidate Name	Development status	Starting date ⁽¹⁾	Type of developer
Suzhou Abogen Biosciences Co., Ltd./ Walvax/Academy of Military Science	SARS-CoV-2 ARCoV mRNA Vaccine	Phase III	2021/7/22	Domestic
AIM Vaccine Co., Ltd/Liverna	LVRNA009	Phase II (PRC) Phase III (overseas) ⁽²⁾	2022/3/16 2022/6/17 ⁽³⁾	Domestic
BioNTech	BNT162b2	Phase II	2020/11/23	International
Guangzhou RiboBio Co., Ltd.	COVID-19 mRNA Vaccine	Phase II	2022/3/17	Domestic
CanSino Biologics Inc.	COVID-19 mRNA Vaccine	Phase II	2022/6/11	Domestic
CSPC Pharmaceutical Group Ltd.	SYS6006	Phase II	2022/6/30	Domestic
Stemirna Therapeutics Co., Ltd.	COVID-19 mRNA Vaccine	Phase I	2021/3/25	Domestic
	COVID-19 mRNA Vaccine	Phase I	2022/7/5	

Source: CIC Report

Notes:

- (1) For approved vaccines, the starting date is date of approval. For vaccines that have not been approved, the starting date is the "Study execute time" of the corresponding clinical trial posted on the website of Chinese Clinical Trial Registry.
- (2) In addition to a Phase II clinical trial in the PRC, we have also initiated a global Phase III clinical trial in June 2022 for our mRNA candidate.
- (3) Refers to the date on which we received ethical approval for our Phase III clinical trial in Pakistan.

There was no approved mRNA COVID-19 vaccine in the PRC as of the Latest Practicable Date. As of the same date, six PRC vaccine developers were undertaking clinical trials for their respective mRNA COVID-19 vaccine candidates in the PRC or overseas, two of which (including us) reached Phase III clinical trials. Therefore, our mRNA COVID-19 vaccine candidate is expected to be one of the first few to be approved in the PRC.

INDUSTRY OVERVIEW

Inactivated COVID-19 vaccines

Company	Candidate Name	Development status	Starting date	Type of developer
Beijing Institute of Biological Products Co., Ltd.	SARS-Cov-2 Vaccine (Vero Cell), Inactivated	Conditional approval	2020/12/31	Domestic
	Omicron COVID-19 Vaccine (Vero Cell), Inactivated	Phase I	2022/5/1	
Sinovac	CoronaVac	Conditional approval	2021/2/5	Domestic
Wuhan Institute of Biological Products Co., Ltd.	SARS-Cov-2 Vaccine (Vero Cell), Inactivated	Conditional approval	2021/2/25	Domestic
BioKangtai	SARS-Cov-2 Vaccine (Vero Cell), Inactivated	Approval for emergency use	2021/5/14	Domestic
Institute of Medical Biology, Chinese Academy of Medical Sciences	SARS-Cov-2 Vaccine, Inactivated (Vero Cell)	Approval for emergency use	2021/6/9	Domestic
Rong'an Bio ⁽¹⁾	Coronavirus Inactivated Vaccine (Vero cell)	Phase II	2021/10/8	Domestic

Source: CIC Report

Note:

(1) This is our first generation inactivated COVID-19 vaccine candidate (against the Original Strain).

All the five inactivated COVID-19 vaccines approved conditionally or for emergency use all target the Original Strain.

Recombinant protein COVID-19 vaccines

Company	Candidate Name	Development status	Starting date	Type of developer	Type of protein	Adjuvant requirement
ZFSW	Recombinant New Coronavirus virus vaccine (CHO cells)	Conditional approval	2022/3/3	Domestic	RBD-Dimer	Aluminum
Livzon Mabpharm Inc.	Recombinant SARS-CoV-2 Fusion Protein Vaccine (V-01)	Approved for emergency use (booster dose)	2022/9/2	Domestic	RBD-Dimer (I-R-F)	Aluminum
ZHONGYIANKE Biotech Co., Ltd.	Recombinant protein subunit vaccine (CHO cells)	Phase III	2020/11/6	Domestic	RBD-Fc	Aluminum
WestVac Biopharma Co., Ltd./West China Hospital of Sichuan University	Coronavirus pneumonia (COVID-19) vaccine (Sf9 cells)	Phase III	2021/6/1	Domestic	RBD	Aluminum

Source: CIC Report

INDUSTRY OVERVIEW

Adenoviral vector COVID-19 vaccines

Company	Candidate Name	Development status	Starting date	Type of developer
CanSino Biologics Inc.	Recombinant Novel Coronavirus Vaccine (Adenovirus Type 5 Vector)	Conditional approval	2021/2/25	Domestic
	Recombinant COVID-19 Vaccine (Adenovirus Type 5 Vector) for Inhalation	Conditional approval	2022/9/4	Domestic
Institute of Biotechnology, Academy of Military Medical Sciences, PLA of China	Recombinant Novel Coronavirus (2019-nCoV) Vaccine (Adenovirus Vector)	Phase II	2020/4/12	Domestic
Walvax	Recombinant SARS-CoV-2 Vaccine (Chimpanzee Adenoviral Vector, ChAdTS-S)	Phase II	2021/8/4	Domestic

Source: CIC Report

DNA COVID-19 vaccines

Company	Candidate Name	Development status	Starting date	Type of developer
Advaccine (Suzhou) Biopharmaceutical, Ltd.	pGX9501	I/II	2021/12/15	Domestic

Source: CIC Report

Virus-like-particle (VLP) vaccines

Company	Candidate Name	Development status	Starting date	Type of developer
Yantai Patronus Biotech Co., Ltd.	LYB001	I	2021/12/5	Domestic

Source: CIC Report

PNEUMOCOCCAL VACCINES IN THE PRC

Overview

Pneumococcal infections can cause a series of diseases, from the milder and more common illnesses such as sinusitis and otitis media, to the more serious and potentially fatal illnesses including meningitis, bacteremia and pneumococcal disease. *Streptococcus pneumoniae* (*S. pneumoniae*), which is the causative bacteria of pneumococcal infections, typically transmits through respiratory droplets and colonizes the human nasopharynx. High risk populations are those with relatively weaker immune systems, including the youth and the elderly. Serotype is a distinct variation as a method to distinguish a species of bacteria or virus or immune cells of different individuals. To date, around 100 *S. pneumoniae* serotypes have been distinguished.

INDUSTRY OVERVIEW

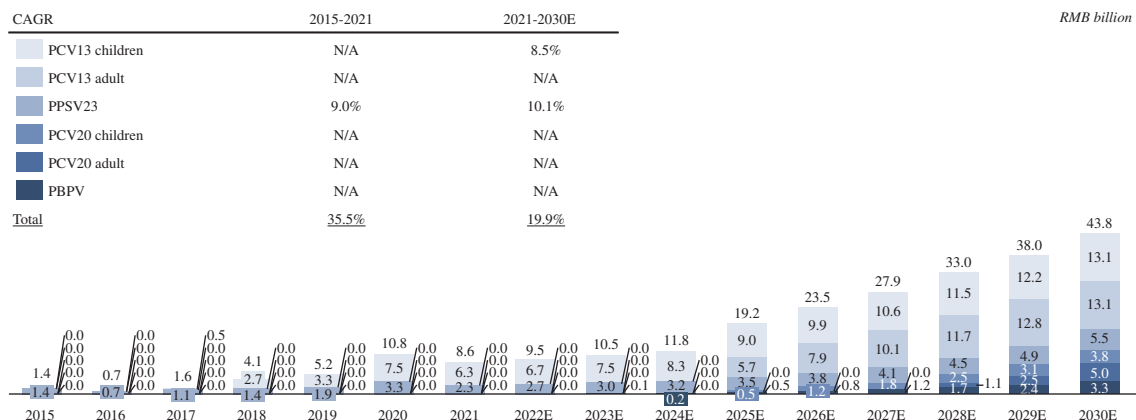
Types of Pneumococcal Vaccines

Pneumococcal vaccines can be classified into several types, among which polysaccharide vaccines and conjugate vaccines are most commonly used for different indications and age groups. Polysaccharide vaccines (PPSV23) and conjugate vaccines (PCV13) are the only two types of pneumococcal vaccines currently sold in the PRC. There are also a number of new types of pneumococcal pipeline candidates under development in the PRC, such as PCV15, PCV20 and protein-based pneumococcal vaccines (PBPV).

Market for Pneumococcal Vaccines

The market size of pneumococcal vaccines in the PRC increased from RMB1.4 billion in 2015 to RMB8.6 billion in 2021 at a CAGR of 35.5%, in which PCV13 and PPSV23 are currently the only two pneumococcal vaccine types, accounted for 73.2% and 26.8% of the overall pneumococcal vaccine market by sales revenue in 2021, respectively. With better immuno-protection in infants, polysaccharide conjugation vaccines will gradually take more market share. It is expected that China's pneumococcal vaccine market will further grow to RMB43.8 billion in 2030 at a CAGR of 19.9%, of which PCV13 will account for 59.8% market shares in 2030. Pfizer's PCV13, Prevnar 13, was the best-selling vaccine on global market from 2015 to 2020 and remains one of the globally best-selling vaccines to date. Prevnar 13 was not available on China's market until 2017. The NMPA approval of Prevnar 13 in 2017 significantly accelerated the growth of China pneumococcal vaccine market. The sales value of PCV13 vaccine achieved a CAGR of 88.2% from 2017 to 2021, much higher than CAGR of PPSV23 sales revenue during the same period, which was 21.8%. The high growth of Prevnar 13's sales shows the huge demand for global innovative vaccines among Chinese people. According to CIC, by 2030, total supply of PCV13 and PCV20 vaccines in the PRC needs to be multiple times the supply of PCV13 in 2021 to satisfy the demand for polysaccharide conjugation vaccines. With availability of additional new vaccines and increasing sales of PCV13 products, the total pneumococcal vaccine market is expected to further grow from RMB8.6 billion in 2021 to RMB43.8 billion in 2030.

Market size of pneumococcal vaccine market in the PRC, by sales revenue, 2015-2030E



Source: CIC Report

INDUSTRY OVERVIEW

Competitive Landscape

As of the Latest Practicable Date, three companies launched PCV13 products, of which Pfizer took approximately six to seven years, and the two domestic companies took over a decade, to bring their PCV13 products from preclinical studies to initiating Phase III clinical trials, while our PCV13 candidate only spent approximately 3.5 years. As of the same date, there were six PCV13 candidates undergoing clinical trials in the PRC, of which one had completed and three (including our candidate) were undergoing Phase III clinical trials. Other Phase III candidates took on average more than six years from preclinical studies to initiating Phase III clinical trials, while our PCV13 also progressed more quickly (approximately 3.5 years) to achieve the same stage. The following tables set forth the competitive landscape for PCV13 vaccines in the PRC as of the Latest Practicable Date.

PCV13 vaccines with approved lot release volume in the PRC, 2021

Company	Product name	Type	Serotype	Immune procedure	Storage	Approval date	Lot release in 2021 (million doses)	Age coverage	Time spent from preclinical study to initiating Phase III
Pfizer	PCV13	Conjugate vaccine	13	4 doses	2~8°C, 36 months	2017/5/18	~5.5	6 weeks to 15 months	~6-7 years
Walvax Biotechnology Co., Ltd.	PCV13	Conjugate vaccine	13	4 doses	2~8°C, 36 months	2019/12/30	~5.0	6 weeks to 5 years old	~11-12 years
Minhai Biotechnology Co., Ltd.	PCV13	Conjugate vaccine	13	4 doses	2~8°C, 36 months	2021/9/10	N/A	2 months to 5 years old	~12 years

Source: CIC Report

Completed and ongoing pipeline of PCV13 in the PRC

Company	Product name	Phase	Status	First posted date	Clinical trials age coverage	Time spend from preclinical study to initiating Phase III
Lanzhou Institute of Biological Products Co., Ltd.	PCV13	III	Completed	2019/9/19	2 months to 5 years old	~9 years
CanSino Biologics Inc.	PCV13	III	Ongoing	2021/4/12	6 weeks to 3 months old	~6 years
AIM Weixin	PCV13	III	Ongoing	2021/12/24	6 weeks to 59 years old	~3.5 years
Chengdu Antejin Biotechnology Co., Ltd.	PCV13	III	Ongoing	2022/5/7	6 weeks to 3 months old	~4 years
KLBIO	PCV13	I	Ongoing	2021/7/27	2 months to 6 years old	N/A
Microvac	PCV13	I	Ongoing	2022/3/24	2 months to 49 years old	N/A

Source: CIC Report

As of the Latest Practicable date, there were five PPSV23 vaccine products approved by NMPA and four clinical-stage PPSV23 candidates, two of which had completed Phase III clinical trials but were pending NDA approvals for at least four years.

As of the same date, there was no approved PCV20 products or clinical-stage PCV20 candidates in the PRC. Our PCV20 is potentially the first-in-class in the PRC.

INDUSTRY OVERVIEW

HFMD VACCINES IN THE PRC

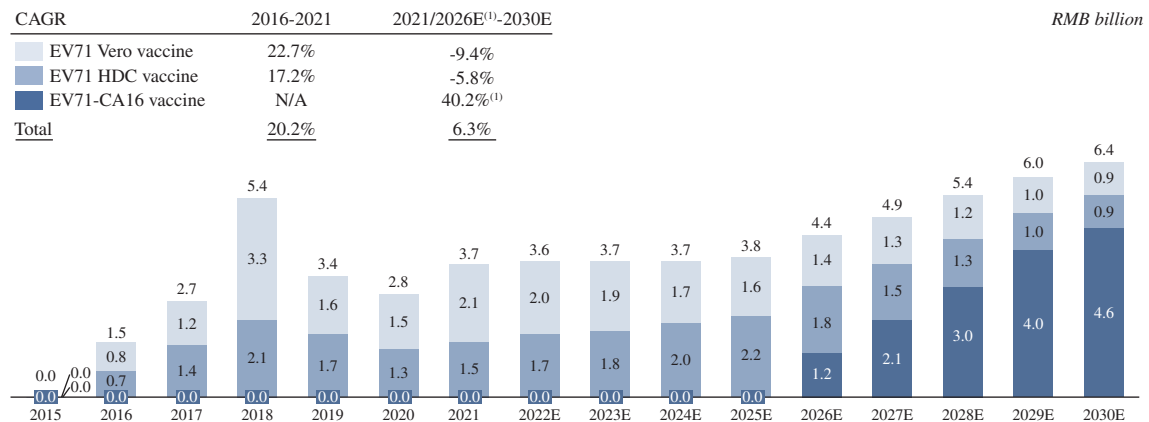
Overview

Hand, foot and mouth disease (HFMD) is a common disease among children below 5 years old in the PRC. Within 1 to 2 days after infection, skin rash can usually be found on the palms, soles and mouth, and blisters may be found on the tongue and gums. Serious HFMD may lead to onychomadesis (separation of fingernails and toenails) within weeks after infection. Viruses causing HFMD are usually transmitted through person-to-person contact, infected patients' cough and excretion and objects contaminated by the viruses. The most common pathogens of HFMD are the enterovirus 71 (EV71) and Coxsackievirus type A16 (CA16), which are two subtypes of enterovirus.

Market for HFMD Vaccines

According to CIC, HFMD vaccines were first approved in China in 2016, which rapidly achieved RMB1.5 billion sales in the same year. The market size of HFMD vaccines in the PRC grew to RMB3.7 billion in 2021 at a CAGR of 20.2% from 2016, which is expected to further grow to RMB6.4 billion in 2030 at a CAGR of 6.3% from 2021.

Market size of HFMD vaccine market in the PRC, by sales revenue, 2015-2030E



Source: CIC Report

Note:

(1) 40.2% refers to the CAGR of EV71-CA16 bivalent vaccine from 2026 to 2030.

Competitive Landscape

As of the Latest Practicable Date, all HFMD vaccines approved for use in the PRC were inactivated EV71 vaccines, which are monovalent vaccines and protect only against the EV71 viral strain. As of the Latest Practicable Date, there had been no CA16 vaccine approved for use or under clinical study in the PRC, same to EV71-CA16 bivalent HFMD vaccine.

INDUSTRY OVERVIEW

DTP-BASED COMBINATION VACCINES IN THE PRC

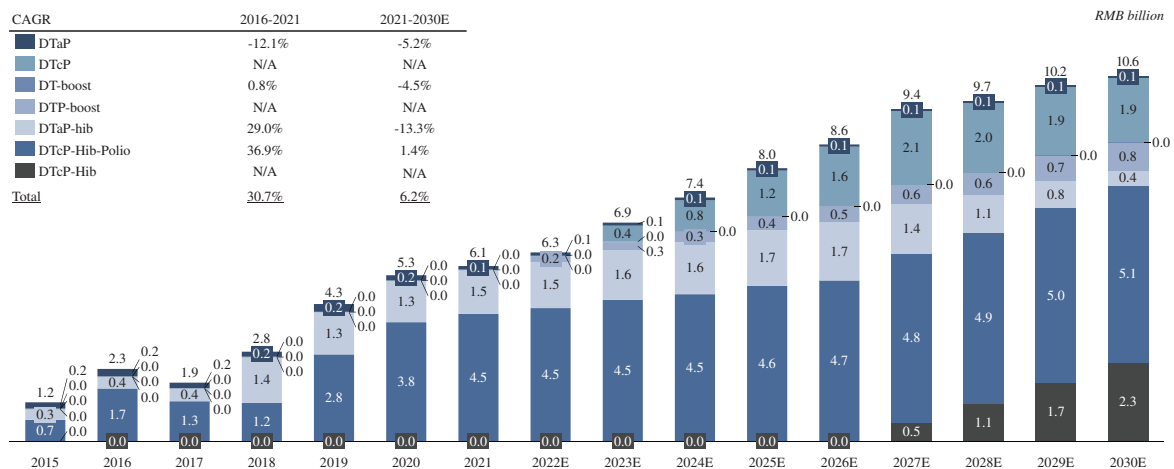
Overview

Diphtheria is a contagious acute respiratory disease caused by corynebacterium diphtheriae. There has been no diphtheria cases reported for years in the PRC. Pertussis is a contagious respiratory disease caused by bordetella pertussis. Pertussis cases in the PRC have been increasing in recent years. Tetanus is generally associated with a wound through a break in the skin or mucous membrane. It can be very dangerous and can cause death, and dirty wound may require tetanus booster immunization. DTP vaccine combines the vaccines for diphtheria, tetanus and pertussis. There are two major categories of DTP vaccines, including DTaP and DTcP. DTP vaccine can be combined with the Hib vaccine to provide four-in-one combination vaccine (DTP-Hib) against four diseases.

Market for DTP Vaccines

According to CIC, the market size of DTP vaccines in the PRC in terms of sales revenue was RMB1.2 billion in 2015 and grew to RMB6.1 billion in 2021, representing a CAGR of 30.7%, which is expected to further grow to RMB10.6 billion in 2030 at a CAGR of 6.2% from 2021. The following charts set forth the historical and forecast market size of DTP-based combination vaccines in the PRC in terms of sales revenue for the period indicated.

Market size of DTP-based vaccine market in the PRC, by sales revenue, 2015-2030E



Source: CIC Report

Competitive Landscape

According to CIC, five DTP or DTP-based combination vaccines obtained approved lot releases in 2021 in the PRC. Seven DTP or DTP-based combination pipeline candidates are in clinical trial stage or pending NDA approval in the PRC.

INDUSTRY OVERVIEW

HEPATITIS A VACCINE IN THE PRC

Overview

Hepatitis A is caused by the hepatitis A virus (HAV), which has a world-wide distribution. HAV is mostly transmitted through the excretion of HAV positive patients or the food and water contaminated by such patients' excretion. The incubation period of HAV usually lasts from 14 to 28 days, and typical symptoms upon seizure include fever, discomfort, loss of appetite, diarrhea, nausea, abdominal discomfort, dark urine and jaundice. HAV does not lead to chronic liver disease, but there exists the risk of sudden loss of liver function due to the acute onset hepatitis A, especially for older patients with chronic liver diseases. Hepatitis A infections mainly occur in developing and underdeveloped countries with relatively poor sanitary conditions. Most children in regions with a high HAV infection rate are infected before 10 years old. Children below six years old infected with HAV typically show no apparent symptoms, while patients over the age of six usually have severer symptoms.

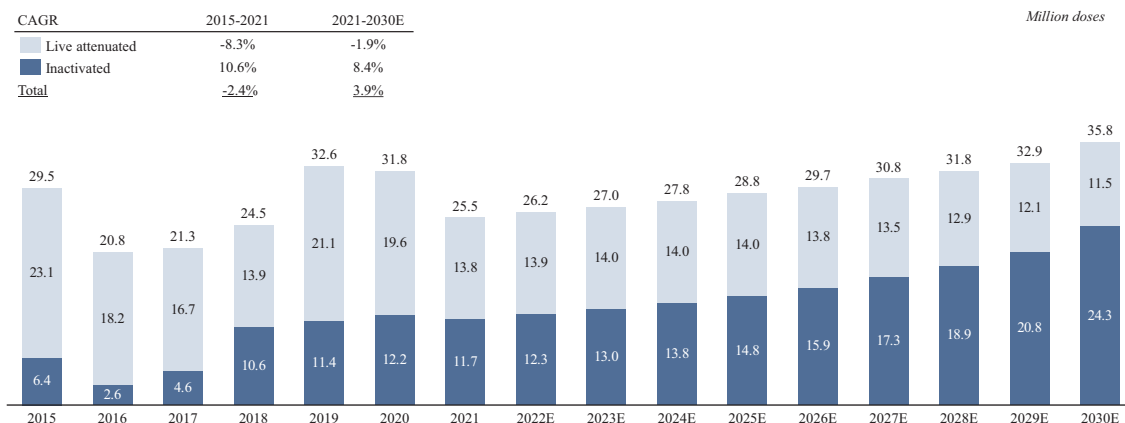
Types of HAV Vaccines

In 2021, there were two types of HAV vaccines with approved lot releases in the PRC, the inactivated HAV vaccine and the live attenuated HAV vaccine, both of which are HDC-based. For the inactivated HAV vaccine, the pathogen is killed before being injected into the human body. It therefore has less safety concerns, and is biologically more stable and easy to store, as compared to live attenuated HAV vaccine.

Market for HAV Vaccines

The PRC HAV vaccine market in terms of sales revenue decreased from RMB1.3 billion in 2015 to RMB0.9 billion in 2021 due to the decreased number of newborns, and is expected to gradually grow to RMB2.3 billion in 2030 at a CAGR of 11.3% from 2021 to 2030, mainly because inactivated HAV vaccines with better safety profile and higher pricing would gradually take market share from live attenuated HAV vaccines and become the largest HAV vaccine segment in the PRC by 2030. The following chart sets forth the historical and forecast market size of the HAV vaccine market in terms of approved lot release volume and sales revenue for the period indicated.

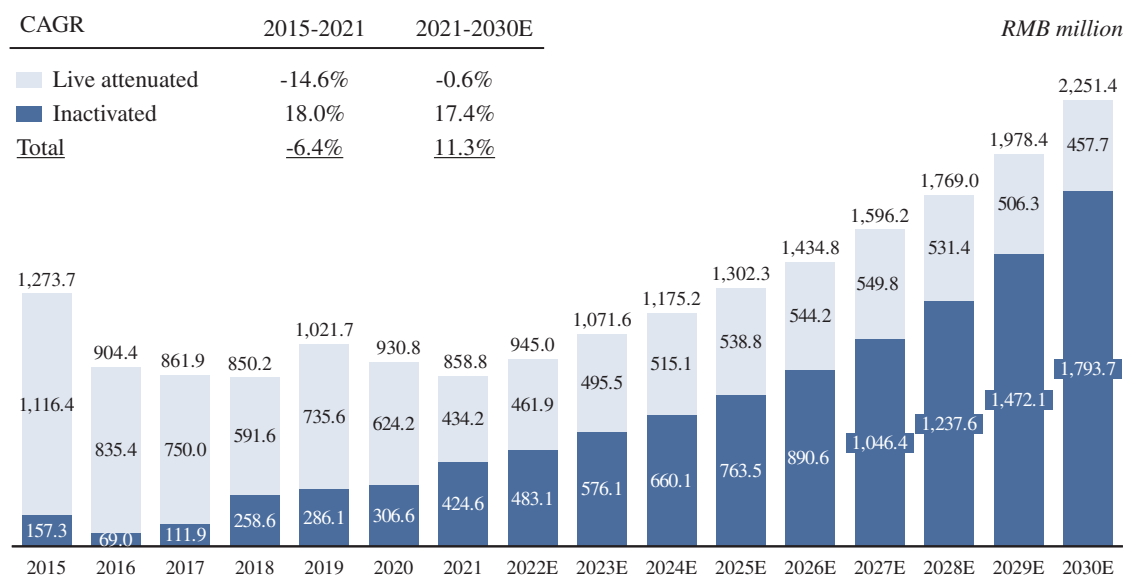
Market size of HAV vaccine market in the PRC, by approved lot release volume, 2015-2030E



Source: CIC Report

INDUSTRY OVERVIEW

Market size of HAV vaccine market in the PRC, by sales revenue, 2015-2030E



Source: CIC Report

Competitive Landscape

As of the Latest Practicable Date, there were six HAV vaccines approved by NMPA, including three live attenuated vaccines and three inactivated vaccines. In 2021, in terms of approved lot release volume, we were the second largest supplier of inactivated HAV vaccines in the PRC.

MENINGOCOCCAL VACCINES IN THE PRC

Overview

Meningococcal meningitis is a serious infection affecting the human brain and spinal cord, which is primarily caused by the *N. meningitides* bacteria, a commensal organism of the nasopharynx. Without timely treatment, meningitis can be fatal, with a mortality rate of approximately 10% to 15% even after treatment. While there are at least 13 serogroups of *N. meningitides* categorized, serogroups A, C, W135 and Y are the most frequent causes of meningococcal disease in the PRC, among which, serogroup A has been the most common and caused 90% of the disease in history. In recent years, serogroups C and W135 have become more common. We expect that the high awareness of vaccination necessity against meningococcal vaccines among Chinese parents will continue to drive demand for new and better meningococcal vaccines.

Types of Meningococcal Vaccines

The Meningococcal polysaccharide vaccines (MPSVs) and meningococcal polysaccharide conjugate vaccines (MCVs) are currently the two major types of meningococcal vaccines, both include bivalent and tetravalent vaccines. However, MCVs can induce immune response in children at or under the age of two while MPSVs cannot, which is clinically important because the incidence of meningococcal disease is highest in infants below 12 months old. In developed countries, MPSVs have been replaced by MCV products.

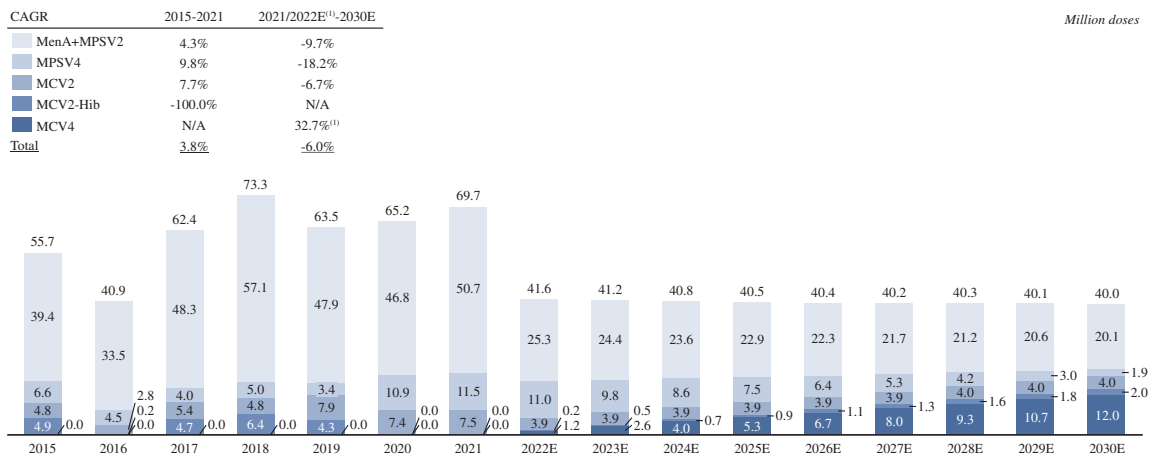
INDUSTRY OVERVIEW

In the PRC, MPSVs are the primary meningococcal vaccines in terms of approved lot release volume, and both MPSV2s (in combination with meningococcal A vaccines) and MPSV4s are available. As of the Latest Practicable Date, only MCV2s (alone or in combination with Hib) and one MCV4 recently approved in December 2021 are available in the PRC. According to CIC, MPSV4s are expected to be gradually replaced by MCV4 in the future.

Market for Meningococcal Vaccines

In terms of sales revenue, the meningococcal vaccine market in the PRC remained relatively stable from 2015 to 2019 with a market size of at least RMB2.4 billion, except for a decrease in 2016. The market decreased to RMB2.2 billion in 2021 due to the impact of the COVID-19 pandemic, and is forecasted to reach RMB5.4 billion in 2030, representing a CAGR of 10.4% from 2021 to 2030, driven by the expected introduction of MCV4 in the PRC market from 2022. The following chart sets forth the historical and forecast market size of the meningococcal vaccine market in terms of sales revenue for the period indicated.

**Market size of meningococcal vaccine market in the PRC,
by approved lot release volume, 2015-2030E**

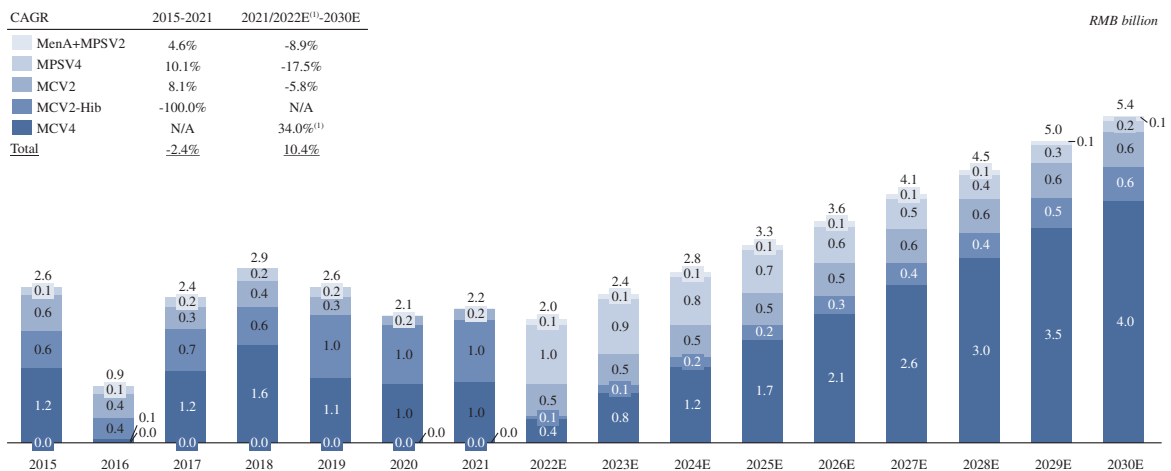


Source: CIC Report

Note:

- (1) 32.7% refers to the CAGR of MCV4 between 2022 to 2030.

Market size of meningococcal vaccine market in the PRC, by sales revenue, 2015-2030E



INDUSTRY OVERVIEW

Source: CIC Report

Note:

(1) 34.0% refers to the CAGR of MCV4 from 2022 to 2030.

Competitive Landscape

According to CIC, as of the Latest Practicable Date, there were six approved MPSV4s in the PRC. We had 7.9% market share in terms of approved lot release volume in 2021.

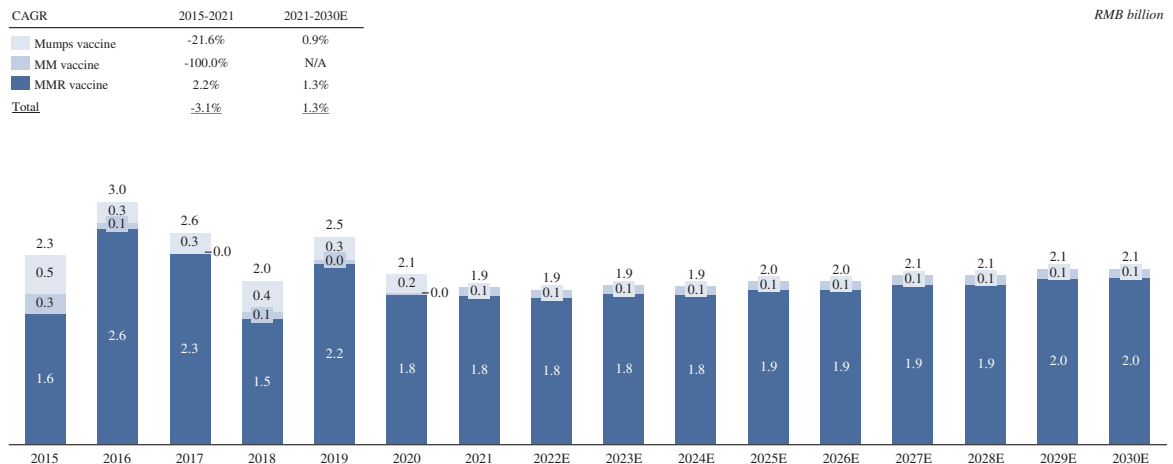
The only MCV4 product in the PRC was recently approved in December 2021. As of the same date, there were five MCV4 candidates in clinical trials, of which one was in the Phase I clinical trial stage, four were in Phase III clinical trials.

MUMPS VACCINE IN THE PRC

Mumps is a benign disease, often with complete recovery within a few weeks after being infected. Long-term outcomes, such as seizures, cranial nerve palsies, hydrocephalus and deafness may also occur. Awareness of mumps being an important vaccine-preventable childhood viral disease is high in the PRC. The incidence and mortalities of mumps has decreased sharply in the PRC since 2008, due to widespread vaccination.

Currently in the PRC, MMR vaccine is a Class I vaccine, and other mumps vaccines such as mumps vaccines are generally Class II vaccines, and may be procured by provincial-level CDCs as a Class I vaccine in the case of local outbreaks. The market size of the PRC mumps vaccines in terms of sales revenue slightly fluctuated from RMB2.3 billion in 2015 to RMB1.9 billion in 2021, and is expected to remain relatively stable towards RMB2.1 billion in 2030. The following chart sets forth the historical and forecast market size of the mumps vaccine market in terms of sales revenue for the period indicated.

Market size of mumps vaccine market in the PRC, by sales revenue, 2015-2030E



Source: CIC Report

Note: MMR vaccine refers to measles mumps and rubella combined vaccine. MM vaccine refers to measles and mumps combined vaccine.

INDUSTRY OVERVIEW

As of the Latest Practicable Date, there were two mumps vaccines, two MM combination vaccine and two MMR combination vaccine approved by the NMPA. Mumps combination vaccines such as MMR and MM vaccines are considered to be in the same market as the mumps vaccines.

HFRS VACCINES IN THE PRC

In the PRC, hemorrhagic fever with renal syndrome (HFRS) is caused by two types of Hantaviruses, namely the Hantaan virus and the Seoul virus. Hantaviruses infect the immune cells, resulting in endothelial cell dysfunction and capillary leakage. Hantaviruses are mainly carried by rodents, insectivores, and bats and transmitted to human via inhalation of virus-contaminated aerosols of excreta and secreta through contained food, and occasionally via rodent bites. The mortality rate of HFRS cases has been low in recent years in the PRC due to the prompt vaccination during local outbreaks.

In the PRC, HFRS vaccines are a Class I vaccine for individuals aged 16 to 60 in high risk areas, such as certain regions in Shaanxi, Heilongjiang and Shandong provinces, and a Class II vaccine for vaccinees in other areas. The size of the PRC HFRS vaccine market in terms of sales revenue was RMB316.1 million in 2015. The market shrank in 2021 to RMB10.9 million primarily due to the COVID-19 pandemic. In addition, the decrease of the market from 2015 to 2021 primarily resulted from the gradual reduction of large-scale outbreaks of HFRS after implementing prompt and effective vaccination measures in the PRC. The HFRS vaccine market is expected to reach RMB135.4 million by 2030.

As of the Latest Practicable Date, there were five HFRS vaccines approved by NMPA. We were the largest HFRS manufacturer in the PRC in terms of the number of approved lot release volume from 2015 to 2019. In 2020 and 2021, only one HFRS vaccine had approved lot releases.

OTHER VACCINES IN THE PRC

Influenza Vaccines

Influenza virus is a negative-strand RNA virus of the orthomyxoviridae family that can cause severe pulmonary disease and lead to widespread pandemics. Antibodies are important for the prevention of influenza infection through neutralization of free infective particles.

According to CIC, the market size of influenza vaccines in the PRC in terms of sales revenue was RMB1.5 billion in 2015 and grew to RMB10.0 billion in 2021, representing a CAGR of 37.9%, which is expected to further grow to RMB20.0 billion in 2030 at a CAGR of 8.0%. According to the same source, 14 influenza vaccines had lot releases volume in the PRC in 2021, including trivalent inactivated influenza vaccine (IIV3), quadrivalent inactivated influenza vaccine (IIV4), trivalent attenuated live influenza vaccine (LAIV3) and quadrivalent subunit influenza vaccine. As of the Latest Practicable Date, there were altogether 14 influenza pipeline candidates currently in clinical trials or pending production approval in the PRC.

Current influenza vaccines are all seasonal-type against major circulating viruses during each flu season. As flu-causing viruses are continually evolving and change annually, current influenza vaccines always have narrow and short-lived efficacy and need to be updated every year based on the WHO's recommendations on the compositions of virus strains, which leads to significant burden on vaccine manufacturing and annual vaccination requirements. Therefore, universal influenza vaccines become a major R&D focus. In addition, all approved influenza vaccines in China are all egg-based by growing flu viruses in eggs, a traditional way of producing influenza vaccines. On the global market, there is one approved cell-based influenza vaccine. This represents a more advanced manufacturing technology independent on egg supply, and studies have shown for the elderly aged 65 years and older, cell-based vaccines provide greater protection against flu-related hospitalizations than egg-based vaccines.

INDUSTRY OVERVIEW

HPV Vaccines

HPV infects mucosal and cutaneous epithelia mainly through minor wounds or infected areas. A small percentage of HPV infections may develop into cancer over a period of time, and about 70% of cervical cancers can be attributed to HPV infection. Existing HPV vaccines are preventive in nature and comprised of adjuvant HPV L1 derived from virus-like-particles of different HPV subtypes. These virus-like-particles are non-infectious and non-oncogenic, which can be produced in bacteria, yeast or insect cells.

According to CIC, since HPV vaccines were first approved for use in the PRC in 2017, the market size of HPV vaccines in the PRC in terms of sales revenue grew from RMB0.6 billion in 2017 to RMB23.6 billion in 2021 representing a CAGR of 146.1%, which is expected to further grow to RMB52.8 billion in 2030 at a CAGR of 9.4%. As of the Latest Practicable Date, there were five HPV vaccines approved for use in the PRC. As of the same date, there were 16 HPV pipeline candidates undergoing clinical trials in the PRC.

The HPV vaccine market experienced a significant growth in the PRC after HPV2 and HPV4 were approved in 2017. The approved lot releases volumes of HPV2 and HPV4 reached 1.5 million doses in their first approval year. HPV9 was approved in 2018 and further accelerated the growth of the market. In terms of sales revenue, HPV9 and HPV4 were among the top 10 best-selling vaccines in China in 2021, with RMB11.7 billion and RMB8.1 billion sales revenue, respectively.

Herpes Vaccines

Herpes is a viral infection caused by the varicella-zoster virus. Typical symptoms include a painful rash and fever. Herpes most often appears as a single stripe of blisters that wraps around either side of the torso. According to CIC, the market size of herpes vaccines in the PRC was RMB1.9 billion in 2021 and is expected to grow to RMB19.6 billion in 2030 at a CAGR of 13.1%. According to the same source, as of the Latest Practicable Date, there was one herpes vaccines approved in the PRC. As of the same date, there were three herpes vaccine candidates currently undergoing clinical trials in the PRC.

RSV Vaccines

The respiratory syncytial virus, or RSV, is a common respiratory virus that typically causes cold-like symptoms. RSV is the most common cause of acute lower respiratory tract infections in children, with a incidence of 18.7% in the PRC. As of the Latest Practicable Date, there is no approved RSV vaccine across the world. In 2021, the economic burden of RSV was approximately US\$5.9 billion globally. In parallel, measures of prevention of RSV are also limited. As a result, there are large unmet needs for RSV prevention.

Hib Vaccines

Diseases caused by the *H. influenzae* bacteria are known as *H. influenzae*. One of the most widely known types of *H. influenzae* is *H. influenzae* type b, or Hib. According to CIC, the market size of Hib vaccines in the PRC in terms of sales revenue was RMB0.8 billion in 2021, which is expected to grow to RMB2.4 billion in 2030 at a CAGR of 12.6%. According to the same source, as of the Latest Practicable Date, there were six Hib vaccines approved in the PRC. As of the same date, there were five Hib conjugate pipeline candidates currently undergoing clinical trials in the PRC.

INDUSTRY OVERVIEW

PRICING POLICIES OF VACCINES IN THE PRC

According to our PRC Legal Advisor, vaccine companies in China are required to participate in governmental centralized bidding processes to sell vaccines to CDCs. There is no pre-set price ceiling for any vaccine products prior to holding such bidding process under the national applicable laws and regulations in the PRC, including the Vaccine Administration Law, the overarching law regulating China's vaccine companies.

Under the Vaccine Administration Law, both Class I and Class II vaccine companies are required to follow two pricing principles: (i) reasonable pricing (合理定價), which is generally understood by the market players as setting prices with reference to market factors and purchase demand of CDCs; and (ii) independent pricing (自主定價), which grants the vaccine companies independent rights to set up bidding price. For Class I vaccines, the NHC and the Ministry of Finance of the PRC, among others, organize annual centralized bidding or unified negotiations, prior to which vaccine companies set their bidding prices in a reasonable and independent manner and submit for the following bidding and negotiation process. The bidding price of the winner becomes the selling price of the respective vaccine product of this winner nationwide. However, as the national centralized bidding or unified negotiations are held each year, for the same product, the winner(s), even the selling price of the same winner, may vary year by year, due to the competition among different vaccine companies, the product supply, the government strategies on public health and specific disease areas, and funding budget. For Class II vaccines, vaccine companies participate in provincial-level centralized bidding processes, prior to which they set bidding prices in a reasonable and independent manner and submit for the following bidding and tendering. The bidding price of the winner becomes the selling price of the respective vaccine product of this winner in the respective province, autonomous region or municipality. However, as such centralized bidding process is held regularly within each provincial administration region, for the same product, the winner(s), even the selling price of the same winner, may vary year by year and vary province by province. As Class II vaccines are paid by vaccinees, the competition is highly market-driven.

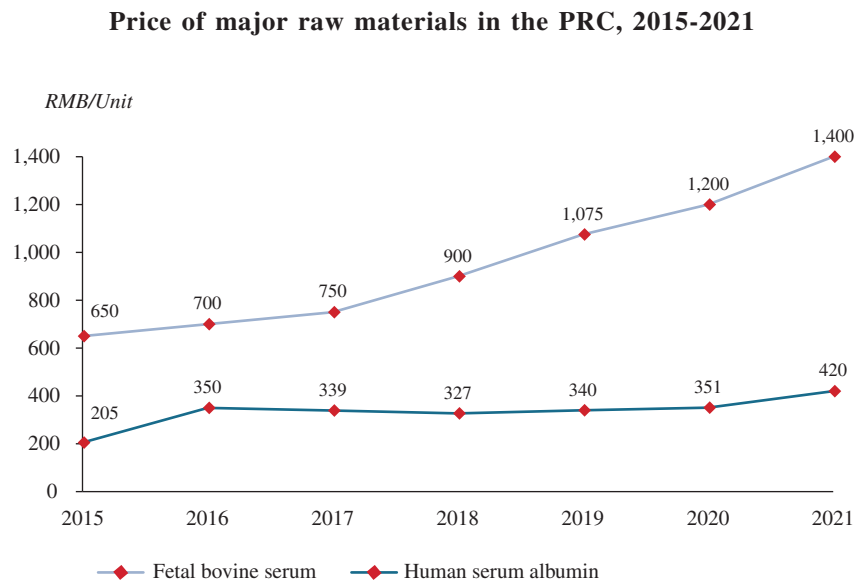
As further advised by our PRC Legal Advisor, according to the Interim Measures for the Administration of Drugs for Basic Medical Insurance (《基本醫療保險用藥管理暫行辦法》) promulgated by the National Healthcare Security Administration, which became effective on September 1, 2020, prophylactic vaccines in the China are not included in the National Reimbursement Drug List. According to the Vaccine Administration Law, Class I vaccines are paid by the government and provided to citizens free of charge, Class II vaccines are paid by vaccinees themselves. According to Social Insurance Law of the PRC (《中華人民共和國社會保險法》), although Class I vaccines are financed by the government funding, the funding source is specifically designated to public health maintenance only, without any overlaps with the fundings for national medical insurance schemes in the PRC including the National Reimbursement Drug List. As a result, there is no need for vaccine companies to negotiate with the relevant PRC government authorities for allowable reimbursement under the national medical insurance, as this concept is not applicable to the vaccine procurement and pricing regulations in China.

As (i) the bidding prices are set by vaccine companies in an independent and reasonable manner without subject to any pre-set price ceilings according to national the laws and regulations; (ii) the selling prices of vaccine products to CDCs are generated through a fair and public competition in each bidding process, subject to changes in the future biddings based on market factors and demands of CDCs; and (iii) vaccine products are not covered by national medical insurance schemes in the PRC, CIC advises that, and our PRC Legal Advisor concurs, (i) the pricing trend of vaccine products is mainly affected by current and future market factors and demands of CDCs, and no clear downward pricing trend either in the regulatory schemes or in the industry has been identified. On the contrary, according to CIC, due to the shortage of supply and public health maintenance requirement, the Class I vaccines, although funded by the government, have begun to show unit price increase in recent years; (ii) our vaccine products under current pricing and funding policy will not be subject to similar downward pricing pressure associated with other types of biological products under the national medical insurance schemes.

INDUSTRY OVERVIEW

MAJOR RAW MATERIALS FOR VACCINE PRODUCTION

Human serum albumin and fetal bovine serum are the raw materials primarily used in the production of viral vaccines. Fluctuations in prices of major raw materials affect the cost structure and profitability of vaccine products. According to CIC, the prices of fetal bovine serum has been increasing since 2015, mainly due to the shortage of cow supply for medical use in the market. Bovine serum is extracted from the blood of calves directly after they are born. The following chart sets forth the historical prices of human serum albumin and fetal bovine serum for the years indicated:



Source: CIC Report

Note:

(1) The unit of human serum albumin is 10g/bottle; the unit of fetal bovine serum is 500ml/bottle.

SOURCE OF INFORMATION

The contract sum to CIC is RMB1,080,000 for the preparation and use of the CIC Report, and we believe that such fees are consistent with the market rate. CIC is an independent consulting firm founded in Hong Kong. It offers industry research and market strategies and provides growth consulting and corporate training. In compiling and preparing the CIC Report, CIC has adopted the following assumption: (i) the overall social, economic and political environment in the PRC is expected to remain stable during the forecast period; (ii) the PRC's economic and industrial development is likely to maintain a steady growth trend over the next decade; (iii) related key industry drivers are likely to continue driving the growth of the PRC's vaccine market during the forecast period; (iv) there is no force majeure or industry regulation in which the market may be affected dramatically or fundamentally and (v) assuming that COVID-19 pandemic will not stop in a short period of time and people need to be vaccinated every year against different variant strains in order to prevent a large scale pandemic. CIC has conducted detailed primary research which involved discussing the status of the industry with leading industry participants and industry experts. CIC has also conducted secondary research which involved reviewing company reports, independent research reports and data based on its own research database. CIC has obtained the figures for the projected total market size from historical data analysis plotted against macroeconomic data as well as specific related industry drivers, and has also considered the pricing policies for vaccines in China as well the government funding for Class I vaccines.

REGULATORY OVERVIEW

PRC REGULATION

We are subject to a variety of PRC laws, rules and regulations affecting many aspects of our business. This section summarizes the principal PRC laws, rules and regulations that we believe are relevant to our business and operations.

Regulatory Authorities

NMPA and Its Evaluation Center

National Medical Products Administration (the “**NMPA**”) is the department in charge of the pharmaceutical industry of China. It is responsible for drawing up the laws and regulations related to pharmaceuticals and medical devices, making policy planning, formulating departmental regulations, organizing the development and issuance of pharmaceutical and medical device standards, classification and management systems, such as national formulary, and supervising the implementation.

Center for Drug Evaluation (the “**CDE**”) is the technical evaluation unit for drug registration with NMPA. It is mainly responsible for conducting technical evaluation on the drugs applying for registration and verifying the relevant drug registrations.

The Center for Food and Drug Inspection (the “**CFDI**”) is a public institution (at bureau level) of Class II affiliated to National Medical Products Administration, which is responsible for the inspection of vaccines and blood products, analysis and evaluation the risks found in the inspection, and making inspection conclusions and recommendations for disposal.

NHC

The National Health Commission (formerly known as the National Health and Family Planning Commission), (the “**NHC**”), is primary national regulator for public health and family planning management. It is primarily responsible for drafting national health policies, supervising and regulating public health, healthcare services, and health emergency systems, coordinating the reform of medical and health system, organizing the formulation of national drug policies and national essential medicine system, launching an early warning mechanism for the monitoring of the use and clinical comprehensive evaluation of medicine as well as the drug shortage, giving suggestions on the pricing policy of national essential medicine, and regulating the operation of medical institutions and practicing of medical personnel.

NIFDC

The National Institutes for Food and Drug Control (the “**NIFDC**”) is a public institution directly subordinate to NMPA and the statutory authority and supreme technical arbitration institution for inspecting the quality of pharmaceuticals and biological products. It is responsible for the approval and registration inspection, import inspection, supervision and inspection, safety evaluation of drugs, biological products, medical devices, foods, dietary supplements, cosmetics, laboratory animals and package materials and the batch release of biological products, the research, distribution and management of the national drug and medical device reference materials and bacterial and viral strains for production verification, as well as the relevant technical research.

REGULATORY OVERVIEW

Chinese CDC

Under the leadership of National Health Commission, Chinese Center for Disease Control and Prevention (the “**CDC**”) exerts its function in technical guidance and support of public health. Focusing on the key tasks of national disease prevention and control, China CDC studies on the strategies and measures for disease prevention and control, organizing and implementing the work plan for various kinds of disease prevention and control. It takes care of management of public health services, including food safety, occupational safety, health related product safety, radiological health, environmental health, as well as women and children’s health. China CDC forcefully carries out operational researches, and enhances technical instruction, training and quality controls in national disease prevention and control, as well as in public health service and plays the leading role nationwide in disease prevention and control, health emergency response and capacity building of public health information.

Regulatory Provisions

Regulations Relating to Biosecurity

According to the Biosecurity Law of the People’s Republic of China (《中華人民共和國生物安全法》), or the Biosecurity Law, promulgated by the Standing Committee of the National People’s Congress (the “**SCNPC**”) on October 17, 2020, and came into effective on April 15, 2021, an entity engaged in biotechnology research, development and application activities shall be responsible for the security of its biotechnology research, development and application, adopt biosecurity risk prevention and control measures, formulate rules of biosecurity training, tracing and inspections, regular reporting, and other work, and strength process management. And the company shall conduct the biotechnology research and development activities in compliance with the national standards of practice for security management of biotechnology research and development, judge the risk class, pay close attention to changes in risks and take promptly response measures. High-risk and medium-risk biotechnology research and development activities shall be conducted by an incorporated organization established within the territory of China, with approval obtained or a filing made in accordance with the law. The purchase or introduction of important equipment and special biological agents on the control list shall be registered to ensure traceability and filed with the relevant department of the State Council. Clinical research on new biomedical technology shall pass ethical review and be conducted in a medical institution with corresponding conditions; and clinical research operations related to human subjects shall be conducted by health professional technicians who meet corresponding conditions.

Regulations Relating to Clinical Trial

According to the Measures for Administration of Drug Registration (《藥品註冊管理辦法》) or the Registration Measures, issued by the China Food and Drug Administration (the “**CFDA**”) on February 28, 2005 and latest amended by the State Administration for Market Regulation (the “**SAMR**”) on January 22, 2020, which became effective on July 1, 2020, clinical trials shall be conducted when applying for new drug application. Drug clinical trials include phase I clinical trial, phase II clinical trial, phase III clinical trial and phase IV clinical trial. Based on the characteristics of drugs and research objectives, the research contents shall include clinical pharmacology research, exploratory clinical trial, confirmatory clinical trial and post-marketing research clinical. Drug clinical trials shall be conducted by drug clinical trial organizations which satisfy the corresponding criteria and for which filing is completed pursuant to the provisions. Therein, vaccine clinical trials shall be implemented or organized by tier 3 medical institutions or disease prevention and control institutions of provincial level or above which satisfy the criteria stipulated by the NMPA and the NHC.

REGULATORY OVERVIEW

Where a drug clinical trial is approved, the sponsor shall, prior to conducting subsequent phases of the drug clinical trial, formulate the corresponding protocol of the drug clinical trial, carry out after review and approval by the Ethics Committee, and submit the corresponding protocol of the drug clinical trial and supporting materials on the CDE website.

According to the Registration Measures, after the completion of the pharmaceutical, pharmacological and toxicological research of the drug clinical trial, the applicant may submit relevant research materials to CDE for applying for the approval to conduct the drug clinical trial. The CDE will organize pharmaceutical, medical and other technicians to review the application and to decide whether to approve the drug clinical trial within 60 working days of the date of acceptance of the application. Once the decision is made, the result will be notified to the applicant through the website of the CDE and if no notice of decision is issued within the aforementioned time limit, the application of clinical trial shall be deemed as approval. The Registration Measures further requires that the applicant shall, prior to conducting the drug clinical trial, register the information of the drug clinical trial plan, etc. on the Drug Clinical Trial Information Platform. During the drug clinical trials, the applicant shall update registration information continuously, and register the information of the outcome of the drug clinical trial upon completion. The applicant shall be responsible for the authenticity of the drug clinical trial information published on the platform.

According to the Opinions on Deepening the Reform on Examination and Approval System and Encouraging the Innovation of Drugs and Medical Devices (《關於深化審評審批制度改革鼓勵藥品醫療器械創新的意見》) formulated by the General Office of the Central Committee of the Communist Party of China and the General Office of State Council on October 8, 2017, the overseas clinical trial data is accepted. The clinical trial data obtained from overseas multi-centers can be used to apply for registration in China if they meet the relevant requirements for the registration of drugs and medical devices in China. For the drugs and medical devices first applies to market in China, the applicant should provide clinical trial data on whether there are ethnic differences.

On July 6, 2018, NMPA promulgated the Technical Guidelines on Accepting Overseas Clinical Trial Data (《接受藥品境外臨床試驗數據的技術指導原則》), according to which the applicant shall ensure the authenticity, completeness, accuracy and traceability of overseas clinical trial data.

According to the Good Clinical Practice of Pharmaceutical Products (《藥物臨床試驗質量管理規範》) jointly issued by the NMPA and NHC on April 23, 2020, to optimize clinical trials, the quality management standard of drug clinical trials is the standard regulation of the whole process of clinical trials, including protocol design, organization, implementation, monitoring, auditing, recording, analysis, summarization and reporting. The preparation of investigational drugs shall conform to the relevant requirements for good manufacturing practice of drugs for clinical trials. The use of the investigational drug shall conform to the protocol. A protocol usually includes the basic information, research background materials, purposes of the trial, trial design, methods of implementation (methods, contents, and steps), etc. On May 22, 2017, CFDA issued the Announcement of the Opinions on Handling Issues Related to Verification of Drug Clinical Trial Data (《關於藥物臨床試驗數據核查有關問題處理意見的公告》), according to which, if the clinical trial data is incomplete, ill-formed and insufficient to prove the safety and efficacy of the drug, the registration application of the drug will be rejected.

REGULATORY OVERVIEW

Regulations Relating to Genetic Resources

The Interim Administrative Measures on Human Genetic Resources (《人類遺傳資源管理暫行辦法》), promulgated by the Ministry of Science and Technology (the “MOST”) and the Ministry of Health (the “MOH”) on June 10, 1998, aimed at protecting and fair utilizing human genetic resources in the PRC. The MOST promulgated the Service Guide for Administrative Licensing Items concerning Examination and Approval of Sampling, Collecting, Trading or Exporting Human Genetic Resources, or Taking Such Resources out of the PRC (《人類遺傳資源採集、收集、買賣、出口、出境審批行政許可事項服務指南》) on July 2, 2015, according to which, the sampling, collection or research activities of human genetic resources by a foreign-invested sponsor fall within the scope of international cooperation, and the cooperating organization of China shall apply for approval of the China Human Genetic Resources Management Office through the online system.

The Regulations of the PRC on the Administration of Human Genetic Resources (《中華人民共和國人類遺傳資源管理條例》), promulgated by the State Council on May 28, 2019 and came into effect on July 1, 2019, further stipulates that in order to obtain marketing authorization for relevant drugs and medical devices in China, no approval is required in international clinical trial cooperation using China’s human genetic resources at clinical institutions without export of human genetic resource materials. However, the type, quantity and usage of the human genetic resource to be used shall be filed with the administrative department of science and technology under the State Council before clinical trials.

The Biosecurity Law of the People’s Republic of China reaffirms that the State shall have sovereignty over the human genetic resources and biological resources of China and also provides the regulatory requirements set out in the Administrative Regulations on Human Genetic Resources of the PRC.

Regulations Relating to Drugs

The Drug Administration Law of the People’s Republic of China, or the Drug Administration Law (《中華人民共和國藥品管理法》) as promulgated by the SCNPC on September 20, 1984, which was subsequently amended and latest revised on August 26, 2019, and Regulations of Implementation of the Drug Administration Law (《中華人民共和國藥品管理法實施條例》) as promulgated by the State Council on August 4, 2002 and latest amended on March 2, 2019, provided legal framework for the establishment of pharmaceutical manufacturing enterprises and pharmaceutical trading enterprises as well as the drug administration of pharmaceutical products including the development and manufacturing of new drugs and medicinal preparations by medical institutions. According to the Drug Administration Law, drugs referred to in this Law shall mean substances used for prevention, treatment and diagnosis of human diseases and purposeful regulation of human physiology, for which indication, usage and dosage are stipulated, including traditional Chinese medicine, chemical medicine and biological products etc. The Drug Administration Law also regulates the packaging, pricing and advertising of pharmaceutical products in the PRC.

Law of the People’s Republic of China on the Prevention and Treatment of Infectious Diseases (《中華人民共和國傳染病防治法》) which was issued on February 21, 1989 and revised on August 28, 2004, and June 29, 2013, established a planned vaccination system for the country and implemented the vaccination certificate system for children. It classified infectious diseases into classes A, B and C. Infectious diseases of class B include but not limited to rabies, meningococcal meningitis and hemorrhagic fever. The vaccinations under the state immunization program are free of charge. According to No. 1 Announcement promulgated by NHC (《中華人民共和國國家衛生健康委員會2020年第1號公告》) on January 20, 2020, pneumococcal disease caused by COVID-19 was classified as infectious diseases of Class B and should be prevented and controlled as Class A infectious disease.

REGULATORY OVERVIEW

Vaccine Administration Law of the People's Republic of China (《中華人民共和國疫苗管理法》), or the Vaccine Administration Law, was passed by the SCNPC on June 29, 2019 and came into effect on December 1, 2019. It had specific provisions on the development, production, circulation and vaccination of vaccines as well as supervision and administration. According to the Vaccine Administration Law, "vaccines" refer to the preventive biological products used for human immunization in order to prevent and control the occurrence and prevalence of diseases, including vaccines under the immunization program and vaccines not covered by the immunization program. Vaccines under the immunization programs means vaccines that shall be inoculated to residents in accordance with government provisions, including vaccines determined in national immunization programs, vaccines added by people's governments of provinces, autonomous regions and municipalities directly under the Central Government in the implementation of national immunization programs, and vaccines used in emergency vaccination or group preventive vaccination organized by people's governments at the county level or above or their competent health departments. Vaccines not covered by the immunization programs means other vaccines voluntarily inoculated by residents.

On January 15, 2017, the General Office of State Council issued Opinions on Further Enhancing Administration of Circulation and Vaccination of Vaccines (Guo Ban Fa [2017] No. 5) (《關於進一步加強疫苗流通和預防接種管理工作的意見》(國辦發[2017]5號)), so as to, on one hand, promote the independent R&D and quality improvement of vaccines, support the R&D and industrialization of new vaccines (especially the polyvalent vaccines), enhance the construction of industry and technology innovation strategic alliances and support the qualified vaccine R&D projects through the national scientific and technological programs (special programs, funds, etc.) and key and special scientific research projects, and on the other hand, enhance vaccine circulation process management, including regulating the collective purchase of vaccines, enhancing the vaccine cold chain distribution management and vaccine tracing management.

On May 24, 2021, the NMPA issued the Administrative Measures for Drug Inspection (Trial) (《藥品檢查管理辦法(試行)》), which stipulates that NMPA shall be in charge of the national drug inspection and management work, and the CFDI shall be responsible for the inspection of vaccines and blood products. For the enterprises which apply for the Drug Production License for the first time, an on-site inspection shall be carried out in accordance with the relevant regulations of GMP. Those which apply for the listing of drugs shall receive pre-marketing GMP compliance inspections as required in accordance with the provisions of Article 52 of the Administrative Measures on Supervision of Pharmaceutical Manufacturing. For the first application for the Pharmaceutical Business License and the changes in licensing items, and on-site inspections shall be carried out in accordance with the GSP and its on-site inspection guidelines, licensing inspection rules and other relevant standards.

New Drug Registration

Pursuant to the Registration Measures, upon completion of clinical trials, the applicant may apply to the NMPA for approval of NDA and the NMPA then determines whether to approve the application according to applicable laws and regulations. Applicants must obtain a new drug manufacture approval before they can manufacture the drug and sell it in the PRC market. Before the promulgation of the revised Drug Administration Law on August 26, 2019, once a new drug has completed its clinical tests and been approved by an appraisal, the drug regulatory department under the State Council would then issue an additional new drug certificate.

- An applicant shall upon completion of pharmacy, pharmacology and toxicology and clinical trial of drugs, etc. to support registration of drug marketing, determination of quality standards, verification of commercial scale manufacturing process, and preparation to undergo examination and inspection for drug registration, submit an application for drug marketing authorization, and submit the relevant research materials in accordance with the requirements for declaration materials. Upon form examination of the declaration materials, the application shall be accepted if it satisfies the requirements.

REGULATORY OVERVIEW

- Upon acceptance of an application for drug registration, the CDE shall conduct preliminary examination within 40 working days from acceptance of the application; where there is a need to conduct examination of manufacturing premises for drug registration, it shall notify the Center for Food and Drug Inspection of the NMPA to organize examination, provide the relevant materials required for examination, and simultaneously notify the applicant as well as the drug administrative authorities of the province, autonomous region or centrally administered municipality where the applicant or the manufacturing enterprise is located.
- Upon completion of the relevant pharmacy research to support marketing of the drug, determination of quality standards, and verification of commercial scale manufacturing process, the applicant may, prior to acceptance of the application for drug registration, apply to the NIFDC or the drug administrative authorities of the province, autonomous region or centrally-administered municipality for drug registration inspection.
- For application for registration of China-manufactured drug, where an applicant applies for drug registration inspection prior to acceptance of the application for drug registration, it shall apply to the relevant drug administrative authorities of the province, autonomous region or centrally-administered municipality for random sampling, the drug administrative authorities of the province, autonomous region or centrally-administered municipality shall organize random sampling and seal up the samples; the applicant shall deliver the list of random samples, the samples, materials required for the inspection and standard substances to the corresponding pharmaceutical inspection agency. For an application for registration of the overseas manufactured drug, where an applicant applies for drug registration inspection prior to acceptance of the application for drug registration, it shall request for random sampling pursuant to the provisions, and deliver the samples, materials required for inspection and standard substances etc. to the NIFDC. Where the application is cleared by the comprehensive review, the drug shall be approved for marketing and a drug registration certificate shall be issued. Where the application is not cleared by the comprehensive review, a decision on non-approval shall be made. The drug registration certificate shall state the approval document number for the drug, the holder, information of the manufacturing enterprise, etc. A drug registration certificate for non-prescription drugs shall also state the nonprescription drug category.

Pursuant to the Registration Measures, drug registration is regulated according to the classification into Chinese medicine, chemical medicine and biological products, biological products shall be submitted as the process of NDA. The Registration Category of Biological Products and the Data Requirements for Declaration (《生物製品註冊分類及申報資料要求》), issued by NMPA on June 29, 2020, and took effect from July 1, 2020, which replaced the former category of therapeutic biological products and stipulated that the therapeutic biological products should be classified into 3 Categories, and Category I refers to therapeutic biological products that have not been marketed anywhere in the world. Category II refers to improved new therapeutic biological products and Category III refers to therapeutic biological products that have been marketed in China or abroad. This Registration also stipulates the specific data requirements for registration of therapeutic biological products.

REGULATORY OVERVIEW

Special Examination and Approval Procedure

At the time of a threat of public health emergency as well as upon occurrence of a public health emergency, the NMPA may decide pursuant to the law to implement special examination and approval for urgently needed drug required for the prevention and treatment in the public health emergency. For drug registration applications subject to special examination and approval, the NMPA shall, in accordance with the principles of “unified command, early intervention, speed and efficiency, scientific examination and approval”, organize, expedite and simultaneously conduct acceptance, review, examination, inspection of the application for drug registration. The scenarios, procedures, timeframe, requirements of special examination and approval shall comply with the provision on special examination and approval for drug.

Conditionally Approval and Emergency Use of Vaccine

With respect to a vaccine urgently needed for responding to a major public health emergency or any other vaccines urgently as determined by the competent health department under the State Council, if the benefits outweigh the risks upon assessment, NMPA may conditionally approve the vaccine registration application. For the drug which is granted conditional approval, the holder shall adopt the corresponding risk management measures following marketing of the drug, and complete the clinical trial of drugs and the relevant research within the stipulated period in accordance with the requirements, and declare via a supplementary application. Where further research requirements proposed at the time of approval for an application for vaccine registration, the holder of the vaccine shall complete research within the stipulated period. Where an extraordinarily serious public health emergency occurs or any other emergency seriously threatening the public health occurs, the competent health department under the State Council shall, based on the needs for prevention and control of infectious diseases, propose suggestions on emergency use of vaccines, and may upon, demonstration and approval by the drug administrative department under the State Council, emergently use such vaccines within a certain scope and time limit.

Drug Re-registration

The validity period of a drug registration certificate shall be five years, and the holder of the drug registration certificate shall ensure the safety, effectiveness and quality control of the marketed drug at all times during the validity period of the certificate, and apply for re-registration of drug six months before expiry of the validity period. Upon acceptance of an application for re-registration of drug, the drug administrative authorities of the province, autonomous region or centrally-administered municipality or the CDE shall examine post marketing evaluation of the holder and adverse reaction monitoring for the drug, carry out the relevant work in accordance with the drug approval document and the requirements of the drug administrative authorities, as well as changes in the information stated in the drug approval document etc.; where the application complies with the provisions, re-registration shall be processed, and a notice on approval of re-registration of drug shall be issued. Where the application does not comply with the provisions, re-registration shall not be processed, and a request shall be submitted to the NMPA to cancel the drug registration certificate.

REGULATORY OVERVIEW

Drug Marketing Authorization Holder Mechanism

The Drug Administration Law enacted the Marketing Authorization Holder Mechanism. In accordance with the PRC Drug Administration Law, the holder of a drug registration certificate shall be the Marketing Authorization Holder. The Marketing Authorization Holders may by themselves manufacture and sell drugs or engage pharmaceutical manufacturing enterprise to manufacture drugs and/or pharmaceutical distribution enterprise to sell drugs. On July 8, 2022, the NMPA promulgated the Regulations on the Administration of Vaccine Production and Circulation (《疫苗生產流通管理規定》) to emphasize and refine the relevant provisions of the Vaccine Administration Law.

The Marketing Authorization Holders shall be responsible for non-clinical research, clinical trials, manufacturing and business operation, post-marketing research, adverse reaction monitoring and reporting and handling. According to the Vaccine Administration Law, a vaccine marketing authorization holder shall establish a complete production quality management system, continuously strengthen the deviation management, and adopt information means to faithfully record all the data formed in the production and inspection process, so as to ensure that the whole production process always meets the statutory requirements. Marketing Authorization Holders may not engage a pharmaceutical manufacturing enterprise to produce blood products, narcotic drugs, psychotropic drugs, toxic drugs for medical use, and pharmaceutical precursor chemical, except as otherwise stipulated by the drug regulatory department under the State Council.

Where the Marketing Authorization Holder is an overseas enterprise, its designated domestic enterprise shall perform the obligations of the Marketing Authorization Holder and jointly assume the responsibilities with the holder.

Drug Manufacturing

According to the Drug Administration Law and the Implementing Regulations of the Drug Administration Law, a drug manufacturing enterprise is required to obtain a drug manufacturing license from the relevant provincial drug administration authority of the PRC. The grant of such license is subject to an inspection of the manufacturing facilities, and an inspection to determine whether the sanitary condition, quality assurance systems, management structure and equipment meet the required standards. According to the Administrative Measures on Supervision of Pharmaceutical Manufacturing (《藥品生產監督管理辦法》) promulgated on August 5, 2004 and amended on November 17, 2017 and January 22, 2020, respectively, the drug manufacturing license is valid for five years and shall be renewed at least six months prior to its expiration date upon a re-examination by the relevant authority. In addition, the name, legal representative, registered address and unified social credit code specified in the drug manufacturing certificate shall be identical to that set forth in the business license as approved and issued by the industrial and commercial administrative department. According to such measures, to the extent that the Marketing Authorization Holder does not manufacture the drug but through contract manufacturing organization, the Marketing Authorization Holder shall apply for drug manufacturing license with the provincial counterpart of the NMPA, subject itself to inspections and other regulatory oversight by the agency.

According to the Vaccine Administration Law, whoever engages in vaccine production activities shall, in addition to meeting the conditions for engaging in drug production activities as prescribed in the Drug Administration Law, also meet the following conditions:

- Having moderate scale and sufficient capacity reserves;
- Having systems, facilities and equipment for ensuring bio-safety; and
- Meeting the needs of disease prevention and control.

REGULATORY OVERVIEW

A vaccine marketing authorization holder shall have the capacity for production of vaccines. If it is really necessary to entrust the production of vaccines in excess of its capacity, the vaccine marketing authorization holder shall obtain the approval of the drug administrative department under the State Council. Where it accepts the entrustment to produce vaccines, it shall abide by the provisions of the Vaccine Administration Law and the relevant provisions of the State, so as to guarantee the quality of vaccines.

According to Good Manufacturing Practice for Drugs (《藥品生產質量管理規範》) promulgated by the MOH on January 17, 2011, the provisions are basic requirements for manufacturing and quality management of drugs. Special requirements for sterile products, biologics and blood products, etc., or the manufacturing and quality management activities, shall be separately enacted as annexes by the SFDA. Subsequently, in February 2011, the SFDA issued five annexes with detailed requirements for the manufacturing of sterile drugs, APIs, biologics, blood products and traditional Chinese medicine. On April 23, 2020, the NMPA revised the annexes of biologics, which took effect from July 1, 2020.

According to the Regulations on the Administration of Vaccine Production and Circulation, the Marketing Authorization Holders shall establish a complete production quality management system, and organize production in accordance with the approved production process and quality control standards, and ensure that the products meet the requirements for market release. During the production process, the Marketing Authorization Holders shall continuously strengthen material supplier management, change control, deviation management and product quality review and analysis. All data formed in the production and inspection process shall be truthfully recorded by information technology to ensure that the entire production process continuously meet legal requirements. Furthermore, the Marketing Authorization Holders shall establish an annual report system, and file the annual report in accordance with relevant requirements and upload it to the drug business management system of the NMPA Intelligence Supervision Platform before the end of April each year.

Sales of Vaccines and Biological Products

According to the Measures for Administration of Batch Release of Biological Products (《生物製品批簽發管理辦法》) which issued on December 13, 2002, revised by SAMR on December 11, 2020 and came into effect on March 1, 2021, and the Vaccine Administration Law, the vaccine products with marketing approval shall be subject to document review, onsite verification and sample inspection by the designated drug control institution and pass the biological product batch release approval before the marketing and sales of each batch of products. The products that fail to pass the batch release approval shall not be marketed and sold. A vaccine urgently needed for preventing and controlling epidemic situation of infectious diseases or responding to emergencies may be exempted from the batch release upon approval of the drug administrative department under the State Council. Pursuant to the Regulations on the Administration of Vaccine Production and Circulation, the Marketing Authorization Holders shall also provide a copy of batch release approval or electronic document affixed with the seal when selling the vaccine, and establish a true, accurate and complete sales record and keep it not less than 5 years after the expiration date of the vaccine.

The competent health department under the State Council shall, in concert with the finance department under the State Council and other departments, organize centralized bidding or unified negotiation to form and publish the bid-winning price or transaction price of vaccines under the national immunization program, and all provinces, autonomous regions and municipalities directly under the Central Government shall implement centralized procurement. The procurement of vaccines under other immunization program and vaccines not covered by the immunization program other than those under the national immunization program shall be organized by provinces, autonomous regions and municipalities directly under the Central Government through provincial public resources trading platforms.

REGULATORY OVERVIEW

Storage and Transportation of Vaccines

According to the Vaccine Administration Law and the Regulations on the Administration of Vaccine Production and Circulation, the vaccine marketing authorization holder and disease prevention and control institution that distribute vaccines themselves shall have the conditions for cold chain storage and transport of vaccines or may entrust eligible vaccine distribution entities to distribute vaccines.

The disease prevention and control institution may, when distributing vaccines not under the immunization program, charge storage and transport fees. The specific measures shall be formulated by the finance department under the State Council jointly with the competent price department under the State Council, while the charging rates shall be formulated by the competent price department of the people's government of the province, autonomous region, or municipality directly under the Central Government jointly with the finance department.

The disease prevention and control institutions, the inoculation entities, the vaccine marketing authorization holders and the vaccine distribution entities shall abide by the administrative rules on storage and transport of vaccines, so as to guarantee the quality of vaccines. The whole process of storage and transport of vaccines shall be subject to the prescribed temperature. The cold chain storage and transport shall meet the relevant requirements, and the temperature shall be regularly monitored and recorded. The administrative rules on storage and transport of vaccines shall be jointly formulated by the drug administrative department under the State Council and the competent health department under the State Council. A vaccine marketing authorization holder shall, in accordance with the provisions, set up true, accurate and complete sales records, and preserve them for inspection for at least five years after expiry of the validity of the vaccines.

Long Term Efficacy and Safety of Vaccines and Biological Products

On March 20, 2003, the State Drug Administration, the predecessor of the CFDA, promulgated the Notice on Issuing Nine Technical Guidelines (《關於印發<預防用以病毒為載體的活疫苗製劑的技術指導原則>等9個技術指導原則的通知》), including the Technical Guidelines on Preclinical Study of Preventive DNA Vaccines (《預防用DNA疫苗臨床前研究技術指導原則》), the Technical Guidelines on the Quality Control of Recombinant DNA Products (《人用重組DNA製品質量控制技術指導原則》), the Technical Guidelines on Gene Therapy and the Quality Control of Preparation. (《人基因治療研究和製劑質量控制技術指導原則》). On October 14, 2005, the CFDA promulgated the Notice on Issuing Six Technical Guidelines (《關於印發<預防用疫苗臨床前研究技術指導原則>等6個技術指導原則的通知》), including the Technical Guidelines on Preclinical Study of Preventive Vaccines (《預防用疫苗臨床前研究技術指導原則》), which is revised on April 12, 2010, the Technical Guidelines on the Management on the Change of Production Process of Biological Products (《生物製品生產工藝過程變更管理技術指導原則》), the Technical Guidelines on the Preclinical and Clinical Studies of Combined Vaccines (《聯合疫苗臨床前和臨床研究技術指導原則》), the Technical Guidelines on the Production and Quality Control of Polypeptide Vaccines (《多肽疫苗生產及質控技術指導原則》), the Technical Guidelines on the Quality Control and Clinical Research of Combined Vaccines (《結合疫苗質量控制和臨床研究技術指導原則》), the Guiding Principles on the Grading Standard for Adverse Reactions in Clinical Trials of Preventive Vaccines (《預防用疫苗臨床試驗不良反應分級標準指導原則》), which is revised on December 26, 2019. These Guidelines specify the requirements on preclinical research, change of production process, quality control in clinical stages of vaccine to ensure its safety and efficacy.

REGULATORY OVERVIEW

On August 14, 2020, the CDE promulgated the Notice on Issuing Five Technical Guidelines for the Research and Development of COVID-19 Prophylactic Vaccines (for Trial Implementation) (《關於發佈〈新型冠狀病毒預防用疫苗研發技術指導原則(試行)〉等5個指導原則的通知》), including the Technical Guidelines on research of COVID-19 Prophylactic Vaccines (for Trial Implementation) (《新型冠狀病毒預防用疫苗研發技術指導原則(試行)》), the Technical Guidelines on Pharmaceutical Research of COVID-19 Prophylactic mRNA Vaccines (for Trial Implementation) (《新型冠狀病毒預防用mRNA疫苗藥學研究技術指導原則(試行)》), the Technical Note for Non-clinical Validation Studies and Assessment of COVID-19 Prophylactic Vaccines (for Trial Implementation) (《新型冠狀病毒預防用疫苗非臨床有效性研究與評價技術要點(試行)》), the Technical Guidelines on Clinical Research of COVID-19 Prophylactic Vaccines (for Trial Implementation) (《新型冠狀病毒預防用疫苗臨床研究技術指導原則(試行)》), the Technical Guidelines on Clinical Assessment of COVID-19 Prophylactic Vaccines (for Trial Implementation) (《新型冠狀病毒預防用疫苗臨床評價指導原則(試行)》). These guidelines provide guidance, and referable technical standards for the clinical research and development of China's COVID-19 vaccines.

Administration of Vaccines after Marketing

According to the Vaccine Administration Law, the vaccine marketing authorization holder shall establish and improve the quality management system for the whole life cycle of a vaccine, formulate and implement the risk management plan after the vaccine is marketed, carry out studies after the vaccine is marketed, and further confirm the safety, effectiveness and quality controllability of the vaccine. With respect to a vaccine for which the requirements for further study are put forward when the application for registration of the vaccine is approved, the vaccine marketing authorization holder shall complete the study within the prescribed time limit. If it fails to complete the study within the time limit or is unable to prove that the benefits outweigh the risks, the drug administrative department under the State Council shall deal with the matter in accordance with the law up to cancelation of its drug registration certificate.

Pursuant to the Regulations on the Administration of Vaccine Production and Circulation, when the production process, production site, key equipment, etc. are changed, the Marketing Authorization Holders shall conduct evaluation and verification, and file or report in accordance with the regulations of the regulatory authorities.

The vaccine marketing authorization holder shall continuously update the instructions and labels based on the research conducted after the vaccine is marketed and Adverse Events Following Immunization and shall apply for approval or filing in accordance with the provisions. The drug administrative department under the State Council shall, in a timely manner, disclose the updated contents of the vaccine instructions and labels on its website.

Regulations Relating to Environmental Protection

Environment Protection

The Environmental Protection Law of the PRC (《中華人民共和國環境保護法》), or the Environmental Protection Law, which was promulgated by the SCNPC on December 26, 1989, came into effect on the same day and last amended on April 24, 2014, outlines the authorities and duties of various environmental protection regulatory agencies. The Ministry of Environmental Protection is authorized to issue national standards for environmental quality and emissions, and to monitor the environmental protection scheme of the PRC. Meanwhile, local environment protection authorities may formulate local standards which are more rigorous than the national standards, in which case, the concerned enterprises must comply with both the national standards and the local standards.

REGULATORY OVERVIEW

Environmental Impact Appraisal

According to the Administration Rules on Environmental Protection of Construction Projects (《建設項目環境保護管理條例》), which was promulgated by the State Council on November 29, 1998, amended on July 16, 2017 and became effective on October 1, 2017, depending on the impact of the construction project on the environment, a construction employer shall submit an environmental impact report or an environmental impact statement, or file a registration form. As to a construction project, for which an environmental impact report or the environmental impact statement is required, the construction employer shall, before the commencement of construction, submit the environmental impact report or the environmental impact statement to the relevant authority at the environmental protection administrative department for approval. If the environmental impact assessment documents of the construction project have not been examined or approved upon examination by the approval authority in accordance with the law, the construction employer shall not commence the construction. According to the Environmental Impact Appraisal Law of PRC (《中華人民共和國環境影響評價法》), or the Environmental Impact Appraisal Law, which was promulgated by the SCNPC on October 28, 2002, amended on July 2, 2016 and December 29, 2018, for any construction projects that have an impact on the environment, an entity is required to produce either a report, or a statement, or a registration form of such environmental impacts depending on the seriousness of effect that may be exerted on the environment.

Regulations Relating to Foreign Investment

Since January 1, 2020, the Foreign Investment Law of the People's Republic of China (《中華人民共和國外商投資法》), or the Foreign Investment Law, promulgated by the National People's Congress has come into effect. The Law of the People's Republic of China on Sino-Foreign Equity Joint Ventures and the Law of the People's Republic of China on Wholly Foreign-Owned and Law of the People's Republic of China on Sino-Foreign Cooperative Joint Ventures abolished at the same time. Since then, the Foreign Investment Law has become the basic law regulating foreign-invested enterprises wholly or partially invested by foreign investors. While the organization form, institutional framework and standard of conduct of foreign-invested enterprises shall be subject to the provisions of the Company Law of the PRC and other laws. The PRC government will implement the management system of pre-entry national treatment and the Negative List for foreign investment abolished the original approval and filing administration system for the establishment and change of foreign-invested enterprises. Pre-entry national treatment refers to the treatment accorded to foreign investors and their investments at the stage of investment entry which is no less favorable than the treatment accorded to domestic investors and their investments. Negative List refers to a special administrative measure for the entry of foreign investment in specific sectors as imposed by the PRC. The PRC accords national treatment to foreign investment outside of the Negative List. The current Negative List is the Special Management Measures, or the Negative List, for the Access of Foreign Investment (2021 Revision) (《外商投資准入特別管理措施(負面清單) (2021年版)》) issued by the National Development and Reform Commission and the Ministry of Commerce (the “MOFCOM”) on December 27, 2021, and came into effect on January 1, 2022 which lists the special management measures for foreign investment access for industries regulated by the Negative List, such as equity requirements and senior management requirements.

While strengthening investment promotion and protection, the Foreign Investment Law further regulates foreign investment management and proposes the establishment of a foreign investment information reporting system that replaces the original foreign investment enterprise approval and filing system of the Ministry of Commerce. The foreign investment information reporting is subject to the Foreign Investment Information Reporting Method (《外商投資信息報告辦法》) jointly developed by the MOFCOM and the SAMR, which came into effect on January 1, 2020. According to the Foreign Investment Information Reporting Method, foreign investors who directly or indirectly carry out investment activities in China shall submit investment information to the competent commercial department through the enterprise registration system and the National Enterprise Credit Information Publicity System and the reporting methods include initial reports, change reports, cancellation reports, and annual reports.

REGULATORY OVERVIEW

Regulations Relating to Intellectual Property

Patent

According to the Patent Law of the People's Republic of China (《中華人民共和國專利法》) revised by the SCNPC on October 17, 2020 and came into effect on June 1, 2021, when the invention or utility model patent is granted, unless otherwise stipulated in the Patent Law, without the approval of the patent owner, no entity or person shall implement the relevant patent, that is, manufacture, use, offer to sell, sell or import the patented products for business purpose, or use the patented method and use, offer to sell, sell or import the products directly obtained with the patented method. Implementing the patent without the approval of the patent owner constitutes the infringement of patent rights. Any dispute in connection with this shall be resolved by the relevant parties through negotiation. If the relevant parties refuse to negotiate or the negotiation fails, the patent owner or the relevant stakeholders may file a lawsuit in the people's court or turn to the patent administration authorities for handling.

Trademark

According to the Trademark Law of the People's Republic of China (《中華人民共和國商標法》) revised by the SCNPC on April 23, 2019 and taking effect on November 1, 2019, the registered trademark has a validity period of 10 years starting from the registration date. The trademark registrant enjoys the exclusive right to use the trademark. Any dispute in connection with the activities the infringe the exclusive right to use a registered trademark set out in Article 57 of the Trademark Law shall be resolved by the relevant parties through negotiation. If the relevant parties refuse to negotiate or the negotiation fails, the trademark registrant or the relevant stakeholders may file a lawsuit in the people's court or turn to the industrial and commercial administrative department for handling.

Domain Names

In accordance with the Measures for the Administration of Internet Domain Names (《互聯網域名管理辦法》) which was issued by the Ministry of Information Industry on August 24, 2017 and came into effect on November 1, 2017, the Ministry of Information Industry is responsible for supervision and administration of domain name services in the PRC. Communication administrative bureaus at provincial levels shall conduct supervision and administration of the domain name services within their respective administrative jurisdictions. Domain name registration services shall, in principle, be subject to the principle of "first apply, first register." A domain name registrar shall, in the process of providing domain name registration services, ask the applicant for which the registration is made to provide authentic, accurate and complete identity information on the holder of the domain name and other domain name registration related information.

Regulations Relating to Employment

The major PRC laws and regulations that govern employment relationship are the Labor Law of the PRC (《中華人民共和國勞動法》) issued by the SCNPC on July 5, 1994, came into effect on January 1, 1995 and revised on August 27, 2009 and December 29, 2018, the Labor Contract Law of the PRC (《中華人民共和國勞動合同法》) or the Labor Contract Law promulgated by the SCNPC on June 29, 2007 and became effective on January 1, 2008, and then amended on December 28, 2012 and became effective on July 1, 2013 and the Implementation Rules of the Labor Contract Law of the PRC (《中華人民共和國勞動合同法實施條例》), or the Implementation Rules of the Labor Contract Law issued by the State Council on September 18, 2008 and came into effect on the same day. According to the aforementioned laws and regulations, labor relationships between employers and employees must be executed in written form. The laws and regulations above impose stringent requirements on the employers in relation to entering into fixed-term employment contracts, hiring of temporary employees and dismissal of employees. As

REGULATORY OVERVIEW

prescribed under the laws and regulations, employers shall ensure its employees have the right to rest and the right to receive wages no lower than the local minimum wages. Employers must establish a system for labor safety and sanitation that strictly abide by state standards and provide relevant education to its employees. Violations of the Labor Contract Law and the Labor Law may result in the imposition of fines and other administrative liabilities and/or incur criminal liabilities in the case of serious violations.

Regulations Relating to Social Securities

According to the Social Insurance Law of PRC (《中華人民共和國社會保險法》), which issued by the SCNPC on October 28, 2010 and came into effect on July 1, 2011 and was newly revised on December 29, 2018, enterprises and institutions in the PRC shall provide their employees with welfare schemes covering pension insurance, unemployment insurance, maternity insurance, occupational injury insurance, medical insurance and other welfare plans. The employer shall apply to the local social insurance agency for social insurance registration within 30 days from the date of its formation. And it shall, within 30 days from the date of employment, apply to the social insurance agency for social insurance registration for the employee. Any employer who violates the regulations above shall be ordered to make correction within a prescribed time limit; if the employer fails to rectify within the time limit, the employer and its directly liable person will be fined. Meanwhile, the Interim Regulation on the Collection and Payment of Social Insurance Premiums (《社會保險費徵繳暫行條例》) issued by the State Council on January 22, 1999 and came into effect on the same day and was recently revised on March 24, 2019 prescribes the details concerning the social securities.

Apart from the general provisions about social insurance, specific provisions on various types of insurance are set out in the Regulation on Work-Related Injury Insurance (《工傷保險條例》) issued by the State Council on April 27, 2003, came into effect on January 1, 2004 and revised on December 20, 2010, the Regulations on Unemployment Insurance (《失業保險條例》) issued by the State Council on January 22, 1999 and came into effect on the same day), the Trial Measures on Employee Maternity Insurance of Enterprises (《企業職工生育保險試行辦法》) issued by the Ministry of Labor on December 14, 1994 and came into effect on January 1, 1995. Enterprises subject to these regulations shall provide their employees with the corresponding insurance.

Regulations Relating to Housing Provident Fund

According to the Regulation Concerning the Administration of Housing Provident Fund (《住房公積金管理條例》), implemented since April 3, 1999 and amended on March 24, 2002 and March 24, 2019, any newly established entity shall make deposit registration at the housing accumulation fund management center within 30 days as of its establishment. After that, the entity shall open a housing accumulation fund account for its employees in an entrusted bank. Within 30 days as of the date an employee is recruited, the entity shall make deposit registration at the housing accumulation fund management center and seal up the employee's housing accumulation fund account in the bank mentioned above within 30 days from termination of the employment relationship.

Any entity that fails to make deposit registration of the housing accumulation fund or fails to open a housing accumulation fund account for its employees shall be ordered to complete the relevant procedures within a prescribed time limit. Any entity failing to complete the relevant procedure within the time limit will be fined RMB10,000 to RMB50,000. Any entity fails to make payment of housing provident fund within the time limit or has shortfall in payment of housing provident fund will be ordered to make the payment or make up the shortfall within the prescribed time limit, otherwise, the housing provident management center is entitled to apply for compulsory enforcement with the People's Court.

REGULATORY OVERVIEW

Regulations Relating to Foreign Exchange

On January 29, 1996, the State Council promulgated the Administrative Regulations on Foreign Exchange of the PRC (《中華人民共和國外匯管理條例》) which became effective on April 1, 1996 and was amended on January 14, 1997 and August 5, 2008. Foreign exchange payments under current account items shall, pursuant to the administrative provisions of the foreign exchange control department of the State Council on payments of foreign currencies and purchase of foreign currencies, be made using self-owned foreign currency or foreign currency purchased from financial institutions engaging in conversion and sale of foreign currencies by presenting the valid document. Domestic entities and domestic individuals making overseas direct investments or engaging in issuance and trading of overseas securities and derivatives shall process registration formalities pursuant to the provisions of the foreign exchange control department of the State Council.

On November 19, 2012, the State Administration of foreign Exchange (the “SAFE”) issued the Circular of Further Improving and Adjusting Foreign Exchange Administration Policies on Foreign Direct Investment (《國家外匯管理局關於進一步改進和調整直接投資外匯管理政策的通知》), or the SAFE Circular 59, which came into effect on December 17, 2012 and was revised on May 4, 2015, October 10, 2018 and partially abolished on December 30, 2019. The SAFE Circular 59 aims to simplify the foreign exchange procedure and promote the facilitation of investment and trade. According to the SAFE Circular 59, the opening of various special purpose foreign exchange accounts, such as pre-establishment expenses accounts, foreign exchange capital accounts and guarantee accounts, the reinvestment of RMB proceeds derived by foreign investors in the PRC, and remittance of foreign exchange profits and dividends by a foreign-invested enterprise to its foreign shareholders no longer require the approval or verification of SAFE, as well multiple capital accounts for the same entity may be opened in different provinces. Later, the SAFE promulgated the Circular on Further Simplifying and Improving Foreign Exchange Administration Policies in Respect of Direct Investment (《關於進一步簡化和改進直接投資外匯管理政策的通知》) on February 13, 2015, which was partially abolished on December 30, 2019 and prescribed that the bank instead of SAFE can directly handle the foreign exchange registration and approval under foreign direct investment while SAFE and its branches indirectly supervise the foreign exchange registration and approval under foreign direct investment through the bank.

On May 11, 2013, the SAFE issued the Administrative Provisions on Foreign Exchange in Domestic Direct Investment by Foreign Investors (《外國投資者境內直接投資外匯管理規定》), or the SAFE Circular 21, which became effective on May 13, 2013, amended on October 10, 2018 and partially abolished on December 30, 2019. The SAFE Circular 21 specifies that the administration by SAFE or its local branches over direct investment by foreign investors in the PRC must be conducted by way of registration and banks must process foreign exchange business relating to the direct investment in the PRC based on the registration information provided by SAFE and its branches.

According to the Notice on Relevant Issue Concerning the Administration of Foreign Exchange for Overseas Listing (《關於境外上市外匯管理有關問題的通知》) issued by the SAFE on December 26, 2014, the domestic companies shall register the overseas listed with the foreign exchange control bureau located at its registered address in 15 working days after completion of the overseas listing and issuance. The funds raised by the domestic companies through overseas listing may be repatriated to China or deposited overseas, provided that the intended use of the fund shall be consistent with the contents of the document and other public disclosure documents.

According to the Notice of the State Administration of Foreign Exchange on Reforming the Management Mode of Foreign Exchange Capital Settlement of Foreign Investment Enterprises (《國家外匯管理局關於改革外商投資企業外匯資本金結匯管理方式的通知》), or the SAFE Circular 19 promulgated on March 30, 2015, coming effective on June 1, 2015 and partially abolished on December 30, 2019, foreign-invested enterprises could settle their foreign exchange capital on a discretionary basis

REGULATORY OVERVIEW

according to the actual needs of their business operations. Whilst, foreign-invested enterprises are prohibited to use the foreign exchange capital settled in RMB (a) for any expenditures beyond the business scope of the foreign-invested enterprises or forbidden by laws and regulations; (b) for direct or indirect securities investment; (c) to provide entrusted loans (unless permitted in the business scope), repay loans between enterprises (including advances by third parties) or repay RMB bank loans that have been on-lent to a third party; and (d) to purchase real estate not for self-use purposes (save for real estate enterprises).

On June 9, 2016, SAFE issued the Notice of the State Administration of Foreign Exchange on Reforming and Standardizing the Foreign Exchange Settlement Management Policy of Capital Account (《國家外匯管理局關於改革和規範資本項目結匯管理政策的通知》), or the SAFE Circular 16, which came into effect on the same day. The SAFE Circular 16 provides that discretionary foreign exchange settlement applies to foreign exchange capital, foreign debt offering proceeds and remitted foreign listing proceeds, and the corresponding RMB capital converted from foreign exchange may be used to extend loans to related parties or repay inter-company loans (including advances by third parties). However, there remain substantial uncertainties with respect to SAFE Circular 16's interpretation and implementation in practice.

On October 23, 2019, SAFE promulgated the Notice on Further Facilitating Cross-Board Trade and Investment (《國家外匯管理局關於進一步促進跨境貿易投資便利化的通知》), which became effective on the same date (except for Article 8.2, which became effective on January 1, 2020). The notice cancelled restrictions on domestic equity investments made with capital funds by non-investing foreign-funded enterprises. In addition, restrictions on the use of funds for foreign exchange settlement of domestic accounts for the realization of assets have been removed and restrictions on the use and foreign exchange settlement of foreign investors' security deposits have been relaxed. Eligible enterprises in the pilot area are also allowed to use revenues under capital accounts, such as capital funds, foreign debts and overseas listing revenues for domestic payments without providing materials to the bank in advance for authenticity verification on an item by item basis, while the use of funds should be true, in compliance with applicable rules and conforming to the current capital revenue management regulations.

Regulations Relating to H-share Full Circulation

Full circulation means listing and circulation on the Stock Exchange of the domestic unlisted shares (including unlisted domestic shares held by domestic shareholders prior to overseas listing, unlisted domestic shares additionally issued after overseas listing and unlisted shares held by foreign shareholders) of H-share companies. On November 14, 2019, the CSRC announced the Guidelines for the Full Circulation Program for Domestic Unlisted Shares of H-share Companies (《H股公司境內未上市股份申請“全流通”業務指引》), allowing certain qualified H-share companies and H-share companies intended for listing to apply to the CSRC for full circulation.

According to the Guidelines for the Full Circulation Program for Domestic Unlisted Shares of H-share Companies, shareholders of domestic unlisted shares may determine by themselves through consultation the amount and proportion of shares, for which an application will be filed for circulation, provided that the requirements laid down in the relevant laws and regulations and set out in the policies for state-owned asset administration, foreign investment and industry regulation are met, and the corresponding H-share listed company may be entrusted to file the said application for full circulation. To file an application for full circulation, an H-share company shall file the application with the CSRC according to the administrative licensing procedures necessary for the “examination and approval of public issuance and listing (including additional issuance) of shares overseas by a joint stock company”. After the application for full circulation has been approved by the CSRC, an H-share company shall submit a report on the relevant situation to the CSRC within 15 days after the registration with the China Securities Depository and Clearing Corporation Limited, or the CSDC, of the shares related to the application has been completed.

REGULATORY OVERVIEW

According to the Measures for Implementation of H-share “Full Circulation” Business (《H股全流通業務實施細則》) promulgated by the CSDC and Shenzhen Stock Exchange, or SZSE, on December 31, 2019 and effective from the same date, the businesses of cross-border transfer registration, maintenance of deposit and holding details, transaction entrustment and instruction transmission, settlement, management of settlement participants, services of nominal holders, etc. in relation to the H-share “full circulation business”, are subject to the Measures for Implementation of H-share “Full Circulation” Business. Where there is no provision in the Measures for Implementation of H-share “Full Circulation” Business, it shall be handled with reference to other business rules of the CSDC and China Securities Depository and Clearing (Hong Kong) Co., Ltd., or CSDC (Hong Kong), and SZSE.

In order to fully promote the reform of H-shares full circulation and clarify the business arrangement and procedures for the relevant shares’ registration, custody, settlement and delivery, the CSDC promulgated the Circular on Issuing the Guide to the Program for Full Circulation of H-shares (《關於發佈〈H股“全流通”業務指南〉的通知》) in February 2020, which specified the business preparation, account arrangement, cross-border share transfer registration and overseas centralized custody, etc. In February 2020, CSDC (Hong Kong) promulgated the Guide to the Program for Full Circulation of H-shares (《中國證券登記結算(香港)有限公司H股“全流通”業務指南》) to specify the relevant escrow, custody, agent service of CSDC (Hong Kong), arrangement for settlement and delivery and other relevant matters.

Regulations Relating to Taxation

Enterprise Income Tax

The Enterprise Income Tax Law of the PRC (《中華人民共和國企業所得稅法》), or the EIT Law, promulgated by the NPC on March 16, 2007, came into effect on January 1, 2008 and amended on February 24, 2017 and December 29, 2018, as well as the Implementation Rules of the EIT Law (《中華人民共和國企業所得稅法實施條例》), or the Implementation Rules, promulgated by the State Council on December 6, 2007, came into force on January 1, 2008 and amended on April 23, 2019, are the principal law and regulation governing enterprise income tax in the PRC. According to the EIT Law and its Implementation Rules, enterprises are classified into resident enterprises and non-resident enterprises. Resident enterprises refer to enterprises that are legally established in the PRC, or are established under foreign laws but whose actual management bodies are located in the PRC. And non-resident enterprises refer to enterprises that are legally established under foreign laws and have set up institutions or sites in the PRC but with no actual management body in the PRC, or enterprises that have not set up institutions or sites in the PRC but have derived incomes from the PRC. A uniform income tax rate of 25% applies to all resident enterprises and non-resident enterprises that have set up institutions or sites in the PRC to the extent that such incomes are derived from their set-up institutions or sites in the PRC, or such income are obtained outside the PRC but have an actual connection with the set-up institutions or sites. And non-resident enterprises that have not set up institutions or sites in the PRC or have set up institutions or sites but the incomes obtained by the said enterprises have no actual connection with the set-up institutions or sites, shall pay enterprise income tax at the rate of 10% in relation to their income sources from the PRC. Enterprises that are recognized as high and new technology enterprises in accordance with the Notice of the Ministry of Science, the Ministry of Finance and SAT on Amending and Issuing the Administrative Measures for the Determination of High and New Tech Enterprises (科技部、財政部、國家稅務總局關於修訂印發《高新技術企業認定管理辦法》的通知) issued on January 29, 2016 are entitled to enjoy the preferential enterprise income tax rate of 15%. The validity period of the high and new technology enterprise qualification shall be three years from the date of issuance of the certificate of high and new technology enterprise. The enterprise can re-apply for such recognition as a high and new technology enterprise before or after the previous certificate expires.

REGULATORY OVERVIEW

Value-Added Tax

The major PRC law and regulation governing value-added tax are the Interim Regulations on Value-added Tax of the PRC (《中華人民共和國增值稅暫行條例》) issued on December 13, 1993 by the State Council, came into effect on January 1, 1994, and revised on November 10, 2008, February 6, 2016 and November 19, 2017, as well as the Implementation Rules for the Interim Regulations on Value-Added Tax of the PRC (《中華人民共和國增值稅暫行條例實施細則》) issued on December 25, 1993 by the Ministry of Finance, came into effect on the same day and revised on December 15, 2008 and October 28, 2011, any entities and individuals engaged in the sale of goods, supply of processing, repair and replacement services, and import of goods within the territory of the PRC are taxpayers of VAT and shall pay the VAT in accordance with the law and regulation. The rate of VAT for sale of goods is 17% unless otherwise specified, such as the rate of VAT for sale of transportation is 11%. With the VAT reforms in the PRC, the rate of VAT has been changed several times. The Ministry of Finance and the SAT issued the Notice of on Adjusting VAT Rates (《關於調整增值稅稅率的通知》) on April 4, 2018 to adjust the tax rates of 17% and 11% applicable to any taxpayer's VAT taxable sale or import of goods to 16% and 10%, respectively, this adjustment became effect on May 1, 2018. Subsequently, the Ministry of Finance, the SAT and the General Administration of Customs jointly issued the Announcement on Relevant Policies for Deepening the VAT Reform (《關於深化增值稅改革有關政策的公告》) on March 20, 2019 to make a further adjustment, which came into effect on April 1, 2019. The tax rate of 16% applicable to the VAT taxable sale or import of goods shall be adjusted to 13%, and the tax rate of 10% applicable thereto shall be adjusted to 9%.

Anti-Corruption Laws

Since early 1990s, the legislative authorities at different levels in China have promulgated certain laws and regulations in respect of commercial bribery. According to the Anti-Unfair Competition Law of the PRC (《中華人民共和國反不正當競爭法》), which was passed by the SCNPC on September 2, 1993, became effective as of December 1, 1993 and was last amended on April 23, 2019, operators practicing bribery by offering money or property or other means for the purposes of selling or buying goods commit a criminal offence. According to the Interim Provisions on the Prohibition of Commercial Bribery of SAIC (國家工商行政管理局《關於禁止商業賄賂行為的暫行規定》), which was promulgated by the State Administration for Industry and Commerce on November 15, 1996, commercial bribery refers to an act of offering money or property or other means by an operator to another entity or individual for the purposes of selling or buying goods, among which "other means" refer to the means used to provide any types of benefits other than money or property, such as offering domestic or international tours. According to the Anti-Unfair Competition Law of the PRC, regulatory authorities may impose fines of more than RMB100,000 and less than RMB3,000,000 depending on the seriousness of the cases and if there is any illegal income, such income shall be confiscated. According to the Interim Provisions on the Prohibition of Commercial Bribery, regulatory authorities may impose fines of more than RMB10,000 and less than RMB200,000 depending on the seriousness of the cases and if there is any illegal income, such income shall be confiscated. According to the PRC Criminal Law (《中華人民共和國刑法》), anyone who offers money or property to national servants for the purposes of seeking illegitimate benefits may commit a criminal offence and may be imposed on criminal penalty.

HISTORY AND DEVELOPMENT

OVERVIEW

Our history can be traced back to November 2011 when the predecessor of our Company, Shenyang Wharton Biotechnology Co., Ltd. (瀋陽沃頓生物技術有限公司) (“**Shenyang Wharton**”), was established as a limited liability company. On September 19, 2020, the Shareholders entered into a promoters’ agreement, pursuant to which our Company was converted into a joint stock limited liability company with our name changed to AIM Vaccine Co., Ltd. (艾美疫苗股份有限公司) on September 21, 2020.

MILESTONES

The following table sets forth certain key milestones of our business development:

Year	Event
2015	We acquired the entire equity interest in AIM Honesty which obtained the NDA for the 10ug/0.5ml and the 20ug/0.5ml specifications of our recombinant HBV vaccines (Hansenula Polymorpha) from the NMPA in March 2004 and in August 2013, respectively, and GMP certificates for production in June 2004.
2016	In November 2016, we acquired a controlling interest in AIM Kanghuai. AIM Kanghuai obtained the NDA for inactivated HAV vaccines (HDC) in April 2015 and subsequently obtained the production approval in January 2016 from the NMPA for all specifications of its inactivated HAV vaccines (HDC).
2017	In November 2017, we acquired a controlling interest in AIM Weixin. AIM Weixin obtained (1) the NDA approval for HFRS vaccine in September 2007 and GMP certificate for its production in February 2008, and (2) the NDA approval for the mumps vaccine in October 2004 and GMP certificate for its production in January 2005. Through AIM Weixin, we indirectly controlled 80% of the equity interest in Rong’an Bio. Rong’an Bio obtained the NDA for human rabies vaccine (Vero cell) in September 2007 and the GMP certificate for its production in June 2008.
2018	AIM Explorer was established in September 2018, of which our Company as a founding member owned as to 51% at that time. We obtained the NDA approval for our MPSV4 in October 2018 and the GMP certificate for its production in December 2018.
2020	On September 21, 2020, our Company was converted into a joint stock company.
2021	We acquired 50.1546% equity interest in Liverna in May 2021 which accelerated the research and production layout of our Company on the mRNA COVID-19 vaccine. AIM Jianchi was established in May 2021, of which our Company owned as to 80%.

HISTORY AND DEVELOPMENT

OUR HISTORY

Our Establishment

On November 9, 2011, the predecessor of our Company, Shenyang Wharton, was established as a limited liability company in the PRC with a registered capital of RMB10,000,000. At the time, Shenyang Wharton was held as to 30% by Mr. Lijun ZHANG (張立軍), 19% by Shenyang Shenlv Agricultural Technology Promotion Service Co., Ltd. (瀋陽深綠農業技術推廣服務有限公司), 19% by Shenyang Mingdongtianxia Culture Media Co., Ltd. (瀋陽名動天下文化傳媒有限公司), 15% by Mr. Xunliang YAN (閆循良), 12% by Shenyang Fulinmen Investment Information Consulting Co., Ltd. (瀋陽富臨門投資信息諮詢有限公司) and 5% by Beijing Taida Hongli Information Consulting Co., Ltd. (北京泰達紅利信息諮詢有限公司) (now Tibet Ruishang Venture Capital Management Co., Ltd. (西藏睿尚創業投資管理有限公司), “**Ruishang Venture Capital**”).

Changes in Shareholding and Corporate Form

Since its establishment, our Company has undertaken a series of shareholding changes and capital increases.

Early Investments Prior to the Track Record Period

To fund our working capital and capital expenditures, between March 2012 and November 2015, the Shareholders approved several increases of the registered capital of our Company, whereby the registered capital of our Company increased from RMB10,000,000 to RMB600,000,000. Between March 2012 and November 2015, additional investors which include (1) Mr. Yan ZHOU (周延), (2) Mr. Xin ZHOU (周欣), (3) Mr. Jie ZHOU (周杰), (4) Shenyang Zongheng Tianxia Trading Co., Ltd. (瀋陽縱橫天下商貿有限公司) (“**Zongheng Tianxia**”), (5) Tibet Ivy Investment Center (Limited Partnership) (西藏常青藤投資中心(有限合夥)) (now Yongzhou Qingteng Trading Partnership (Limited Partnership) (永州青藤貿易合夥企業(有限合夥)) (“**Yongzhou Qingteng**”), (6) Shenyang Xixi Handmade Leather Co., Ltd. (瀋陽茜茜手工皮具有限公司) (now Shenyang Xixi Enterprise Management Consulting Co., Ltd. (瀋陽茜茜企業管理諮詢有限公司)) (“**Shenyang Xixi**”), (7) Tibet Bohai Investment Group Co., Ltd. (西藏渤海投資集團有限公司) (“**Tibet Bohai**”) and (8) Tibet Silicon Valley Angel Venture Capital Co., Ltd. (西藏硅谷天使創業投資有限公司) (“**Tibet Silicon Valley Angel**”) and certain Shareholders together agreed to subscribe for the total increased registered capital of our Company of RMB590,000,000 for a total consideration of RMB590,000,000.

In 2017, we entered into a series of capital increase agreements with (1) Tibet Yingfeng, (2) Lhasa Meihua Biological Investment Holdings Co., Ltd. (拉薩梅花生物投資控股有限公司) (“**Lhasa Meihua**”), (3) Linzhi Desheng Technology Co., Ltd. (林芝德勝科技有限公司) (“**Linzhi Desheng**”), (4) Gongqingcheng Everest Investment Management Partnership (Limited Partnership) (共青城珠峰投資管理合夥企業(有限合夥)) (“**Everest Investment**”), (5) Tibet Zhiying Investment Co., Ltd. (西藏智盈投資有限公司) (“**Tibet Zhiying**”), (6) Gongqingcheng Everest No. 2 Investment Management Partnership (Limited Partnership) (共青城珠峰二號投資管理合夥企業(有限合夥)) (“**Everest No. 2 Investment**”), (7) Tibet Sincere Heart, (8) Zhongrenxing, (9) Ms. Jing HUANG (黃靜) and (10) Yunnan Ziyongchen Investment Co., Ltd. (雲南紫雍晨投資有限公司) (“**Yunnan Ziyongchen**”), pursuant to which the investors agreed to subscribe for the total increased registered capital of our Company of RMB399,990,000 for a total consideration of RMB2,791,930,200. All investors paid the same premium for such subscriptions.

HISTORY AND DEVELOPMENT

In addition, there has been equity transfers among the Shareholders between December 2011 to July 2017. The following table sets forth the equity interest structure of our Company as of December 29, 2017:

Name of Shareholders ⁽¹⁾	Registered capital subscribed	Equity interest percentage
	(RMB)	
Mr. Yan ZHOU (周延) ⁽²⁾	200,000,000	20.0002%
Tibet Sincere Heart ⁽³⁾	160,000,000	16.0002%
Tibet Yingfeng ⁽⁴⁾	100,000,000	10.0001%
Lhasa Meihua ⁽⁵⁾	50,000,000	5.0001%
Tibet Tianxia Holdings Group Co., Ltd. (西藏天下控股集團 股份有限公司) (“ Tibet Tianxia ”) ⁽⁶⁾	40,000,000	4.0000%
Tibet Great Times Mobile Internet Technology Service Co., Ltd. (西藏大時代移動互聯網技術服務有限公司) (“ Tibet Great Times ”) ⁽⁶⁾	40,000,000	4.0000%
Mr. Jie ZHOU (周杰) ⁽²⁾	40,000,000	4.0000%
Mr. Xin ZHOU (周欣) ⁽²⁾	40,000,000	4.0000%
Anji Weilan Enterprise Management Center (Limited Partnership) (安吉蔚藍企業管理中心(有限合夥)) ⁽⁶⁾ (“ Anji Weilan ”)	40,000,000	4.0000%
Yongzhou Qingteng ⁽⁷⁾	40,000,000	4.0000%
Zongheng Tianxia ⁽⁸⁾	40,000,000	4.0000%
Shenyang Xixi ⁽⁹⁾	40,000,000	4.0000%
Zhongrenxing ⁽¹⁰⁾	33,390,000	3.3390%
Everest Investment ⁽¹¹⁾	24,550,000	2.4550%
Ruishang Venture Capital ⁽¹²⁾	20,000,000	2.0000%
Jiaxing Hekang Investment Partnership (Limited Partnership) (嘉興禾康投資合夥企業(有限合夥)) (“ Jiaxing Hekang ”) ⁽⁶⁾⁽¹³⁾	18,150,000	1.8150%
Linzhi Desheng ⁽¹⁴⁾	15,000,000	1.5000%
Mr. Guanqun SUN (孫冠群) ⁽⁶⁾	14,000,000	1.4000%
Ms. Jing HUANG (黃靜)	11,450,000	1.1450%
Changxing Fengze Financial Consulting Partnership (Limited Partnership) (長興豐澤財務諮詢合夥企業(有限 合夥)) (“ Changxing Fengze ”) ⁽⁶⁾	8,300,000	0.8300%
Yunnan Ziyongchen	5,150,000	0.5150%
Tibet Pude Zhengyuan Venture Capital Co., Ltd. (西藏樸德 正元創業投資有限公司) (“ Pude Zhengyuan ”) ⁽⁶⁾⁽¹⁵⁾	5,000,000	0.5000%
Shenzhen Hebang Zhengzhixing Asset Management Co., Ltd. (深圳和邦正知行資產管理有限公司) (“ Shenzhen Hebang ”) ⁽⁶⁾⁽¹⁶⁾	5,000,000	0.5000%
Tibet Zhiying ⁽¹⁷⁾	5,000,000	0.5000%
Everest No. 2 Investment ⁽¹⁸⁾	5,000,000	0.5000%
Total	999,990,000	100.00%

Notes:

- (1) Save as disclosed below in relation to these Shareholders, to the best knowledge of our Directors, (i) there is no past or present relationships among these Shareholders, their existing shareholders and directors; and (ii) there is no past or present relationship among the Shareholders, their existing shareholders, their existing directors and our Company and our subsidiaries, their existing controlling shareholders, directors and senior management, and any of their respective existing associates.

HISTORY AND DEVELOPMENT

- (2) Mr. Yan ZHOU, Mr. Jie ZHOU and Mr. Xin ZHOU are brothers.
- (3) Tibet Sincere Heart is a limited liability company incorporated in the PRC. It is an investment holding company with investments under management around RMB155.68 million. It is owned as to 99.99% by Yan ZHOU and 0.01% by Xin ZHOU.
- (4) Tibet Yingfeng is a limited liability company incorporated in the PRC, and is mainly engaged in the development of new energy sources with investments under management of around RMB698 million. It is owned as to 42.68% by Shanghai Xunjing Enterprise Management Center (Limited Partnership) (上海循景企業管理中心(有限合夥)) (“**Shanghai Xunjing**”), 31.68% by Shanghai China UniCredit Investment Development Co., Ltd. (上海中聯信投資發展股份有限公司) (“**Shanghai China UniCredit**”), 12.20% by Chao ZHANG (張超), 6.12% by Jianguo SUN (孫建國), 4.88% by Zhenya FENG (馮振亞) and 2.44% by Jing WANG (王靜). Shanghai Xunjing is managed by its general partner, Aihua YANG (楊愛華), who owns 76.75% of the interest in the partnership. Yan JIANG (蔣妍), the limited partner, owns the remaining 23.25% of the interest in the partnership. Shanghai China UniCredit is ultimately controlled by Zhiliang BIAN (卞志良). Tibet Yingfeng’s ultimate beneficial owner is Aihua YANG, who is a friend of Yan ZHOU. Tibet Yingfeng invested in our Company due to the development potential of our Company and the vaccine industry as a whole.
- (5) Lhasa Meihua is a limited liability company incorporated in the PRC and is mainly engaged in the investments relating to bio-technology, bio-pharmaceuticals, new bio-materials and bio-environmental protection with investments under management around RMB680 million. It is a wholly-owned subsidiary of Meihua Holdings Group Co. Ltd. (SSE: 600873). Our Director Aijun WANG is the legal representative and sole executive director of Lhasa Meihua. Lhasa Meihua invested in our Company due to our industry experience and development potential.
- (6) Became a Shareholder through purchase of equity interest from a then existing Shareholder.
- (7) Yongzhou Qingteng is a limited partnership established in the PRC and is an investment holding company investing solely in our Company with investments under management around RMB40 million. It is managed by its general partner, Tibet Oriental Wisdom Investment Management Co., Ltd. (西藏東方智慧投資管理有限公司) (“**Tibet Oriental Wisdom**”), which holds approximately 10% of the interest in the partnership. Chong ZHANG (張崇), the limited partner, holds 90% of the interest in the partnership. Tibet Oriental Wisdom is owned as to 51% and 49% by Lihua LI (李麗華) and Fengchen WANG (王鳳臣), respectively. Chong ZHANG is a nephew of Yan ZHOU’s spouse. Yongzhou Qingteng invested in our Company due to our development potential.
- (8) Zongheng Tianxia is a limited liability company incorporated in the PRC and is an investment holding company investing solely in our Company with investments under management around RMB40 million. It is owned as to 23.75% by Bole MA (馬伯樂), 22.5% by Wen GUAN (關文), 12.50% by Yongmei ZHAO (趙詠梅), 12.50% by Dingfeng LIANG (梁頂峰), 12.5% by Xinjiang Xinruntai Equity Investment Co., Ltd. (新疆新潤泰股權投資有限公司) (“**Xinjiang Xinruntai**”), 10% by Xiaoqiu ZHAN (詹小秋), 2.5% by Xuanling ZHOU (周選玲), 2.5% by Bo JIANG (姜波) and 1.25% by Tao LI (李濤). Xinjiang Xinruntai is owned as to 70% by Min YAN (燕敏) and 30% by Peng LIU (劉鵬). Bole MA is a shareholder of both our Company and Chengdu Bole Action Biological Products Co., Ltd. (成都伯樂行動生物製品有限公司) which holds 20% of the equity interest in AIM Jianchi. Wen GUAN is our Director. The shareholders of Zongheng Tianxia are all friends of Yan ZHOU. Zongheng Tianxia invested in our Company due to our development potential.
- (9) Shenyang Xixi is a limited liability company incorporated in the PRC and is an investment holding company investing solely in our Company with investments under management around RMB40 million. It is owned as to 61.25% by Zhuhai Tongdao Tomorrow Investment Partnership (Limited Partnership) (珠海同道明天投資合夥企業(有限合夥)) (“**Zhuhai Tongdao Tomorrow**”), 24.5% by Jinyan WEN (溫金燕) and 14.25% by Dongtai Meian Financial Information Consulting Center (Limited Partnership) (東台市美安財務信息諮詢中心(有限合夥)) (“**Dongtai Meian**”). Zhuhai Tongdao Tomorrow is managed by its general partner Kuo ZHANG (張闊), who owns 51% of the interest in the partnership. Wei CHANG (常偉), the limited partner, owns the remaining 49% of the interest in the partnership. Dongtai Meian is managed by its general partner Shenyang Zhongchuang Enterprise Management Co., Ltd. (瀋陽眾創企業管理有限公司) which owns 1.75% of its equity interest and is wholly owned by Jie ZHOU, our Director. Yan ZHOU owns 98.25% of the interest in Dongtai Meian. Kuo ZHANG, Wei CHANG and Jinyan WEN are friends of Yan ZHOU. Shenyang Xixi invested in our Company due to our development potential.

HISTORY AND DEVELOPMENT

- (10) Zhongrenxing is a limited partnership established in the PRC investing solely in our Company with investments under management around RMB233.06 million. Zhongrenxing is managed by Shenyang Dongjian Yuanfang Enterprise Management Co., Ltd. (瀋陽洞見遠方企業管理有限公司) (“**Dongjian Yuanfang**”) as its general partner, which holds 0.21% of the interest in the partnership. Dongjian Yuanfang is wholly owned by Yan ZHOU. The limited partners of Zhongrenxing, namely, Shenyang Jili Renxin Enterprise Management Co., Ltd. (瀋陽激勵人心企業管理有限公司) (“**Jili Renxin**”) and Shaojun JIA, who is our executive Director, hold approximately 34.3686% and 10.6872% of the interest in Zhongrenxing, respectively. No other limited partners of Zhongrenxing hold more than 5% of the interest in Zhongrenxing. Jili Renxin is owned as to 90% by Yan ZHOU, 5% by Jie ZHOU and 5% by Xin ZHOU. To the best knowledge of our Directors, (i) Lixin NIU, who is our chief financial officer, (ii) Zhenyu LIN, who is our chief marketing officer, (iii) Wenjuan ZHOU, who is our chief public affairs officer, (iv) Ling LIU, who is secretary to the Board and our chief investment officer, (v) Fan ZHANG, who is our chief research officer, (vi) Wen GUAN who is our executive Director, and (vii) Li MENG who is our chief quality officer, hold approximately 3.9470%, 3.6433%, 2.4289%, 2.4289%, 0.9108%, 0.9108% and 0.6072% of the interest in Zhongrenxing, respectively.
- (11) Everest Investment is a limited partnership established in the PRC mainly engaged in equity investments with aggregate assets around RMB300 million. It is managed by Tibet Tongxin Capital Investment Management Co., Ltd. (西藏同信資本投資管理有限公司) (“**Tibet Tongxin Capital**”) as its general partner which holds 0.33% of the interest in the partnership. Tibet Tongxin Capital is ultimately controlled by Shaojun JIA, our Director. The limited partners of Everest Investment, namely, Beijing Youcai Investment Management Co., Ltd. (北京友財投資管理有限公司), Juan YU (俞娟) and Shaojun JIA hold 35.60%, 33.33% and 19.83% of the interest in the partnership, respectively. No other limited partners of Everest Investment hold more than 5% of the interest in the partnership.
- (12) Ruishang Venture Capital is a limited liability company incorporated in the PRC and is an investment holding company with investments under management around RMB24.90 million. It is owned as to 90% by Min ZHOU (周敏) and 10% by Feng ZHOU (周峰).
- (13) Jiaxing Hekang is a limited partnership established in the PRC mainly engaged in the equity investments with investments under management around RMB108.9 million. It is managed by Nanjing Nanda Sanbao Capital Management Co., Ltd. (南京南大三寶資本管理有限公司) (“**Nanjing Nanda Sanbao**”) as its general partner which holds 1.84% of the interest in the partnership. Nanjing Nanda Sanbao is ultimately controlled by Min SHA (沙敏). The limited partners of Jiaxing Hekang, namely, Qinglong FAN (樊慶龍), Jun CHEN (陳軍), Shiqiang WANG (王世強), and Yang YANG (楊颺) and Yuhui MA (馬宇暉) hold 18.82%, 9.18%, 9.18%, 9.18% and 5.51% of the interest in the partnership, respectively. No other limited partners of Jiaxing Hekang hold more than 5% of the interest in the partnership.
- (14) Linzhi Desheng is a limited liability company incorporated in the PRC mainly engaged in information technology development, with investments under management around RMB154.7 million. Its legal representative is Wenkai CHEN, one of our Shareholders. It is wholly owned by Gonqingcheng Desheng Investment Management Partnership (Limited Partnership) (共青城德勝投資管理合夥企業(有限合夥)) which is ultimately controlled by Zhenhua WANG (王振華).
- (15) Pude Zhengyuan is a limited liability company incorporated in the PRC and is an investment holding company with investments under management around RMB30 million. It is owned as to 60% by Qiang WANG (王強), 20% by Jiuling PEI (裴九齡) and 20% by Qiang LI (李強).
- (16) Shenzhen Hebang is a limited liability company incorporated in the PRC and is an investment holding company with investments under management around RMB300 million. It is wholly owned by Chengdu Qingyang Zhengzhixing Technology Microfinance Co., Ltd. (成都青羊正知行科技小額貸款有限公司) which is ultimately controlled by Zhenggang HE (賀正剛).
- (17) Tibet Zhiying is a limited liability company incorporated in the PRC and is an investment holding company with investments under management around RMB110 million. It is wholly owned by Shaojun JIA.
- (18) Everest No.2 Investment is a limited partnership established in the PRC and is an investment holding company with aggregate assets around RMB191.7 million. It is managed by Tibet Tongxin Capital as its general partner which holds 0.52% of the interest in the partnership. The limited partners of Everest No.2 Investment, namely, Shaojun JIA and Tibet Zhiying hold 77.57% and 7.82% of the interest in the partnership, respectively. No other limited partners of Everest No.2 Investment hold more than 5% of the interest in the partnership.

HISTORY AND DEVELOPMENT

Equity Transfers During the Track Record Period⁽¹⁾

There were equity transfers among the Shareholders during the Track Record Period.

Tibet Tianxia transferred registered capital of (1) RMB30,000,000 to Mr. Tingdong YANG (楊廷棟) in January 2019, (2) RMB7,200,000 to Gongqingcheng Chenxi No. 1 Le Meridien Equity Investment Partnership (Limited Partnership) (共青城晨熹一號艾美股權投資合夥企業(有限合夥)) (“**Chenxi No. 1**”)⁽²⁾ in November 2019 and (3) RMB2,800,000 to Mr. Junping SHI (史俊萍) in July 2020.

In July 2020, Tibet Great Times transferred registered capital of (1) RMB2,200,000 to Mr. Junping SHI (史俊萍), (2) RMB4,240,000 to Shenzhen Tongchuang Jiaxing Investment Partnership (Limited Partnership) (深圳市同創佳興投資合夥企業(有限合夥)) (“**Tongchuang Jiaxing**”), (3) RMB580,000 to Shenzhen Tongchuang Jiazhi Investment Partnership (Limited Partnership) (深圳市同創佳致投資合夥企業(有限合夥)) (“**Tongchuang Jiazhi**”), (4) RMB640,000 to Shenzhen Zhaoyin Gongying Equity Investment Partnership Enterprise (Limited Partnership) (深圳市招銀共贏股權投資合夥企業(有限合夥)) (“**Shenzhen Gongying**”), (5) RMB9,850,000 to Shenzhen CMB Langyao Growth Equity Investment Fund Partnership (Limited Partnership) (深圳市招銀朗曜成長股權投資基金合夥企業(有限合夥)) (“**CMB Langyao**”), (6) RMB9,210,000 to CMB Growth II Investment (Shenzhen) Partnership (Limited Partnership) (招銀成長貳號投資(深圳)合夥企業(有限合夥)) (“**CMB Growth II**”), (7) RMB1,400,000 to Foshan Hongtao Kexuan Equity Investment Partnership (Limited Partnership) (佛山弘陶科選股權投資合夥企業(有限合夥)) (“**Hongtao Kexuan**”), (8) RMB8,615,385 to Shanghai Lancheng Tongliang Equity Investment Fund Partnership (Limited Partnership) (上海蘭丞同梁股權投資基金合夥企業(有限合夥)) (“**Lancheng Tongliang**”)⁽³⁾, (9) RMB1,384,615 to Shanghai Lancheng Chengchun Equity Investment Fund Partnership (Limited Partnership) (上海蘭丞承春股權投資基金合夥企業(有限合夥)) (“**Lancheng Chengchun**”)⁽⁴⁾ and (10) RMB1,880,000 to Tibet Zhiming Yuanyang Technology Development Co., Ltd. (西藏智明遠揚科技發展有限公司) (“**Zhiming Yuanyang**”)⁽⁵⁾.

In July 2020, Anji Weilan transferred registered capital of (1) RMB5,000,000 to Hangzhou Puhua Yuchen Equity Investment Partnership (Limited Partnership) (杭州普華昱辰股權投資合夥企業(有限合夥)) (“**Puhua Yuchen**”)⁽⁶⁾, (2) RMB1,800,000 to Langma No. 25 (Shenzhen) Venture Capital Center (Limited Partnership) (朗瑪二十五號(深圳)創業投資中心(有限合夥)) (“**Langma No. 25**”)⁽⁷⁾, (3) RMB1,600,000 to Langma No. 24 (Shenzhen) Venture Capital Center (Limited Partnership) (朗瑪二十四號(深圳)創業投資中心(有限合夥)) (“**Langma No. 24**”)⁽⁷⁾, (4) RMB1,600,000 to Langma No. 23 (Shenzhen) Venture Capital Center (Limited Partnership) (朗瑪二十三號(深圳)創業投資中心(有限合夥)) (“**Langma No. 23**”)⁽⁷⁾, (5) RMB8,000,000 to Shanghai Jiexuan Enterprise Management Center (上海傑玄企業管理中心) (“**Shanghai Jiexuan**”)⁽⁸⁾, (6) RMB5,400,000 to Jiaxing Chenxi No. 3 Equity Investment Partnership (Limited Partnership) (嘉興晨熹三號股權投資合夥企業(有限合夥)) (“**Chenxi No. 3**”)⁽⁹⁾, (7) RMB3,840,000 to Qingdao Penglong Equity Investment Partnership (Limited Partnership) (青島蓬龍股權投資合夥企業(有限合夥)) (“**Qingdao Penglong**”), (8) RMB2,000,000 to Shenzhen Fenghong Investment Co., Ltd. (深圳豐鴻投資有限公司) (“**Shenzhen Fenghong**”)⁽¹⁰⁾, (9) RMB3,000,000 to Mr. Xiaojun HUANG (黃曉軍), (10) RMB1,000,000 to Hainan Jiashui Trading Co., Ltd. (海南嘉水貿易有限責任公司) (“**Hainan Jiashui**”), (11) RMB160,000 to Everest No. 2 Investment, (12) RMB600,000 to Everest Investment and (13) RMB6,000,000 to Tianjin Jingeng Biotechnology Partnership (Limited Partnership) (天津金耕生物科技合夥企業(有限合夥)) (“**Tianjin Jingeng**”)⁽¹¹⁾.

In July 2020, Changxing Fengze transferred registered capital of RMB8,300,000 to Ruishang Venture Capital.

HISTORY AND DEVELOPMENT

Notes:

- (1) Save as disclosed below in relation to these Shareholders, to the best knowledge of our Directors, (i) there is no past or present relationships among these Shareholders, their existing shareholders and directors; and (ii) there is no past or present relationship among the Shareholders, their existing shareholders, their existing directors and our Company and our subsidiaries, their existing controlling shareholders, directors and senior management, and any of their respective existing associates.
- (2) Chenxi No. 1 is a limited partnership established in the PRC and is an investment holding company solely investing in our Company with investments under management around RMB90 million. It is managed by its general partner, Jiaxing Chenxi Investment Management Co., Ltd. (嘉興晨熹投資管理有限公司) (“**Jiaxing Chenxi**”), which holds approximately 1.05% of the interest in the partnership. Jiaxing Chenxi is owned as to 60% by Yutian SHAO (邵雨田), 30% by Jian LI (李健) and 10% by Yiyang SHAO (邵奕洋). The limited partners of Chenxi No.1, namely, Xuefei GAO (高學飛), Huiting XU (徐惠亭), Chundong XU (許春棟), Bo WANG (王波), Taizhou Huiming Equity Investment Partnership (Limited Partnership) (台州匯明股權投資合夥企業(有限合夥)) (“**Taizhou Huiming**”), Xiaoyu FENG (馮小玉) and Xiasheng LI (李夏生) hold 20.94%, 15.71%, 13.61%, 11.52%, 11.52%, 10.47% and 5.24% of the interest in the partnership, respectively. No other limited partners of Chenxi No.1 hold more than 5% of the interest in the partnership. Taizhou Huiming is ultimately controlled by Yixing SHAO (邵奕興).
- (3) Lancheng Tongliang is a limited partnership established in the PRC and is an investment holding company with investments under management around RMB112 million. It is managed by its general partner, Shanghai Lancheng Equity Investment Management Co., Ltd. (上海蘭丞股權投資管理有限公司) (“**Shanghai Lancheng**”), which holds approximately 1% of the interest in the partnership. Shanghai Lancheng is ultimately controlled by Jing HUANG (黃靖) who holds approximately 36.91% of the interest as its limited partner. The limited partners of Lancheng Tongliang Minghai MA (馬明海) and Jinyun TIAN (田金運) hold 63.65% and 35.35% of the interest in the partnership, respectively.
- (4) Lancheng Chengchun is a limited partnership established in the PRC and is an investment holding company with investments under management around RMB13.22 million. It is managed by its general partner Shanghai Lancheng which holds approximately 40% of the interest in the partnership. Each of the limited partners holds approximately 5% of the interest in the partnership, namely Yuanqi Technology (Beijing) Fund Management Co., Ltd. (源起科創(北京)基金管理有限公司) (“**Yuanqi Fund**”), Shanghai Meigang Fastener Co., Ltd. (上海美鋼緊固件有限公司) (“**Shanghai Meigang**”), Wei HOU (候偉), Ying ZHANG (張櫻), Huanmin ZHANG (張煥民), Wei WANG (王偉), Guiyou WANG (王貴友), Bo LUO (羅波), Zenghua HU (胡增華), Yaning YONG (雍雅寧), Zhixing MA (馬志興) and Keyue LONG (龍可月). Yuanqi Fund is wholly owned by Beijing Hengtai Rongfeng Technology Co., Ltd. (北京恒泰榮豐科技有限公司) which is ultimately controlled by Yue WANG (汪悅). Shanghai Meigang is owned as to 90% by Meixing PAN (潘美興) and 10% by Jia YAN (嚴佳).
- (5) Zhiming Yuanyang is a limited liability company incorporated in the PRC. It is an investment holding company with investments under management around RMB24.44 million. It is owned as to 52% by Ping WANG (王平), 32% by Wenting LI (李文婷) and 16% by Rui GAO (高瑞).
- (6) Puhua Yuchen is a limited partnership established in the PRC and is an investment holding company with aggregate assets under management around RMB400 million. It is managed by its general partner Zhejiang Puhua Tianqin Equity Investment Management Co., Ltd. (浙江普華天勤股權投資管理有限公司) (“**Zhejiang Puhua**”) which holds approximately 2.50% of the interest in the partnership. Zhejiang Puhua is ultimately controlled by Qinhua SHEN (沈琴華). The limited partners of Puhua Yuchen, namely, Lanxi Puhua Zefeng Equity Investment Partnership (Limited Partnership) (蘭溪普華澤豐股權投資合夥企業(有限合夥)) (“**Lanxi Puhua**”), Zhejiang Industry Fund Co., Ltd. (浙江省產業基金有限公司) (“**Zhejiang Industry**”), Hangzhou West Lake Industry Fund Co., Ltd. (杭州西湖產業基金有限公司) (“**Hangzhou West Lake**”), Wenjuan LUO (羅文娟), Weiguang ZHAO (趙偉光) and Hangzhou Puhua Ruifeng Venture Capital Partnership (Limited Partnership) (杭州普華銳豐創業投資合夥企業(有限合夥)) (“**Hangzhou Puhua**”) hold 37.50%, 25.00%, 15.00%, 5.00%, 5.00% and 5.00% of the interest in the partnership, respectively. The ultimate beneficial owners of Lanxi Puhua, Zhejiang Industry, Hangzhou West Lake and Hangzhou Puhua are Hongzhen CHEN (陳鴻鎮), Zhejiang Provincial Department of Finance (浙江省財政廳), Department of Finance of Xihu District Government of Hangzhou Province (杭州市西湖區政府區財政局) and Qinhua SHEN (沈琴華), respectively. No other limited partner of Puhua Yuchen holds more than 5% of the interest in the partnership.
- (7) Each of Langma No. 25, Langma No. 24 and Langma No. 23 is a limited partnership established in the PRC and is an investment holding company with investments under management around RMB57.03 million, RMB53.80 million and RMB52.16 million, respectively. All of Langma No. 25, Langma No. 24 and Langma No. 23 are managed by Langmafeng Venture Investment Co., Ltd. (朗瑪峰創業投資有限公司) (“**Langmafeng Venture**”) as the general partner, which holds approximately 1.58%, 1.70% and 1.77% of the interest in Langma No. 25, Langma No. 24 and Langma No. 23, respectively. Langmafeng Venture is owned as to 85% by Jiancong XIAO (肖建聰), and 5% by each of Yuping WANG (王玉平), Xianhong LIANG (梁顯宏) and Yunxi LI (李運喜). Other than its limited partner Xiuzhen YANG (楊秀珍) who holds 16.91% of the interest, Langma No. 25 has no other limited partner who holds more than 5% in the partnership. Other than its limited partner Huiqin WANG (王慧琴) who holds approximately 5.10% of the interest, Langma No. 24 has no other limited partner who holds more than 5% in the partnership. Langma No. 23 has no limited partner who holds more than 5% in the partnership.

HISTORY AND DEVELOPMENT

- (8) Shanghai Jiexuan is a limited liability company incorporated in the PRC. It is an investment holding company with investments under management around RMB104 million. It is wholly owned by Man SHU (舒曼).
- (9) Chenxi No.3 is a limited partnership established in the PRC and is an investment holding company solely investing in our Company with investments under management around RMB70.2 million. It is managed by its general partner, Jiaying Chenxi which holds approximately 2.02% of the interest in the partnership. The limited partners of Chenxi No.3, namely, Weimin FEI (費偉民), Hanxiang XU (許漢祥), Qingdao Century Liankai Investment Co., Ltd. (青島世紀聯凱投資有限公司) (“**Qingdao Liankai**”), Jian ZENG (曾健), Huiting XU (徐惠亭) and Meiyang XIN (辛梅艷), hold 21.39%, 21.39%, 20.18%, 14.26%, 9.98% and 6.73% of the interest in the partnership, respectively. No other limited partner of Chenxi No.3 holds more than 5% in the partnership. Qingdao Liankai is owned as to 90% by Hongbo WANG (王洪波) and 10% by Haosong WANG (王好松).
- (10) Shenzhen Fenghong is a limited liability company incorporated in the PRC. It is an investment holding company with investments under management around RMB26 million. It is owned as to 67% by Honglan SHI (施鴻蘭) and 33% by Yaoke LIANG (梁耀科).
- (11) Tianjin Jingeng is a limited partnership established in the PRC and is an investment holding company with investments under management around RMB7.8 million. It is managed by its general partners Jiyun YANG (楊濟雲) who holds 3.84% of the interest and Ningbo Meishan Free Trade Zone Jingeng Investment Management Co., Ltd. (寧波梅山保稅港區金耕投資管理有限公司) (“**Ningbo Jingeng**”) which holds 0.38% of the interest in the partnership. Ningbo Jingeng is ultimately controlled by Kaijing YAN (閔凱境). The limited partners of Tianjin Jingeng, namely, Tianjin Huaxin Pharmaceutical Venture Capital Partnership (Limited Partnership) (天津華新醫藥創業投資合夥企業(有限合夥)) (“**Tianjin Huaxin**”), Shenzhen Chongshi who is our Shareholder, Tibet Jiaze who is our Shareholder, and Ningbo Meishan Free Trade Zone Xucheng Investment Management Co., Ltd. (寧波梅山保稅港區旭呈投資管理有限公司) (“**Ningbo Xucheng**”), hold 31.97%, 25.58%, 19.18% and 12.66% of the interest in the partnership. No other limited partner of Tianjin Jingeng holds more than 5% in the partnership. Tianjin Huaxin and Ningbo Xucheng are both ultimately controlled by Kaijing YAN (閔凱境).

Capital Increases in May 2020

On May 11, 2020, we entered into capital increase agreements with (1) Tongchuang Jiaying, (2) Tongchuang Jiazhi, (3) Shenzhen Gongying, (4) CMB Langyao, (5) CMB Growth II and (6) Hongtao Kexuan, pursuant to which the investors agreed to subscribe for the total increased registered capital of RMB25,000,000 for a total consideration of RMB332,500,000. The funds were received by our Company on July 24, 2020. The following table sets forth the details of the investments:

Name of Investors	Registered capital subscribed	Consideration
	(RMB)	(RMB)
Tongchuang Jiaying	4,240,000	56,392,000
Tongchuang Jiazhi	580,000	7,714,000
Shenzhen Gongying	610,000	8,113,000
CMB Langyao	9,390,000	124,887,000
CMB Growth II	8,780,000	116,774,000
Hongtao Kexuan	1,400,000	18,620,000

Upon completion of the investments above in July 2020, the registered capital of our Company was increased to RMB1,024,990,000.

HISTORY AND DEVELOPMENT

Conversion into a Joint Stock Limited Liability Company

On September 18, 2020, the Shareholders passed resolutions approving the conversion of our Company from a limited liability company into a joint stock limited liability company with our name changed to AIM Vaccine Co., Ltd. (艾美疫苗股份有限公司). Pursuant to the promoters' agreement dated September 19, 2020 entered into by all the Shareholders, all promoters approved the conversion of the net assets value of our Company as of July 31, 2020 into 1,024,990,000 Shares. On September 19, 2020, our Company convened our inaugural meeting and our first general meeting, and resolutions were passed to approve the conversion. Upon the completion of the conversion, the registered capital of our Company was RMB1,024,990,000 divided into 1,024,990,000 Shares with a nominal value of RMB1.00 each, which were subscribed by all the Shareholders in proportion to their respective equity interest in our Company before the conversion. The conversion was completed on September 21, 2020.

Capital Increases in September 2020

On September 7, 2020, we entered into a capital increase agreement with Beijing Yizhuang International Emerging Industry Investment Center (Limited Partnership) (北京亦莊國際新興產業投資中心(有限合夥)) (“**Beijing Yizhuang**”) and Beijing Key Industry Intellectual Property Operation Fund (Limited Partnership) (北京市重點產業知識產權運營基金(有限合夥)) (“**Beijing Key Industry**”), pursuant to which the investors agreed to subscribe for the total increased registered capital of RMB10,500,000 of our Company for a consideration of RMB139,650,000. The funds were received by our Company on September 23, 2020. The following table sets forth the details of the investments:

Name of Investors	Registered capital subscribed	Shares subscribed	Consideration
	(RMB)		(RMB)
Beijing Yizhuang	7,500,000	7,500,000	99,750,000
Beijing Key Industry	3,000,000	3,000,000	39,900,000

Upon completion of the investments above on September 23, 2020, the registered capital of our Company was increased to RMB1,035,490,000.

Ningbo Free Trade Zone Investment

On October 26, 2020, we entered into a capital increase agreement with Ningbo Free Trade Zone Holdings Co., Ltd. (寧波保稅區控股有限公司) (“**Ningbo Free Trade Zone**”), pursuant to which Ningbo Free Trade Zone agreed to subscribe for the increased registered capital of RMB54,051,428 of our Company for 20% equity interest in Rong'an Bio (the “**Ningbo Free Trade Zone Investment**”). Prior to the Ningbo Free Trade Zone Investment, Rong'an Bio was owned as to 80% by AIM Weixin and as to 20% by Ningbo Free Trade Zone. Upon completion of the Ningbo Free Trade Zone Investment, Rong'an Bio became an indirect wholly-owned subsidiary of our Company. The consideration was determined based on arm's length negotiation between the parties taking into account our Company's research and development progress, pipeline candidates, business operations and future prospects. Our PRC Legal Advisor has confirmed that the Ningbo Free Trade Zone Investment has been properly and legally completed in accordance with applicable PRC laws and regulations.

Upon completion of the Ningbo Free Trade Zone Investment, the registered capital of our Company was increased to RMB1,089,541,428.

HISTORY AND DEVELOPMENT

Capital Increases in November 2020

In November 2020, we entered into a series of capital increase agreements with (1) Zhuhai Gao Ling Xiheng Equity Investment L.P. (Limited Partnership) (珠海高瓴汐恒股權投資合夥企業(有限合夥)) (“**Gao Ling Xiheng**”), (2) Zhejiang Yiwu Letai Investment Management Partnership Enterprise (Limited Partnership) (浙江義烏市樂泰投資管理合夥企業(有限合夥)) (“**Loyal Valley Letai**”), (3) Beijing Huakong Industrial Investment Fund (Limited Partnership) (北京華控產業投資基金(有限合夥)) (“**Beijing Huakong**”), (4) Shanghai Hutong Investment Center (Limited Partnership) (上海胡桐投資中心(有限合夥)) (“**Shanghai Hutong**”), (5) Mr. Wenkai CHEN (陳文凱) and (6) Suqian Lingdao Life Evergreen Equity Investment Partnership (Limited Partnership) (宿遷領道生命常青股權投資合夥企業(有限合夥)) (“**Suqian Lingdao**”), respectively, pursuant to which the investors agreed to subscribe for the total increased registered capital of our Company of RMB20,458,571 for a total consideration of RMB380,120,249. The funds were received by our Company on and prior to December 29, 2020. The following table sets forth the details of the investments:

Name of Investors	Registered capital subscribed	Shares subscribed	Consideration
	(RMB)		(RMB)
Gao Ling Xiheng	5,400,000	5,400,000	100,332,000
Loyal Valley Letai	5,000,000	5,000,000	92,900,000
Beijing Huakong	5,058,571	5,058,571	93,988,249.18
Shanghai Hutong	2,690,000	2,690,000	49,980,200
Mr. Wenkai CHEN (陳文凱)	1,500,000	1,500,000	27,870,000
Suqian Lingdao	810,000	810,000	15,049,800

Upon completion of the investment above, the registered capital of our Company was increased to RMB1,109,999,999.

Liverna Acquisitions and Capital Increases in May 2021

In May 2021, we entered into a series of investment agreements with Liverna whereby (1) we agreed to acquire registered capital of RMB280,000 of Liverna from its shareholders for a cash consideration of RMB40,320,000 (the “**Cash Acquisition**”) and (2) we agreed to subscribe for the increased registered capital of RMB555,556 of Liverna for a cash consideration of RMB160,000,000 and to acquire registered capital of RMB2,926,037 of Liverna from its shareholders at a total consideration of RMB842,698,656, which was settled partly by cash payment of RMB184,999,779.67 and partly by the issue of 28,078,591 Shares to such shareholders of Liverna (the “**Cash and Share Acquisition**”, together with the Cash Acquisition, the “**Liverna Acquisitions**”). The considerations were determined after arm’s length negotiations between our Company and the shareholders of Liverna. The shareholders of Liverna became our registered Shareholders on May 28, 2021. Upon completion of the above investments, we controlled 50.1546% equity interest in Liverna. The following table sets forth the details of share issues to the shareholders of Liverna pursuant to the Cash and Share Acquisition:

Name of Shareholders of Liverna	Shares subscribed
Zhuhai Ruijin Technology Partnership (Limited Partnership) (珠海瑞進科技合夥企業(有限合夥)) (“ Zhuhai Ruijin ”)	2,236,523
Zhuhai Hengqin Qijing Technology Partnership (Limited Partnership) (珠海橫琴麒麟科技合夥企業(有限合夥)) (“ Hengqin Qijing ”)	4,458,562
Shanghai Kangcheng Health Technology Co., Ltd. (上海康橙健康科技有限公司) (“ Shanghai Kangcheng ”)	2,988,452
Zhuhai Hengqin Yuanyan Technology Partnership (Limited Partnership) (珠海橫琴琴原炎科技合夥企業(有限合夥)) (“ Hengqin Yuanyan ”)	2,988,452

HISTORY AND DEVELOPMENT

Name of Shareholders of Liverna	Shares subscribed
Jiangsu Jiequan Tianhui Sumintou Health Industry Fund (Limited Partnership) (江蘇捷泉天匯蘇民投健康產業基金(有限合夥)) (“ Jiequan Tianhui Sumintou ”)	2,988,452
Zhuhai Hengqin Ruifan Technology Partnership (Limited Partnership) (珠海橫琴瑞凡科技合夥企業(有限合夥)) (“ Hengqin Ruifan ”)	12,418,150

Our PRC Legal Advisor has confirmed that the Liverna Acquisitions have been properly and legally completed in accordance with applicable PRC laws and regulations.

In conjunction with the Liverna Acquisitions, we entered into a series of capital increase agreements with (1) Gao Ling Xiheng, (2) Hainan Jiashui, (3) Laobaixing Pharmaceutical Group Co., Ltd. (老百姓醫藥集團有限公司) (“**Laobaixing**”), (4) Qingdao Huakong Growth Equity Investment Partnership (Limited Partnership) (青島華控成長股權投資合夥企業(有限合夥)) (“**Qingdao Huakong**”), (5) Qingdao Penglong, (6) Shenzhen Tongchuang Wenjian Equity Investment Fund Partnership (Limited Partnership) (深圳同創穩健股權投資基金合夥企業(有限合夥)) (“**Tongchuang Wenjian**”), (7) Mr. Hua WU (吳華), (8) Shenzhen Chongshi Private Equity Investment Fund Management Co., Ltd. (深圳崇石私募股權投資基金管理有限公司) (“**Shenzhen Chongshi**”), (9) Yunnan Ziyongchen, (10) Mr. Zhen LIN (林振), (11) Ms. Jing HUANG (黃靜), (12) Mr. Bole MA (馬伯樂) and (13) Tibet Jiaze Venture Capital Co., Ltd. (西藏嘉澤創業投資有限公司) (“**Tibet Jiaze**”), pursuant to which the investors agreed to subscribe for the total increased registered capital of our Company of RMB21,921,409.00 for a total consideration of RMB513,476,123.71. The funds were received by our Company on and prior to May 28, 2021. The following table sets forth the details of the investments:

Name of Investors	Registered capital subscribed (RMB)	Shares subscribed	Consideration (RMB)
Gao Ling Xiheng	253,514	253,514	5,938,185.18
Hainan Jiashui	50,000	50,000	1,171,175.00
Laobaixing	1,150,000	1,150,000	26,937,025.00
Qingdao Huakong	2,136,000	2,136,000	50,032,596.00
Qingdao Penglong	4,225,755	4,225,755	98,981,972.25
Tongchuang Wenjian	1,280,800	1,280,800	30,000,818.80
Mr. Hua WU (吳華)	850,000	850,000	19,909,975.00
Shenzhen Chongshi	210,000	210,000	4,918,935.00
Yunnan Ziyongchen	350,000	350,000	8,198,225.00
Mr. Zhen LIN (林振)	8,538,400	8,538,400	199,999,212.40
Ms. Jing HUANG (黃靜)	426,940	426,940	10,000,429.09
Mr. Bole MA (馬伯樂)	2,400,000	2,400,000	56,216,400.00
Tibet Jiaze	50,000	50,000	1,171,175.00

Upon completion of the Liverna Acquisitions and capital increases in May 2021, the registered capital of our Company was increased to RMB1,159,999,999.

Share Awards to Mr. Yan ZHOU

On June 2, 2021, the Shareholders approved the adoption of the Share Award Scheme. The purpose of the Share Award Scheme is to (1) provide the selected participants with opportunities to purchase our Shares, (2) encourage and retain the selected participants to continue to work for our Group, (3) encourage the selected participants to improve their performance and create higher value for our Company and (4) directly link the interests of the selected participants with the interests of the Shareholders.

HISTORY AND DEVELOPMENT

On the same day, the Shareholders approved the issue of 40,000,000 Shares under the Share Award Scheme for a consideration of RMB40,000,000 to Tibet Sincere Heart, an entity owned as to 99.99% by Mr. Yan ZHOU, to reward Mr. Yan ZHOU's leadership of the management team to exceed the performance target and his major contribution to the rapid development of our Company in the past few years. All the award Shares have been vested and settled, and there are no further conditions.

Upon issue of 40,000,000 Shares to Tibet Sincere Heart, the registered capital of our Company was increased to RMB1,199,999,999.

The table below is a summary of the shareholding structure of our Company as of the Latest Practicable Date and immediately prior to and following the completion of the Global Offering and the Conversion of Domestic Shares into H Shares (assuming the Over-allotment Option and the options under the Pre-IPO ESOP are not exercised):

No.	Name of Shareholders	Shares Subscribed	Approximate percentage of interest in our Company as of the Latest Practicable Date and immediately prior to the Global Offering	Approximate percentage of interest in our Company immediately after completion of the Global Offering and the Conversion of Domestic Shares into H Shares ⁽¹⁾
1. . . .	Mr. Yan ZHOU (周延)	200,000,000	16.6668%	16.5328%
2. . . .	Tibet Sincere Heart	200,000,000	16.6668%	16.5328%
3. . . .	Tibet Yingfeng	100,000,000	8.3334%	8.2664%
4. . . .	Ningbo Free Trade Zone	54,051,428	4.5043%	4.4681%
5. . . .	Lhasa Meihua	50,000,000	4.1667%	4.1332%
6. . . .	Mr. Jie ZHOU (周杰)	40,000,000	3.3333%	3.3066%
7. . . .	Mr. Xin ZHOU (周欣)	40,000,000	3.3333%	3.3066%
8. . . .	Shenyang Xixi	40,000,000	3.3333%	3.3066%
9. . . .	Zongheng Tianxia	40,000,000	3.3333%	3.3066%
10. . .	Yongzhou Qingteng	40,000,000	3.3333%	3.3066%
11. . .	Zhongrenxing	33,390,000	2.7825%	2.7602%
12. . .	Mr. Tingdong YANG (楊廷棟)	30,000,000	2.5000%	2.4799%
13. . .	Ruishang Venture Capital	28,300,000	2.3583%	2.3394%
14. . .	Everest Investment	25,150,000	2.0958%	2.0790%
15. . .	CMB Langyao	19,240,000	1.6033%	1.5905%
16. . .	Jiaying Hekang	18,150,000	1.5125%	1.5004%
17. . .	CMB Growth II	17,990,000	1.4992%	1.4871%
18. . .	Linzhi Desheng	15,000,000	1.2500%	1.2400%
19. . .	Mr. Guanqun SUN (孫冠群)	14,000,000	1.1667%	1.1573%
20. . .	Hengqin Ruifan	12,418,150	1.0348%	1.0265%
21. . .	Ms. Jing HUANG (黃靜)	11,876,940	0.9897%	0.9818%
22. . .	Lancheng Tongliang	8,615,385	0.7179%	0.7122%
23. . .	Mr. Zhen LIN (林振)	8,538,400	0.7115%	0.7058%
24. . .	Tongchuang Jiaying	8,480,000	0.7067%	0.7010%
25. . .	Qingdao Penglong	8,065,755	0.6721%	0.6667%
26. . .	Shanghai Jiexuan	8,000,000	0.6667%	0.6613%
27. . .	Beijing Yizhuang	7,500,000	0.6250%	0.6200%
28. . .	Chenxi No. 1	7,200,000	0.6000%	0.5952%

HISTORY AND DEVELOPMENT

No.	Name of Shareholders	Shares Subscribed	Approximate percentage of interest in our Company as of the Latest Practicable Date and immediately prior to the Global Offering	Approximate percentage of interest in our Company immediately after completion of the Global Offering and the Conversion of Domestic Shares into H Shares ⁽¹⁾
29. . .	Tianjin Jingeng	6,000,000	0.5000%	0.4960%
30. . .	Gao Ling Xiheng	5,653,514	0.4711%	0.4673%
31. . .	Yunnan Ziyongchen	5,500,000	0.4583%	0.4547%
32. . .	Chenxi No. 3	5,400,000	0.4500%	0.4464%
33. . .	Everest No. 2 Investment	5,160,000	0.4300%	0.4265%
34. . .	Beijing Huakong	5,058,571	0.4215%	0.4182%
35. . .	Pude Zhengyuan	5,000,000	0.4167%	0.4133%
36. . .	Shenzhen Hebang	5,000,000	0.4167%	0.4133%
37. . .	Tibet Zhiying	5,000,000	0.4167%	0.4133%
38. . .	Puhua Yuchen	5,000,000	0.4167%	0.4133%
39. . .	Mr. Junping SHI (史俊萍)	5,000,000	0.4167%	0.4133%
40. . .	Loyal Valley Letai	5,000,000	0.4167%	0.4133%
41. . .	Hengqin Qijing	4,458,562	0.3715%	0.3686%
42. . .	Mr. Xiaojun HUANG (黃曉軍)	3,000,000	0.2500%	0.2480%
43. . .	Beijing Key Industry	3,000,000	0.2500%	0.2480%
44. . .	Shanghai Kangcheng	2,988,452	0.2490%	0.2470%
45. . .	Hengqin Yuanyan	2,988,452	0.2490%	0.2470%
46. . .	Jiequan Tianhui Sumintou	2,988,452	0.2490%	0.2470%
47. . .	Hongtao Kexuan	2,800,000	0.2333%	0.2315%
48. . .	Shanghai Hutong	2,690,000	0.2242%	0.2224%
49. . .	Mr. Bole MA (馬伯樂)	2,400,000	0.2000%	0.1984%
50. . .	Zhuhai Ruijin	2,236,523	0.1864%	0.1849%
51. . .	Qingdao Huakong	2,136,000	0.1780%	0.1766%
52. . .	Shenzhen Fenghong	2,000,000	0.1667%	0.1653%
53. . .	Zhiming Yuanyang	1,880,000	0.1567%	0.1554%
54. . .	Langma No. 25	1,800,000	0.1500%	0.1488%
55. . .	Langma No. 23	1,600,000	0.1333%	0.1323%
56. . .	Langma No. 24	1,600,000	0.1333%	0.1323%
57. . .	Mr. Wenkai CHEN (陳文凱)	1,500,000	0.1250%	0.1240%
58. . .	Lancheng Chengchun	1,384,615	0.1154%	0.1145%
59. . .	Tongchuang Wenjian	1,280,800	0.1067%	0.1059%
60. . .	Shenzhen Gongying	1,250,000	0.1042%	0.1033%
61. . .	Tongchuang Jiazhi	1,160,000	0.0967%	0.0959%
62. . .	Laobaixing	1,150,000	0.0958%	0.0951%
63. . .	Hainan Jiashui	1,050,000	0.0875%	0.0868%
64. . .	Mr. Hua WU (吳華)	850,000	0.0708%	0.0703%
65. . .	Suqian Lingdao	810,000	0.0675%	0.0670%
66. . .	Shenzhen Chongshi	210,000	0.0175%	0.0174%
67. . .	Tibet Jiaze	50,000	0.0042%	0.0041%
Total		1,199,999,999	100.0000 %	

HISTORY AND DEVELOPMENT

Notes:

- (1) Such percentage figures are based on the assumption that the Over-allotment Option and the options granted under the Pre-IPO ESOP are not exercised.

Our PRC Legal Advisor has confirmed that the above mentioned equity transfers, capital increases and joint-stock conversion have been properly and legally completed in all material aspects and all requisite regulatory approvals have been obtained in accordance with the applicable PRC laws and regulations.

PREVIOUS PLAN FOR A-SHARE LISTING

On December 7, 2020, we entered into a pre-listing tutoring engagement agreement with China Securities Co., Ltd. (“**China Securities**”) in relation to our previous plan to list on the Science and Technology Innovation Board (“**Sci-Tech Innovation Board**”) of the Shanghai Stock Exchange. As part of the preparation for such preliminary listing plan, we filed a notice of pre-listing tutoring for A-share listing application with the Beijing office of CSRC on December 9, 2020.

Due to the overall more active market environment for vaccine companies and more efficient H-share vetting process, we subsequently considered that a listing on the Stock Exchange would be more favorable to our overall strategic development. Therefore, we decided to change our plan and proceed with the Listing. On June 24, 2021, we terminated the pre-listing tutoring engagement agreement with China Securities in relation to our planned A-share listing. On June 28, 2021, we filed a notice of cessation on the pre-listing tutoring with the Beijing office of CSRC. No listing application has ever been submitted to the CSRC.

The Directors confirmed that the notice of cessation on the pre-listing tutoring filed with the Beijing office of the CSRC was withdrawn voluntarily and that they are not aware of anything material in relation to the Company’s previous plan for A-share listing that needs to be brought to the attention of the Stock Exchange or potential investors of the Global Offering. Based on the independent due diligence of the Joint Sponsors, nothing has come to the attention of the Joint Sponsors that would cause them to cast doubt on the reasonableness of the views of the Directors.

MAJOR SUBSIDIARIES OF OUR COMPANY

We operate our businesses primarily through our subsidiaries, seven of which we consider are major subsidiaries of our Company.

AIM Honesty

AIM Honesty was established in the PRC on September 20, 1993, with a current registered capital of RMB250,000,000. In December 2015, we acquired the entire equity interest in AIM Honesty for a total consideration of RMB660,000,000. AIM Honesty has been primarily engaged in the manufacture and commercialization of recombinant HBV vaccines (Hansenula Polymorpha).

AIM Kanghuai

AIM Kanghuai was established in the PRC on October 13, 2011, with a current registered capital of RMB360,000,000. In November 2016, we acquired a controlling interest in AIM Kanghuai and then acquired the remaining equity interest in AIM Kanghuai in December 2017, for a total consideration of RMB343,337,929. AIM Kanghuai has been focused on the manufacture and commercialization of inactivated HAV vaccines (HDC).

HISTORY AND DEVELOPMENT

AIM Weixin

AIM Weixin was established in the PRC on December 24, 2002, with a current registered capital of RMB515,306,120. In November 2017 we acquired a controlling interest in AIM Weixin both directly and indirectly through Beibi Road and then acquired the remaining equity interest in AIM Weixin in January 2019, for a total consideration of RMB1,100,238,000. AIM Weixin has been principally engaged in the manufacture and commercialization of HFRS vaccine, mumps vaccine and MPSV4.

Rong'an Bio

Rong'an Bio was established in the PRC on April 30, 2001, with a current registered capital of RMB60,000,000 and was owned by our Company indirectly through AIM Weixin as to 80% since November 2017. Upon completion of the Ningbo Free Trade Zone Investment in October 2020, Rong'an Bio became an indirectly wholly-owned subsidiary of our Company. Rong'an Bio has been engaged in the manufacture and commercialization of human rabies vaccine (Vero cell).

AIM Explorer

AIM Explorer was established in the PRC on September 10, 2018, with a current registered capital of RMB250,000,000 and was owned by our Company as to 51% since its establishment. In November 2020, we completed the acquisition of the remaining 49% equity interest in AIM Explorer from Shenyang Senturui Biotechnology Co., Ltd. (瀋陽森途瑞生物科技有限公司) (now Yifeng Senturui Biotechnology Co., Ltd. (宜豐森途瑞生物科技有限公司)) for a consideration of RMB512,527,701. AIM Explorer is established as a research platform to support the innovation and upgrading of our vaccines.

Liverna

Liverna was established in the PRC on June 21, 2019, with a current registered capital of RMB7,500,000. Upon completion of the Liverna Acquisitions in May 2021, we controlled 50.1546% equity interest in Liverna. Other than the interest they had in Liverna, the other minority shareholders of Liverna are Independent Third Parties. We operate our mRNA platform through Liverna.

AIM Jianchi

AIM Jianchi was established in the PRC on May 17, 2021, with a current registered capital of RMB50,000,000. AIM Jianchi was established in collaboration with Shanghai Public Health Clinical Center and was owned as to 90% by our Company and as to 10% by Chengdu Bole Action Biological Products Co., Ltd. (成都伯樂行動生物製品有限公司), an Independent Third Party. AIM Jianchi is established to focus on the research and development and commercialization of genetically engineered recombinant vaccines.

MAJOR ACQUISITIONS, DISPOSALS AND MERGERS

During the Track Record Period, we entered into acquisitions and disposals with related parties, including (i) the share purchase agreement entered between Shenyang Aimei Pharmaceutical Technology Co., Ltd. (瀋陽艾美醫藥科技有限公司, a previous subsidiary of us which was absorbed and merged into our Company and subsequently deregistered in 2020) and Chambray Investment Ltd. in January 2019 for the acquisition of 20% shareholdings of AIM Weixin with a consideration of RMB220.0 million; (ii) the share purchase agreement entered between Shenyang Aimei Pharmaceutical Technology Co., Ltd. and Little Wheel Investment Ltd. in January 2019 for the acquisition of 19.3% shareholdings of AIM Weixin with a consideration of RMB213.0 million; and (iii) the disposal of our 51% equity interests in our

HISTORY AND DEVELOPMENT

previous subsidiary named AIM Explorer Biopharmaceutical Research Institute (Shenyang) Co., Ltd. (艾美探索者生物製藥研究院(瀋陽)有限公司) (“**AIM Explorer Shenyang**”) to Alhealth Eye Medicine (Liaoning) Co., Ltd. (艾爾健康眼藥(遼寧)有限公司) in January 2020 with nil consideration (the “**Disposal**”). As part of the development and strategic planning of the Company’s research capabilities, the Company established AIM Explorer in Shanghai in 2018, which has become the main research platform of the Group. Given that AIM Explorer Shenyang had no actual business operations since its establishment, the Company decided to dispose of this subsidiary to streamline the Group’s structure. As the registration capital of AIM Explorer Shenyang had not been paid up at the time of the Disposal, the Disposal was therefore settled with nil consideration.

During the Track Record Period and until the Latest Practicable Date, except as otherwise disclosed above and in this section, we did not conduct any acquisitions, disposals or mergers that we consider to be material to us.

PRE-IPO INVESTMENTS

Overview

The following table sets forth a summary of the details of the Pre-IPO Investments:

	Capital Increases in May 2020 and September 2020, and Ningbo Free Trade Zone Investment	Capital Increases in November 2020	Liverna Acquisitions and Capital Increases in May 2021
Amount of registered capital increase	RMB89,551,428	RMB20,458,571	RMB50,000,000
Amount of consideration paid	RMB1,191,034,000	RMB380,120,249	RMB1,171,175,000
Date of last payment of consideration by the Pre-IPO investors	July 24, 2020 September 23, 2020 October 27, 2020	December 29, 2020	May 31, 2021
Post-money valuation of our Company	RMB14.49 billion	RMB20.62 billion	RMB27.17 billion
Cost per Share paid under the Pre-IPO Investments	RMB13.3000	RMB18.5800	RMB23.4235
Discount to the Offer Price⁽¹⁾ . .	6.79%	-30.21%	-64.16%
Use of proceeds and whether they have been fully utilized	Approximately 85% of the proceeds raised from the Pre-IPO Investments have been used for (1) acquisitions of our subsidiaries; (2) purchase of equipment and construction of factories; (3) land purchase; (4) clinical trials and (5) working capital.		
Lock-up	The Pre-IPO Investors are subject to a lock up period of 12 months following the Listing Date according to the PRC Company Law.		

HISTORY AND DEVELOPMENT

	Capital Increases in May 2020 and September 2020, and Ningbo Free Trade Zone Investment	Capital Increases in November 2020	Liverna Acquisitions and Capital Increases in May 2021
Strategic benefits of the Pre-IPO Investments brought to Our Group	Our Group would benefit from the additional capital injected into our Group which will provide support for our research and development, construction of production facilities as well as daily operations and such investments demonstrate the investors' commitment and confidence in the business performance and operations, strengths and long-term prospects of our Group.		

Notes:

(1) The discount is calculated based on the Offering Price of HK\$16.16.

The considerations for the Pre-IPO Investments were determined based on arm's length negotiation between the parties taking into account the Company's research and development progress, pipeline candidates, business operations and future prospects.

Special Rights of the Pre-IPO Investors

None of the Shareholders, including the Pre-IPO Investors were granted any special rights in relation to our Company.

Information on the Pre-IPO Investors

The background information of the Pre-IPO Investors is set out below. To the best knowledge of our Directors, save as otherwise disclosed below in relation to Beijing Huakong, Beijing Key Industry, Beijing Yizhuang, CMBI, Hengqin Qijing, Hengqin Ruifan, Hengqin Yuanyan, Jiequan Tianhui Sumintou, Mr. Bole MA, Mr. Wenkai CHEN, Ms. Jing HUANG, Ningbo Free Trade Zone, Qingdao Huakong, Qingdao Penglong, Shanghai Kangcheng, Shenzhen Gongying, Shenzhen Chongshi, Tibet Jiaze, Tongchuang Investments, Yunnan Ziyongchen and Zhuhai Ruijin, (i) there is no past or present relationships among the Pre-IPO Investors, their existing shareholders and directors; and (ii) the Pre-IPO Investors are Independent Third Parties, and there is no past or present relationship among the Pre-IPO Investors, their existing shareholders, their existing directors and our Company and our subsidiaries, their existing controlling shareholders, directors and senior management, and any of their respective existing associates.

1. *Beijing Huakong*

Beijing Huakong is a limited partnership established in the PRC and is primarily engaged in private equity investments. Beijing Huakong is managed by Beijing Huakong Investment & Consultant Co., Ltd. (北京華控投資顧問有限公司) with an aggregate amount of assets under management of RMB1.5 billion which is ultimately controlled by Yang ZHANG (張揚). To the best knowledge of our Directors, none of its limited partners holds more than 30% interests in the partnership. Beijing Huakong approached our Company for investment opportunities upon conducting industry research, and it invested in our Company because of our development potential and the prospect of the vaccine industry. In addition to investment in our Company, it also invested in Boruikang Technology Co., Ltd. (博睿康科技(常州)股份有限公司). To the best knowledge of our Directors, except for the fact that both Beijing Huakong and Qingdao Huakong are ultimately controlled by Yang ZHANG and that the manager of Beijing Huakong is indirectly owned

HISTORY AND DEVELOPMENT

by the manager of Qingdao Huakong, there is no past or present relationships among Beijing Huakong and other Pre-IPO Investors. Upon completion of the Global Offering and the Conversion of Domestic Shares into H Shares (assuming the Over-allotment Option and the options under the Pre-IPO ESOP are not exercised), Beijing Huakong will hold 0.4182% of our Shares.

2. *Beijing Key Industry*

Beijing Key Industry is a limited partnership established in the PRC and is mainly engaged in non-securities business investments, investment management, and consulting business with an aggregate investment of approximately RMB141 million. Beijing Key Industry is managed by its general partner and private equity fund manager, Beijing E-town International Industrial Investment Management Co., Ltd (北京屹唐華睿投資管理有限公司), which is ultimately owned by the Financial Audit Bureau of Beijing Economic-Technological Development Area (北京經濟技術開發區財政審計局). To the best knowledge of our Directors, except for Beijing Yizhuang, which holds approximately 47.4% interests in the partnership and is ultimately owned by the Financial Audit Bureau of Beijing Economic-Technological Development Area, none of its limited partners holds more than 30% interests in the partnership. Beijing Key Industry invested in other healthcare companies including Beijing Mabworks Biotech Co Ltd (北京天廣實生物技術股份有限公司) and Beijing Datsing Bio-Tech Co., Ltd (北京大清生物技術股份有限公司). Our Company became acquainted with Beijing Key Industry when our Company expanded our operation in the Daxing District in Beijing, and it invested in our Company because of our development potential. To the best knowledge of our Directors, except for the fact that one of its limited partners, Beijing Yizhuang, is also a Pre-IPO Investor, there is no past or present relationships among Beijing Key Industry and other Pre-IPO Investors. Upon completion of the Global Offering and the Conversion of Domestic Shares into H Shares (assuming the Over-allotment Option and the options under the Pre-IPO ESOP are not exercised), Beijing Key Industry will hold 0.2480% of our Shares.

3. *Beijing Yizhuang*

Beijing Yizhuang is a limited partnership established in the PRC and is mainly engaged in investments, asset management, investment consulting and enterprise management consulting businesses with a registered capital of over RMB50,002 million and aggregate amount of assets under management of over RMB10 billion. Beijing Yizhuang is managed by its general partner, Beijing E-Town International Industrial Investment Management Co., Ltd. (北京亦莊國際產業投資管理有限公司), which is ultimately owned by the Financial Audit Bureau of Beijing Economic-Technological Development Area (北京經濟技術開發區財政審計局). Beijing E-town International Investment and Development Co., Ltd. (北京亦莊國際投資發展有限公司) is the only limited partner which holds over 99.9% interests in the partnership. In addition to the investments in our Company, Beijing Yizhuang also invested in healthcare funds including but without limitation to Beijing Yizhuang Biomedicine M&A Investment Center (Limited Partnership) (北京亦莊生物醫藥併購投資中心(有限合夥)), Beijing Yizhuang Phase II Biomedical Industry Investment Fund (Limited Partnership) (北京亦莊二期生物醫藥產業投資基金(有限合夥)), Beijing Huagai Xincheng Yuanhang Medical Industry Investment Partnership (Limited Partnership) (北京華蓋信誠遠航醫療產業投資合夥企業(有限合夥)). Our Company became acquainted with Beijing Yizhuang when our Company expanded our operation in the Daxing District in Beijing, and it invested in our Company because of our development potential and the conformity between the principal business of our Company and the investment directions of Beijing Yizhuang. To the best knowledge of our Directors, except for the fact that Beijing Yizhuang is one of the limited partners of Beijing Key Industry, which is also a Pre-IPO Investor, that the general partner of Beijing Yizhuang is the shareholder of the general partner of Beijing Key Industry and that the limited partner of Beijing Yizhuang, Beijing E-town International Investment and Development Co., Ltd., is also a limited partner of Beijing Key Industry, there is no past or present relationships among Beijing Yizhuang, its existing partners and other Pre-IPO Investors. Upon completion of the Global Offering and the Conversion of Domestic Shares into H Shares (assuming the Over-allotment Option and the options under the Pre-IPO ESOP are not exercised), Beijing Yizhuang will hold 0.6200% of our Shares.

HISTORY AND DEVELOPMENT

4. *CMBI*

Each of CMB Growth II and CMB Langyao (“CMBI”) is a limited partnership established in the PRC and is primarily engaged in equity investment and investment management businesses, together with Shenzhen Gongying managing an aggregate amount of assets under management of approximately RMB9 billion. Each of CMB Growth II and CMB Langyao is managed by CMB International Capital Management (Shenzhen) Co., Ltd. (招銀國際資本管理(深圳)有限公司) (“CMB Shenzhen”) as its general partner. CMB Shenzhen is a wholly owned subsidiary of CMB Financial Holdings (Shenzhen) Co., Ltd. (招銀金融控股(深圳)有限公司) which is in turn wholly-owned by CMB International Capital Corporation Limited (招銀國際金融有限公司). To the best knowledge of our Directors, (i) CMB Financial Holdings (Shenzhen) Co., Ltd. (招銀金融控股(深圳)有限公司), which holds approximately 99.83% interests of the partnership, is the only limited partner of CMB Growth II; and (ii) except for Shenzhen Zhaoyinsihao Equity Investment Partnership (Limited Partnership) (深圳市招銀肆號股權投資合夥企業(有限合夥)) and the National Council of Social Security Fund (全國社會保障基金理事會), which hold respectively approximately 41.92% and 40.00% interests in the partnership, none of the limited partners of CMB Langyao holds more than 30% interests in the partnership. In addition to the investments in our Company, CMBI and its Affiliates invested in healthcare companies including but without limitation to Novogene Co., Ltd. (北京諾禾致源科技股份有限公司) (SSE: 688315), Cathay Biotech Inc. (上海凱賽生物技術股份有限公司) (SSE: 688065), Shenzhen Chipscreen Biosciences Co., Ltd. (深圳微芯生物科技股份有限公司) (SSE: 688321) and Burning Rock Biotech Limited (NASDAQ: BNR). CMBI approached our Company for investment opportunities upon conducting research, and it invested in our Company because of our development potential. To the best knowledge of our Directors, except for the fact that Shenzhen Gongying is one of the limited partners of CMB Langyao, and that both CMB Langyao and CMB Growth II are managed by CMB Shenzhen, there is no past or present relationships among CMBI, its existing shareholders, its existing directors and other Pre-IPO Investors. Upon completion of the Global Offering and the Conversion of Domestic Shares into H Shares (assuming the Over-allotment Option and the options under the Pre-IPO ESOP are not exercised), CMB Growth II and CMB Langyao will hold 1.4871% and 1.5905% of our Shares, respectively.

5. *Hainan Jiashui*

Hainan Jiashui is a limited liability company established in the PRC and is primarily engaged in equity investments and financial consultation with investments under management of RMB20 million. Hainan Jiashui is ultimately controlled by Yunjuan WANG (王雲娟). Hainan Jiashui has not invested in the healthcare industry other than in our Company. Our Company became acquainted with Hainan Jiashui through introduction by friends. It invested in our Company because of our development potential. Upon completion of the Global Offering and the Conversion of Domestic Shares into H Shares (assuming the Over-allotment Option and the options under the Pre-IPO ESOP are not exercised), Hainan Jiashui will hold 0.0868% of our Shares.

6. *Hengqin Qijing*

Hengqin Qijing is a limited partnership established in the PRC and is primarily engaged in technology consulting and enterprise management consulting business with an aggregate amount of assets under management of RMB18 million. Hengqin Qijing is managed by Qijing TAO (陶麒麟) as its general partner who holds 80% interests in the partnership. To the best knowledge of our Directors, there is no limited partner holding more than 30% interests in the partnership. In respect of its investment experience in healthcare industry, it also invested in Liverna. Our Company became acquainted with Hengqin Qijing through the Liverna Acquisitions. To the best knowledge of our Directors, except for the fact that Hengqin Qijing is a shareholder of Liverna, Hengqin Qijing is an Independent Third Party, and there is no past or present relationship between Hengqin Qijing, their existing shareholders, their existing directors and our Company and our subsidiaries, their existing controlling shareholders, directors and senior management, and any of their respective existing associates. Upon completion of the Global Offering and the Conversion of Domestic Shares into H Shares (assuming the Over-allotment Option and the options under the Pre-IPO ESOP are not exercised), Hengqin Qijing will hold 0.3686% of our Shares.

HISTORY AND DEVELOPMENT

7. *Hengqin Ruifan*

Hengqin Ruifan is a limited partnership established in the PRC and is primarily engaged in technology consulting and development business with investments under management of RMB241 million. Hengqin Ruifan is managed by Yucai PENG (彭育才) as its general partner. To the best knowledge of our Directors, Yucai PENG (彭育才) holds 80% of partnership interest in Hengqin Ruifan through Liverna Biotech Limited (基源生物科技有限公司) and holds the remaining 20% of partnership interest directly. Prior to becoming one of our Pre-IPO Investors, Hengqin Ruifan was an investor of Liverna. Our Company became acquainted with Hengqin Ruifan in its acquisition of Liverna, as a result of which Hengqin Ruifan became a shareholder of our Company and became one of our Pre-IPO Investors. To the best knowledge of our Directors, (i) except as disclosed under “—30. Zhuhai Ruijin” below and that Saihua PENG, sister of Yucai PENG, used to be a limited partner of Hengqin Ruifan with 0.01% interests until December 3, 2021, there is no past or present relationships among Hengqin Ruifan and other Pre-IPO Investors and (ii) Hengqin Ruifan is an Independent Third Party, and there is no past or present relationship between Hengqin Ruifan, its existing general partner and our Company and its subsidiaries, their existing controlling shareholders, directors and senior management, and any of their respective existing associates except for the fact that Hengqin Ruifan is a non-substantial shareholder of our Company and a shareholder of Liverna, Yucai PENG is our chief scientist (not a senior management member) and a director and general manager of Liverna and his sister Saihua PENG is a supervisor of Liverna. Upon completion of the Global Offering and the Conversion of Domestic Shares into H Shares (assuming the Over-allotment Option and the options under the Pre-IPO ESOP are not exercised), Hengqin Ruifan will hold 1.0265% of our Shares.

8. *Hengqin Yuanyan*

Hengqin Yuanyan is a limited partnership established in the PRC and is primarily engaged in technology consulting and enterprise management consulting business with a net asset of more than RMB25 million. Hengqin Yuanyan is managed by Wenbiao ZHANG (張文標) as its general partner holding 99% interests in the partnership. Wenqin ZHANG (張文欽) is the only limited partner of the partnership. Our Company became acquainted with Hengqin Yuanyan through the Liverna Acquisitions, and Hengqin Yuanyan invested in our Company because of our development potential. To the best knowledge of our Directors, except for the fact that Hengqin Yuanyan was a shareholder of Liverna, Hengqin Yuanyan is an Independent Third Party, and there is no past or present relationship between Hengqin Yuanyan, their existing shareholders, their existing directors and our Company and our subsidiaries, their existing controlling shareholders, directors and senior management, and any of their respective existing associates. Upon completion of the Global Offering and the Conversion of Domestic Shares into H Shares (assuming the Over-allotment Option and the options under the Pre-IPO ESOP are not exercised), Hengqin Yuanyan will hold 0.2470% of our Shares.

9. *Gao Ling Xiheng*

Gao Ling Xiheng is a limited partnership established in the PRC and the limited partner investors of which are private equity funds managed by Zhuhai Gao Ling Equity Investment Management Co., Ltd. (珠海高瓴股權投資管理有限公司), a limited liability company established in the PRC with assets under management exceeding HKD1 billion. The general partner of Gao Ling Xiheng is Shenzhen Gao Ling Tiancheng III Investment Co., Ltd. (深圳高瓴天成三期投資有限公司) (“**Gao Ling Tiancheng III**”), which is owned by Haiyan ZHANG (張海燕), Cuifang MA (馬翠芳), Liang LI (李良), Wei CAO (曹偉) and Jia ZHU (祝佳). To the best knowledge of our Directors, except for (i) Shenzhen Gao Ling Muqi Equity Investment Fund L.P. (深圳高瓴慕祺股權投資基金合夥企業(有限合夥)) which holds approximately 42.56% interests in Gao Ling Xiheng and the general partner of which is Gao Ling Tiancheng III, and (ii) Xiamen Gao Ling Ruiqi Equity Investment Fund L.P. (廈門高瓴瑞祺股權投資基金合夥企業(有限合夥)) which holds approximately 41.93% interests in Gao Ling Xiheng and the general

HISTORY AND DEVELOPMENT

partner of which is Xiamen Gao Ling Tiancheng III Investment Management Co., Ltd. (廈門高瓴天成三期投資管理有限公司), none of the limited partners of Gao Ling Xiheng holds more than 30% interests in the partnership. Gao Ling Xiheng has only invested in our Company. Gao Ling Xiheng became acquainted with our Company through conducting its industry researches. It invested in our Company because of the development potential of the vaccine market and our Company. Upon completion of the Global Offering and the Conversion of Domestic Shares into H Shares (assuming the Over-allotment Option and the options under the Pre-IPO ESOP are not exercised), Gao Ling Xiheng will hold 0.4673% of our Shares.

10. Hongtao Kexuan

Hongtao Kexuan is a limited partnership established in the PRC and is mainly engaged in equity investments, with an aggregate investment under management of over RMB37 million. Hongtao Kexuan is managed by its general partner Shenzhen Hongtao Fund Management Co., Ltd. (深圳市弘陶基金管理有限公司) which is ultimately controlled by Jun QIU (邱俊), its legal representative. To the best knowledge of our Directors, except for Jiaying Tianxuan Equity Investment Partnership (Limited Partnership) (嘉興天軒股權投資合夥企業(有限合夥)), which is ultimately controlled by Rongpeng XIA (夏榮鵬) and holds approximately 44.96% interests in the partnership, none of the limited partners of Hongtao Kexuan holds more than 30% interests in the partnership. In addition to the investment in our Company, the general partner of Hongtao Kexuan, Shenzhen Hongtao Fund Management Co., Ltd., has been investing in the healthcare industry, with investments in biotechnology companies including but without limitation to Guangdong Danxia Biology Pharmacy Co., Ltd. (廣東丹霞生物製藥有限公司), Hinova Pharmaceuticals Inc. (海創藥業股份有限公司) and Sirnaomics Ltd. Hongtao Kexuan became acquainted with our Company through the introduction of its peers. It invested in our Company because of the prospects of the vaccine market, our market share and pipeline. Upon completion of the Global Offering and the Conversion of Domestic Shares into H Shares (assuming the Over-allotment Option and the options under the Pre-IPO ESOP are not exercised), Hongtao Kexuan will hold 0.2315% of our Shares.

11. Jiequan Tianhui Sumintou

Jiequan Tianhui Sumintou is a limited partnership established in the PRC and is mainly engaged in equity investments and enterprise management consulting business, with an aggregate investment under management of more than RMB467 million. Jiequan Tianhui Sumintou is managed by Jiangsu Jiequan Tianhui Sumintou Health Industry Investment Management Co., Ltd. (江蘇惠泉天匯蘇民投健康產業投資管理有限公司), its general partner, which is ultimately controlled by An'gen YUAN (袁安根). To the best knowledge of our Directors, except for Jiangsu Private Investment Holding Co., Ltd. (江蘇民營投資控股有限公司), which holds approximately 39.60% interests in the partnership, none of the limited partners of Jiequan Tianhui Sumintou holds more than 30% interests in the partnership. In addition to the investments in our Company, its general partner and manager, Jiangsu Tianhui Sumintou Health Industry Investment Management Co., Ltd, together with Jiangsu Tianhui Hongyou Investment Management Co., Ltd. (江蘇天匯紅優投資管理有限公司), another limited partnership controlled by An'gen YUAN, have been investing in the healthcare industry, with a focus on innovative medical treatment and advanced medical equipment. Jiangsu Tianhui Sumintou Health Industry Investment Management Co., Ltd has invested in pharmaceutical companies including but not limited to Dian Diagnostics Group Co., Ltd. (迪安診斷技術集團股份有限公司) (SHE: 300244), Suzhou Nanomicro Technology Co., Ltd. (蘇州納微科技股份有限公司) (SSE: 688690), Wuhan Hzymes Biotechnology Co., Ltd. (武漢瀚海新酶生物科技有限公司), Nanjing Shihe Gene Biotechnology Co., Ltd. (南京世和基因生物技術股份有限公司) and Liverna. Our Company became acquainted with Jiequan Tianhui Sumintou in its acquisition of Zhuhai Ruijin's shareholding in Liverna, as a result of which Jiequan Tianhui Sumintou became a shareholder of our Company and one of our Pre-IPO Investors. To the best knowledge of our Directors, except for the fact that Jiequan Tianhui Sumintou was a shareholder of Liverna, Jiequan Tianhui Sumintou is an Independent Third Party, and there is no past or present relationship between Jiequan Tianhui Sumintou, their existing shareholders, their existing directors and our Company and its subsidiaries, their existing controlling shareholders,

HISTORY AND DEVELOPMENT

directors and senior management, and any of their respective existing associates. Upon completion of the Global Offering and the Conversion of Domestic Shares into H Shares (assuming the Over-allotment Option and the options under the Pre-IPO ESOP are not exercised), Jiequan Tianhui Sumintou will hold 0.2470% of our Shares.

12. Laobaixing

Laobaixing is a limited liability company established in the PRC that is mainly engaged in equity investments. Laobaixing is ultimately controlled by Zilong XIE (謝子龍). In respect of its investment experience in healthcare industry, Laobaixing is the largest shareholder of Laobaixing Pharmacy Chain Joint Stock Company (老百姓大藥房連鎖股份有限公司) (SSE: 603883). Our Company became acquainted with Laobaixing as a result of long-term exchange and communication, and Laobaixing invested in our Company because of our potential commercial synergy and development. Upon completion of the Global Offering and the Conversion of Domestic Shares into H Shares (assuming the Over-allotment Option and the options under the Pre-IPO ESOP are not exercised), Laobaixing will hold 0.0951% of our Shares.

13. Loyal Valley Letai

Loyal Valley Letai is a limited partnership established in the PRC and is primarily engaged in investment management and asset management businesses with a subscription amount of over RMB93 million. Loyal Valley Letai is managed by Shanghai Loyal Valley Investment Management Co., Ltd. (上海正心谷投資管理有限公司), its general partner, which is in turn wholly-owned by Lijun LIN (林利軍). To the best knowledge of our Directors, except for Shanghai Tan Ying Investment Partnership (Limited Partnership) (上海檀英投資合夥企業(有限合夥)) and Zhejiang Longsheng Group Co., Ltd. (浙江龍盛集團股份有限公司) (SSE: 600352), which respectively holds approximately 48.99% interests in the partnership, none of the limited partners of Loyal Valley Letai holds more than 30% interests in the partnership. Shanghai Tan Ying Investment Partnership (Limited Partnership) is ultimately controlled by Lijun LIN and Shuilong RUAN is the largest shareholder of Zhejiang Longsheng Group Co., Ltd. In addition to the investments in our Company, its manager, Shanghai Loyal Valley Investment Management Co., Ltd., has been investing in the healthcare industry, with investments in, without limitation, Shanghai Junshi Biosciences Co., Ltd. (上海君實生物醫藥科技股份有限公司) (SEHK: 1877), Shanghai Henlius Biotech Co., Ltd. (上海復宏漢霖生物技術股份有限公司) (SEHK: 2696) and InnoCare Pharma Limited (諾誠健華醫藥有限公司) (SEHK: 9969). Loyal Valley Letai became acquainted with our Company through its research in the vaccine market and introduction by its peers. It invested in our Company because of our development potential, particularly the prospects of our pipeline. Upon completion of the Global Offering and the Conversion of Domestic Shares into H Shares (assuming the Over-allotment Option and the options under the Pre-IPO ESOP are not exercised), Loyal Valley Letai will hold 0.4133% of our Shares.

14. Mr. Bole MA (馬伯樂)

Mr. Bole MA (馬伯樂) is a PRC resident. To the best knowledge of our Directors, Mr. Bole MA has invested in another healthcare company, Walvax Biotechnology Co., Ltd. (雲南沃森生物技術股份有限公司) (SHE: 300142). The Group became acquainted with Mr. Bole MA by way of the friendship between Mr. Bole MA and Mr. Yan ZHOU, and Mr. Bole MA invested in our Company because of his trust in Mr. Yan ZHOU, the prospect of the vaccine industry and our development potential. To the best knowledge of our Directors, other than his investments in our Company and Walvax Biotechnology Co., Ltd. (雲南沃森生物技術股份有限公司) (SHE: 300142), Mr. Bole MA has no other previous investment experience in healthcare industry. To the best knowledge of our Directors, except for the fact that Mr. Bole MA has invested in our Company through Zongheng Tianxia and that Mr. Bole MA is a shareholder of Chengdu Bole Action Biological Products Co., Ltd. (成都伯樂行動生物製品有限公司) which has in turn invested in AIM Jianchi, Mr. Bole MA is an Independent Third Party, and there is no past or present relationship between Mr. Bole MA and our Company and its subsidiaries, their existing controlling shareholders,

HISTORY AND DEVELOPMENT

directors and senior management, and any of their respective existing associates. Upon completion of the Global Offering and the Conversion of Domestic Shares into H Shares (assuming the Over-allotment Option and the options under the Pre-IPO ESOP are not exercised), Mr. Bole MA will hold 0.1984% of our Shares.

15. Mr. Hua WU (吳華)

Mr. Hua WU (吳華) is a PRC resident. To the best knowledge of our Directors, Mr. Hua WU has not invested in the healthcare industry other than in our Company. The Group became acquainted with Mr. Hua WU through an introduction by a Shareholder, and Mr. Hua WU invested in our Company because of our development potential. Upon completion of the Global Offering and the Conversion of Domestic Shares into H Shares (assuming the Over-allotment Option and the options under the Pre-IPO ESOP are not exercised), Mr. Hua WU will hold 0.0703% of our Shares.

16. Mr. Wenkai CHEN (陳文凱)

Mr. Wenkai CHEN (陳文凱) is a PRC resident. To the best knowledge of our Directors, other than his investment in our Company, Mr. Wenkai CHEN has invested in certain pharmaceutical and medical devices companies on the secondary stock market. The Group became acquainted with Mr. Wenkai CHEN through Linzhi Desheng, of which Mr. Wenkai CHEN is the legal representative, and Mr. Wenkai CHEN invested in our Company because of our development potential. To the best knowledge of our Directors, except for the fact that Mr. Wenkai CHEN is the legal representative of Linzhi Desheng, there is no past or present relationship between Mr. Wenkai CHEN and our Company and our subsidiaries, their existing controlling shareholders, directors and senior management, and any of their respective existing associates. Upon completion of the Global Offering and the Conversion of Domestic Shares into H Shares (assuming the Over-allotment Option and the options under the Pre-IPO ESOP are not exercised), Mr. Wenkai CHEN will hold 0.1240% of our Shares.

17. Mr. Zhen LIN (林振)

Mr. Zhen LIN (林振) is a PRC resident. To the best knowledge of our Directors, Mr. Zhen LIN has not invested in the healthcare industry other than in our Company, the Group became acquainted with Mr. Zhen LIN through an introduction by a friend of Mr. Zhen LIN, and Mr. Zhen LIN invested in our Company because of the prospect of the healthcare industry, our development potential and management team. Upon completion of the Global Offering and the Conversion of Domestic Shares into H Shares (assuming the Over-allotment Option and the options under the Pre-IPO ESOP are not exercised), Mr. Zhen LIN will hold 0.7058% of our Shares.

18. Ms. Jing HUANG (黃靜)

Ms. Jing HUANG (黃靜) is a PRC resident. To the best knowledge of our Directors, Ms. Jing HUANG has worked in the pharmaceutical industry but has not invested in the healthcare industry other than in our Company. The Group became acquainted with Ms. Jing HUANG through AIM Kanghuai, and Ms. Jing HUANG invested in our Company because of the prospect of the healthcare industry, our development potential and management team. To the best knowledge of our Directors, except for the fact that Ms. Jing HUANG was a shareholder of AIM Kanghuai, Ms. Jing HUANG is an Independent Third Party and there is no past or present relationships between Ms. Jing HUANG and our Company and our subsidiaries, their existing controlling shareholders, directors and senior management, and any of their respective existing associates. Upon completion of the Global Offering and the Conversion of Domestic Shares into H Shares (assuming the Over-allotment Option and the options under the Pre-IPO ESOP are not exercised), Ms. Jing HUANG will hold 0.9818% of our Shares.

HISTORY AND DEVELOPMENT

19. *Ningbo Free Trade Zone*

Ningbo Free Trade Zone is a limited liability company established in the PRC that is mainly engaged in state-owned asset management. Ningbo Free Trade Zone is owned by Ningbo Beilun District State-owned Capital Operation Co., Ltd. (寧波市北崙區國有資本運營有限公司), established by Ningbo Economic and Technological Development Zone State-owned Assets Management Center (寧波經濟技術開發區國有資產管理中心), a district state-owned assets management center of Beilun District Government under the Ningbo Municipal Government, as to 91.71% and by Zhejiang Province Financial Development Co., Ltd. (浙江省財務開發有限責任公司) as to 8.29%. To the best knowledge of our Directors, Ningbo Free Trade Zone has not invested in the healthcare industry other than in our Company. The Group became acquainted with Ningbo Free Trade Zone through the Ningbo Free Trade Zone Management Committee (寧波保稅區管理委員會) (the “**NFTZ Management Committee**”), which previously owned Ningbo Free Trade Zone as to 91.71% and was an agency of Ningbo People’s Government, and Ningbo Free Trade Zone invested in our Company in order to fulfil the mission of NFTZ Management Committee to promote regional economic and industrial development by the Listing of our Company. To the best knowledge of our Directors, except for the fact that Ningbo Free Trade Zone was a shareholder of Rong’an Bio, there is no past or present relationships between Ningbo Free Trade Zone, their existing shareholders and their existing directors and our Company and our subsidiaries, their existing controlling shareholders, directors and senior management, and any of their respective existing associates. Upon completion of the Global Offering and the Conversion of Domestic Shares into H Shares (assuming the Over-allotment Option and the options under the Pre-IPO ESOP are not exercised), Ningbo Free Trade Zone will hold 4.4681% of our Shares.

20. *Qingdao Huakong*

Qingdao Huakong is a limited partnership established in the PRC that is mainly engaged in private equity investments with an aggregate amount of assets under management of RMB3 billion. Qingdao Huakong is managed by Horgos Huakong Venture Capital Co., Ltd. (霍爾果斯華控創業投資有限公司) which is ultimately controlled by Yang ZHANG (張揚). To the best knowledge of our Directors, none of its limited partners holds more than 30% interests in the partnership. Qingdao Huakong approached our Company for investment opportunities upon conducting industry research, and it invested in our Company because of our development potential. In addition to investment in our Company, it also invested in Shanghai Bendao Gene Technology Co., Ltd. (上海本導基因技術有限公司). To the best knowledge of our Directors, except for the fact that both Beijing Huakong and Qingdao Huakong are ultimately controlled by Yang ZHANG and that the manager of Beijing Huakong is indirectly owned by the manager of Qingdao Huakong, there is no past or present relationships among Qingdao Huakong, its existing shareholders, its existing directors and other Pre-IPO Investors. Upon completion of the Global Offering and the Conversion of Domestic Shares into H Shares (assuming the Over-allotment Option and the options under the Pre-IPO ESOP are not exercised), Qingdao Huakong will hold 0.1766% of our Shares.

21. *Qingdao Penglong*

Qingdao Penglong is a limited partnership established in the PRC that is mainly engaged in pre-IPO investments. Qingdao Penglong is managed by its general partner, Xianjiang ZHANG (張咸江). To the best knowledge of our Directors, except for Genmu MA (馬根木) and Guoding HONG (洪國定), who respectively holds approximately 37.18% and 35.71% interests in the partnership, none of its limited partners holds more than 30% interests in the partnership. To the best knowledge of our Directors, Qingdao Penglong has not invested in the healthcare industry other than in our Company. Our Company became acquainted with Qingdao Penglong by way of the friendship between Xianjiang ZHANG and Mr. Yan ZHOU, our Controlling Shareholder. Qingdao Penglong invested an amount of over RMB498 million in our Company because of our development potential. To the best knowledge of our Directors, save for the friendship between Xianjiang ZHANG and our Controlling Shareholder as disclosed above, Qingdao

HISTORY AND DEVELOPMENT

Penglong is an Independent Third Party, and there is no past or present relationship between Qingdao Penglong, its existing shareholders and its existing directors and our Company and its subsidiaries mainly their existing controlling shareholders, directors and senior management, and any of their respective existing associates. Upon completion of the Global Offering and the Conversion of Domestic Shares into H Shares (assuming the Over-allotment Option and the options under the Pre-IPO ESOP are not exercised), Qingdao Penglong will hold 0.6667% of our Shares.

22. Shanghai Hutong

Shanghai Hutong is a limited partnership established in the PRC that is mainly engaged in asset management, equity investment and consulting businesses. The size of fund is RMB802 million, with a cumulative amount of investment of RMB336 million. Shanghai Hutong is managed by Shanghai Angju Asset Management Co., Ltd. (上海昂巨資產管理有限公司) as its general partner. To the best knowledge of our Directors, except for Ligang YAO (姚立剛) and Jilin Province Investment Group Co., Ltd. (吉林省投資集團有限公司) which is ultimately wholly owned by the Financial Bureau of Jilin Province (吉林省財政廳), which respectively holds approximately 43.20% and 37.03% interests in the partnership, none of its limited partners holds more than 30% interests in the partnership. In addition to the investments in our Company, Shanghai Hutong and its group companies have invested in the healthcare industry, with investment in companies including but without limitation to Jingze Biomedical Co., Ltd. (景澤生物醫藥(合肥)有限公司), Shanghai Cingular Biotech Corporation (上海欣吉特生物科技有限公司), Jilin Provincial Morestep Medical Equipment Co., Ltd. (吉林省邁達醫療器械股份有限公司), Ji Yao Holding Group Co., Ltd. (吉藥控股集團股份有限公司), Beijing Sunho Pharmaceutical Co., Ltd. (北京星昊醫藥股份有限公司) and Changchun Xinhuatong Pharmaceutical Equipment Co., Ltd. (長春新華通製藥設備有限公司). Shanghai Hutong became acquainted with our Company through introduction by its industry peers. It invested in our Company because of our development potential in the vaccine market in China. Upon completion of the Global Offering and the Conversion of Domestic Shares into H Shares (assuming the Over-allotment Option and the options under the Pre-IPO ESOP are not exercised), Shanghai Hutong will hold 0.2224% of our Shares.

23. Shanghai Kangcheng

Shanghai Kangcheng is a limited liability company established in the PRC that is mainly engaged in research and development of biotechnology and technology consulting business, with an aggregate investment under management of approximately RMB11.5 million. Shanghai Kangcheng is a wholly-owned subsidiary of Shanghai Kangcheng Capital Co., Ltd. (上海康橙投資管理股份有限公司), which is ultimately controlled by Feng SUN (孫鋒). In addition to the investment in our Company, Shanghai Kangcheng had invested in Liverna and has been trading shares of companies quoted on the National Equities Exchange and Quotations in the secondary market. Our Company became acquainted with Shanghai Kangcheng in its acquisition of all of the shareholding of Shanghai Kangcheng in Liverna, as a result of which Shanghai Kangcheng became a shareholder of our Company and one of our Pre-IPO Investors. To the best knowledge of our Directors, except for the fact that Shanghai Kangcheng was a shareholder of Liverna, Shanghai Kangcheng is an Independent Third Party, and there is no past or present relationship between Shanghai Kangcheng, its existing shareholders, its existing directors and our Company and its subsidiaries, their existing controlling shareholders, directors and senior management, and any of their respective existing associates. Upon completion of the Global Offering and the Conversion of Domestic Shares into H Shares (assuming the Over-allotment Option and the options under the Pre-IPO ESOP are not exercised), Shanghai Kangcheng will hold 0.2470% of our Shares.

HISTORY AND DEVELOPMENT

24. *Shenzhen Gongying*

Shenzhen Gongying is a limited partnership established in the PRC and is mainly engaged in equity investment, together with CMBI managing an aggregate asset under management of approximately RMB9 billion. Shenzhen Gongying is managed by Shenzhen Hongshu Growth Investment Management Co., Ltd. (深圳紅樹成長投資管理有限公司) as its general partner, of which the largest shareholder is Xinghai ZENG (曾興海). To the best knowledge of our Directors, except for Zhuhai Growth Gongying Venture Capital Fund (Limited Partnership) (珠海市成長共贏創業投資基金(有限合夥)), which is also managed by Shenzhen Hongshu Growth Investment Management Co., Ltd. (深圳紅樹成長投資管理有限公司) as its general partner, none of the limited partners of Shenzhen Gongying holds more than 30% interests in the partnership. In addition to the investments in our Company, Shenzhen Gongying directly or indirectly invested in healthcare companies including but without limitation to Novogene Co., Ltd. (北京諾禾致源科技股份有限公司) (SSE: 688315), Cathay Biotech Inc. (上海凱賽生物技術股份有限公司) (SSE: 688065) and Shenzhen Chipscreen Biosciences Co Ltd (深圳微芯生物科技股份有限公司) (SSE: 688321). Shenzhen Gongying approached our Company for investment opportunities upon conducting research, and it invested in our Company because of our development potential. To the best knowledge of our Directors, except for the fact that Shenzhen Gongying is one of the limited partners of CMB Langyao, there is no past or present relationships among Shenzhen Gongying and other Pre-IPO Investors. Upon completion of the Global Offering and the Conversion of Domestic Shares into H Shares (assuming the Over-allotment Option and the options under the Pre-IPO ESOP are not exercised), Shenzhen Gongying will hold 0.1033% of our Shares.

25. *Suqian Lingdao*

Suqian Lingdao is a limited partnership established in the PRC that is mainly engaged in equity investment, with an aggregate amount of assets under management of RMB3 billion. Suqian Lingdao is managed by Suzhou Lingdao Investment Management Co., Ltd. (蘇州領道投資管理有限公司) as its general partner which is ultimately controlled by Rui CHEN (陳銳). To the best knowledge of our Directors, none of its limited partners holds more than 30% interests in the partnership. In addition to the investments in our Company, Suqian Lingdao has been investing in the healthcare industry in the Asia Pacific region, with a focus on new biotechnology companies. Suqian Lingdao became acquainted with our Company through the introduction by its peers, and it invested in our Company as part of its financial investment strategy. Upon completion of the Global Offering and the Conversion of Domestic Shares into H Shares (assuming the Over-allotment Option and the options under the Pre-IPO ESOP are not exercised), Suqian Lingdao will hold 0.0670% of our Shares.

26. *Shenzhen Chongshi*

Shenzhen Chongshi is a limited liability company established in the PRC that is mainly engaged in trust management and investment and consulting business with an aggregate amount of assets under management of RMB970 million. Shenzhen Chongshi is ultimately controlled by Kaijing YAN (閔凱境). In addition to the investments in our Company, Shenzhen Chongshi has also invested in the healthcare industry including but without limitation to Tasly Pharmaceutical Group Co., Ltd. (江蘇天士力帝益藥業有限公司) (SSE: 600535), Henan Puxin Biology Engineering Co., Ltd. (河南普新生物工程有限公司), Shanghai HeartCare Medical Technology Corporation Limited (上海心瑋醫療科技股份有限公司) (SEHK: 6609), Beijing Northland Biotechnology Co., Ltd. (北京諾思蘭德生物技術股份有限公司) (NEEQ: 430047), Just Huajian Medical Device (Tianjin) Co., Ltd. (嘉思特華劍醫療器材(天津)有限公司), Jiangsu Gareax Health Technology Co., Ltd. (江蘇蓋睿健康科技有限公司), Triastek, Inc. (南京三迭紀醫藥科技有限公司), ClouDr Group Limited (智雲健康科技集團), Shaanxi Micot Technology Co., Ltd. (陝西麥科奧特科技有限公司) and Anovant Pharmaceuticals Co., Ltd. (上海谷森醫藥有限公司). Our Company became acquainted with Shenzhen Chongshi through the introduction by Tianjin Jingeng, of which Shenzhen Chongshi is a limited partner. Shenzhen Chongshi invested in our Company because of our development

HISTORY AND DEVELOPMENT

potential and the prospect of the vaccine industry. To the best knowledge of our Directors, except for the fact that Shenzhen Chongshi is a limited partner of Tianjin Jingeng as disclosed above, Shenzhen Chongshi is an Independent Third Party, and there is no past or present relationship between Shenzhen Chongshi, its existing shareholders and its existing directors and our Company and its subsidiaries, their existing controlling shareholders, directors and senior management, and any of their respective existing associates. Upon completion of the Global Offering and the Conversion of Domestic Shares into H Shares (assuming the Over-allotment Option and the options under the Pre-IPO ESOP are not exercised), Shenzhen Chongshi will hold 0.0174% of our Shares.

27. Tibet Jiaze

Tibet Jiaze is a limited liability company established in the PRC that is mainly engaged in venture capital investments, with a net asset of approximately RMB1,017 million. Tibet Jiaze is a subsidiary of Jiangsu Jichuan Holding Group Co., Ltd. (江蘇濟川控股集團有限公司) which is ultimately controlled by Longxiang CAO (曹龍祥). In addition to the investments in our Company, Tibet Jiaze has invested in the healthcare industry. It has been a pre-IPO investor of Tibet Aim Pharm. Inc. (西藏易明西雅醫藥科技股份有限公司) which is listed on the Shenzhen Stock Exchange (SHE: 002826). It also holds 18% and 3.04% interests in Jiangsu Nuoxing Biotechnology Co., Ltd. (江蘇諾興生物科技股份有限公司) and Huimeishuke (Beijing) Medical Technology Co., Ltd. (惠每數科(北京)醫療科技有限公司) respectively. Our Company became acquainted with Tibet Jiaze through the introduction by the management of Tianjin Jingeng. It invested in our Company because of our development potential and the prospects of the vaccine market. It holds approximately 19.18% interests in Tianjin Jingeng as a limited partner. To the best knowledge of our Directors, except for the fact Tibet Jiaze is a limited partner of Tianjin Jingeng, Tibet Jiaze is an Independent Third Party, and there is no past or present relationship between Tibet Jiaze, its existing shareholders, its existing directors and our Company and its subsidiaries, their existing controlling shareholders, directors and senior management, and any of their respective existing associates. Upon completion of the Global Offering and the Conversion of Domestic Shares into H Shares (assuming the Over-allotment Option and the options under the Pre-IPO ESOP are not exercised), Tibet Jiaze will hold 0.0041% of our Shares.

28. Tongchuang Investments

Each of Tongchuang Jiazhi, Tongchuang Jiaying and Tongchuang Wenjian (“**Tongchuang Investments**”) is a limited partnership established in the PRC and is primarily engaged in venture capital investments, with an aggregate amount of investment in our Company of approximately RMB155.32 million. Each of Tongchuang Jiazhi and Tongchuang Jiaying is managed by Shenzhen Tongchuang Jinxiu Asset Management Co., Ltd. (深圳同創錦繡資產管理有限公司) as its general partner and Tongchuang Wenjian is managed by Tibet Leading Growth Venture Capital Co., Ltd. (西藏領先成長創業投資有限公司) as its general partner. Both general partners are wholly-owned subsidiaries of Shenzhen Cowin Asset Management Co., Ltd. (深圳同創偉業資產管理股份有限公司). To the best knowledge of our Directors, (i) except for Shilin ZHENG (鄭仕麟) and Wenbo XIANG (項文波), who respectively holds approximately 38.52% and 37.50% interests in the partnership, none of the limited partners of Tongchuang Jiazhi holds more than 30% interests in the partnership; (ii) none of the limited partners of Tongchuang Jiaying holds more than 30% interests in the partnership and (iii) except for Yingda Taihe Life Insurance Co., Ltd. (英大泰和人壽保險股份有限公司), which is ultimately controlled by the State-owned Assets Supervision and Administration Commission of the State Council, holds 60% interest in the partnership, none of the limited partners of Tongchuang Wenjian holds more than 30% interests in the partnership. Tongchuang Investments became acquainted with our Company by way of a project screen driven by industry research. It invested in our Company because of the potential growth of the vaccine market, our development potential and the experience of our management team. To the best knowledge of our Directors, save for the relationship between Tongchuang Jiazhi, Tongchuang Jiaying and Tongchuang Wenjian as disclosed herein, there is no past or present relationships among Tongchuang Investments and other Pre-IPO

HISTORY AND DEVELOPMENT

Investors. Upon completion of the Global Offering and the Conversion of Domestic Shares into H Shares (assuming the Over-allotment Option and the options under the Pre-IPO ESOP are not exercised), Tongchuang Jiazhi, Tongchuang Jiaxing and Tongchuang Wenjian will hold 0.0959%, 0.7010% and 0.1059% of our Shares, respectively.

29. *Yunnan Ziyongchen*

Yunnan Ziyongchen is a limited liability company established in the PRC that is mainly engaged in equity investment and consulting businesses. Yunnan Ziyongchen is ultimately controlled by Chao ZHANG (張超). In addition to the investments in our Company, Yunnan Ziyongchen also invested in AIM Kanghuai. Our Company became acquainted with Yunnan Ziyongchen through its acquisition of the equity interest of AIM Kanghuai, as a result of which Yunnan Ziyongchen became a shareholder of our Company and one of our Pre-IPO Investors. To the best knowledge of our Directors, save for the fact that Yunnan Ziyongchen is a shareholder of our Company and that Yunnan Ziyongchen was a shareholder of AIM Kanghuai, Yunnan Ziyongchen is an Independent Third Party, and there is no past or present relationship between Yunnan Ziyongchen, its existing shareholders, its existing directors and our Company and its subsidiaries, their existing controlling shareholders, directors and senior management, and any of their respective existing associates. Upon completion of the Global Offering and the Conversion of Domestic Shares into H Shares (assuming the Over-allotment Option and the options under the Pre-IPO ESOP are not exercised), Yunnan Ziyongchen will hold 0.4547% of our Shares.

30. *Zhuhai Ruijin*

Zhuhai Ruijin is a limited partnership established in the PRC and is primarily engaged in biotechnology research and development and technology consulting business. Zhuhai Ruijin is managed by Saihua PENG (彭賽花) under the instructions of Yucai PENG, her brother. Saihua PENG is Zhuhai Ruijin' nominee general partner who holds over 50% of interests in the partnership for and on behalf of Yucai PENG through partnership interest entrustment arrangement between them. To the best knowledge of our Directors, none of the limited partners of Zhuhai Ruijin holds more than 30% interests in the partnership. In addition to the investments in our Company, Zhuhai Ruijin has invested in Liverna. Our Company became acquainted with Zhuhai Ruijin in its acquisition of Zhuhai Ruijin's shareholding in Liverna as a result of which Zhuhai Ruijin became a shareholder of our Company and one of our Pre-IPO Investors. To the best knowledge of our Directors, (i) except for the relationships between Saihua PENG and Yucai PENG as disclosed above, and the fact that Yucai PENG wholly owns and manages Hengqin Ruifan, another Pre-IPO investor as disclosed under “—7. Hengqin Ruifan,” there is no past or present relationships among Zhuhai Ruijin and other Pre-IPO Investors; and (ii) Zhuhai Ruijin is an Independent Third Party, and there is no past or present relationship between Zhuhai Ruijin, its existing general partners and our Company and its subsidiaries, their existing controlling shareholders, directors and senior management, and any of their respective existing associates, except for Yucai PENG's positions in the Company and Liverna as disclosed under “—7. Hengqin Ruifan” and the fact that Zhuhai Ruijin is a non-substantial shareholder of our Company and Liverna and Saihua PENG is a supervisor of Liverna. Upon completion of the Global Offering and the Conversion of Domestic Shares into H Shares (assuming the Over-allotment Option and the options under the Pre-IPO ESOP are not exercised), Zhuhai Ruijin will hold 0.1849% of our Shares.

HISTORY AND DEVELOPMENT

Public Float

Upon the completion of the Global Offering (assuming that the Over-allotment Option is not exercised) and the Conversion of Domestic Shares into H Shares, (i) the Domestic Shares, and (ii) the H Shares converted from Domestic Shares held by certain of our Shareholders who are, or are directly or indirectly controlled by, our core connected persons, will not be counted towards public float for the purpose of Rule 8.08 of the Listing Rules. Details of these H Shares are set out below:

- i. 1,200,000 H Shares held by Mr. Bole MA, a core connected person by virtue of controlling Chengdu Bole Action Biological Products Co., Ltd. (成都伯樂行動生物製品有限公司), which is a substantial shareholder of our subsidiary, AIM Jianchi;
- ii. 14,000,000 H Shares held by Zongheng Tianxia, which is a close associate of Mr. Bole MA, because it is controlled by Mr. Bole MA;
- iii. 23,254,765 H Shares held by Zhongrenxing, which is a close associate of Mr. Yan ZHOU, our executive Director, because its general partner, Dongjian Yuanfang, is controlled by Mr. Yan ZHOU;
- iv. 5,150,000 and 5,160,000 H Shares held by Everest Investment and Everest No. 2 Investment, respectively. Everest Investment and Everest No. 2 Investment are both close associates of Mr. Shaojun JIA, our executive Director, because their common general partner, Tibet Tongxin Capital, is controlled by Mr. Shaojun JIA;
- v. 2,418,150 H Shares held by Hengqin Ruifan, which is a close associate of Mr. Yucai PENG (a core connected person by virtue of being a director of our subsidiary, Liverna), because it is controlled by Mr. Yucai PENG;
- vi. 2,236,523 H Shares held by Zhuhai Ruijin, which is a close associate of Mr. Yucai PENG, because it is controlled by Mr. Yucai PENG through partnership interest entrustment arrangement between Mr. Yucai PENG and Zhuhai Ruijin's nominee general partner, Ms. Saihua PENG;
- vii. 3,458,562 H Shares held by Hengqin Qijing, which is a core connected person by virtue of being a substantial shareholder of our subsidiary, Liverna; and
- viii. 25,000,000 H Shares held by Lhasa Meihua, which is a close associate of Ms. Aijun WANG, our non-executive Director, because it is controlled by Ms. Aijun WANG.

Save as provided above, all the other H Shares held by our Shareholders upon Listing will be counted towards public float. In total, 408,947,111 H Shares, representing 33.81% of our total issued Shares upon completion of the Global Offering (assuming that the Over-allotment Option is not exercised) and the Conversion of Domestic Shares into H Shares, or 410,404,111 H Shares, 33.88% of our total issued Shares upon completion of the Global Offering (assuming that the Over-allotment Option is fully exercised) and the Conversion of Domestic Shares into H Shares, will count towards public float.

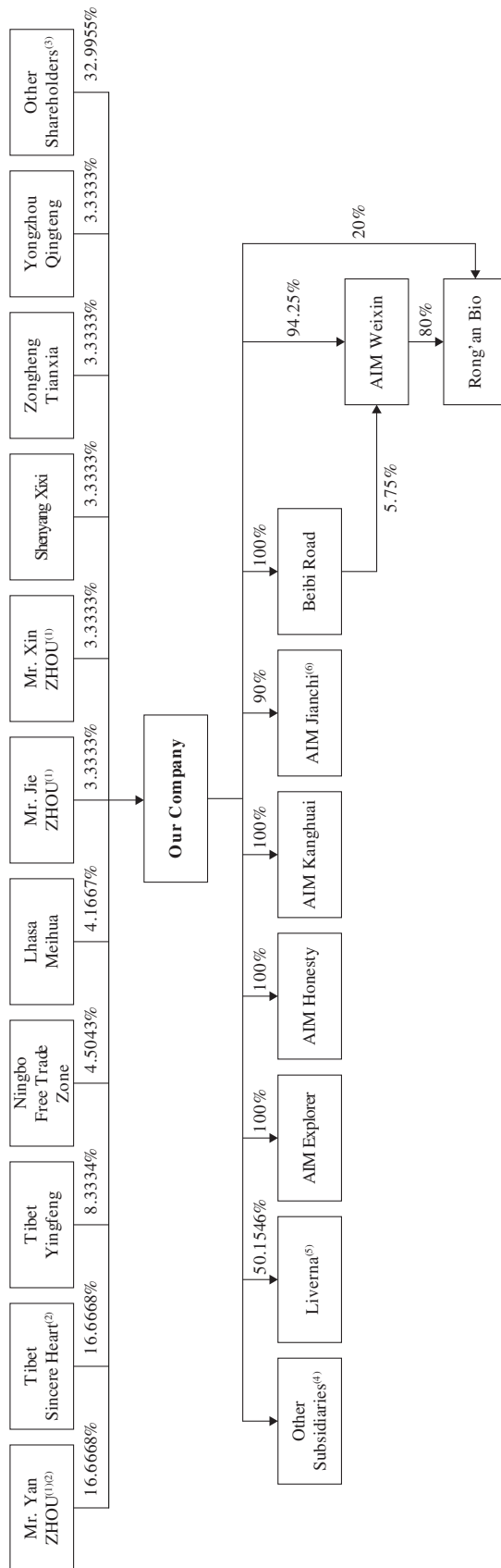
Compliance with Interim Guidance

The Joint Sponsors confirmed that the Pre-IPO Investments are in compliance with the Guidance Letter HKEX-GL29-12 issued by the Stock Exchange in January 2012 and as updated in March 2017, the Guidance Letter HKEX-GL43-12 issued by the Stock Exchange in October 2012 and as updated in July 2013 and March 2017.

CORPORATE STRUCTURE

Immediately before Completion of the Global Offering

The chart below sets out the shareholding structure of our Company immediately before completion of the Global Offering:

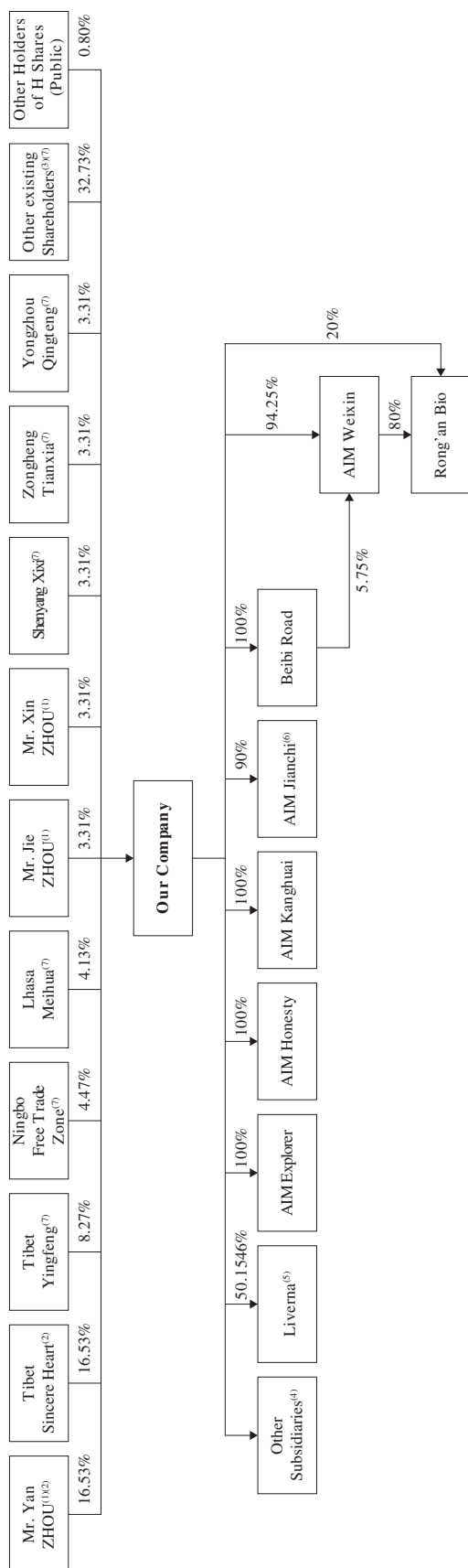


Notes:

- (1) Mr. Yan ZHOU, Mr. Jie ZHOU and Mr. Xin ZHOU are brothers.
- (2) Mr. Yan ZHOU and Mr. Xin Zhou hold 99.99% and 0.01% of the registered capital of Tibet Sincere Heart respectively.
- (3) Each of the other Shareholders holds less than 3.00% of our issued share capital. See this section above for further details of the other Shareholders.
- (4) Other subsidiaries include (1) AIM Innovative Biotechnology (Shanghai) Co., Ltd. (艾美創新生物技術(上海)有限公司), a wholly owned subsidiary of our Company and (2) AIM Vaccine Research Institute (Jiangsu) Co., Ltd. (艾美疫苗研究院(江蘇)有限公司), a wholly-owned subsidiary of our Company. Neither of these two companies have any current operations.
- (5) As Liverna is an insignificant subsidiary of our Company as defined under Rule 14.09A(1) of the Listing Rules, all the minority shareholders of Liverna are Independent Third Parties. Hengqin Ruifan holds 32.1821%, Hengqin Qijing holds 11.0146% and Zhuhai Ruijin holds 6.6487% of the registered capital of Liverna respectively.
- (6) AIM Jianchi is owned as to 90% by our Company and 10% by Chengdu Bole Action Biological Products Co., Ltd. (成都伯樂行動生物製品有限公司), an Independent Third Party.

Immediately after Completion of the Global Offering

The chart below sets out the shareholding structure of our Company immediately after completion of the Global Offering (assuming the Over-allotment Option and the options under the Pre-IPO ESOP are not exercised) and the Conversion of Domestic Shares into H Shares:



Notes:

- (1) Mr. Yan ZHOU, Mr. Jie ZHOU and Mr. Xin ZHOU are brothers.
- (2) Mr. Yan ZHOU holds 99.99% of the registered capital of Tibet Sincere Heart.
- (3) Each of the other Shareholders holds less than 3.00% of our issued share capital. See this section above for further details of the other Shareholders.
- (4) Other subsidiaries include (1) AIM Innovative Biotechnology (Shanghai) Co., Ltd. (艾美創新生物技術(上海)有限公司), a wholly owned subsidiary of our Company and (2) AIM Vaccine Research Institute (Jiangsu) Co., Ltd. (艾美疫苗研究院(江蘇)有限公司), a wholly-owned subsidiary of our Company. Neither of these two companies have any current operations.
- (5) As Liverna is an insignificant subsidiary of our Company as defined under Rule 14.09A(1) of the Listing Rules, all the minority shareholders of Liverna are Independent Third Parties. Hengqin Ruifan holds 32.1821%, Hengqin Qijing holds 11.0146% and Zhuhai Ruijin holds 6.6487% of the registered capital of Liverna respectively.
- (6) AIM Jianchi is owned as to 90% by our Company and 10% by Chengdu Bole Action Biological Products Co., Ltd. (成都伯樂行動生物製品有限公司), an Independent Third Party.
- (7) Immediately upon the completion of the Global Offering, 481,111,111 Domestic Shares (representing 39.77% of total issued Shares of the Company upon completion of the Conversion of Domestic Shares into H Shares and the Global Offering (assuming the Over-allotment Option is not exercised)) held by 60 out of 67 of our existing Shareholders (including Tibet Yingfeng, Ningbo Free Trade Zone, Lhasa Meihua, Shenyang Xixi, Zongheng Tianxia, Yongzhou Qingteng and certain other Shareholders) will be converted into H Shares. Such Conversion of Domestic Shares into H Shares has been approved by the CSRC on September 2, 2022 and is still subject to the approval by the Stock Exchange. See "Share Capital—Upon Completion of the Global Offering".

OVERVIEW

We are the second largest vaccine company in China in terms of 2021 approved lot release volume (excluding COVID-19 vaccines), accounting for a 7.4% market share following state-owned CNBG (中國醫藥集團中國生物技術股份有限公司). In terms of 2021 sales revenue (excluding COVID-19 vaccines), we accounted for a 2.1% market share in the PRC, whereas CNBG is the largest market player in China. Among all privately-owned vaccine companies, we are the largest one in terms of 2021 approved lot release volume. As a major vaccine company in China, we cover the full value chain from research and development to manufacturing and to commercialization. According to CIC, we are the only China-based vaccine player that has all five proven human vaccine platform technologies worldwide, namely bacterial vaccine technologies, viral vaccine technologies, genetically engineered vaccine technologies, combination vaccine technologies and mRNA vaccine technologies, with at least one approved product or one vaccine candidate at CTA or clinical stages under each platform. We are one of the first two human vaccine companies in the PRC that have been granted permission under the Fourteenth Five Year Plan of the PRC to build a P3 Lab. In particular, in response to the current pandemic, we have taken full advantages of our full-spectrum platform technologies and are developing COVID-19 vaccine candidates spanning three technology routes validated by approved vaccines, namely mRNA, inactivated virus and recombinant adenoviral vector.

Compared to therapeutic drugs, vaccine development and commercialization have longer lead time and are subject to more stringent requirements in product safety and quality considering its strategic significance to public health, and therefore large-scale market players with established leaderships have a significant competitive edge. In the global vaccine market, the top four market players in aggregate took a 72.4% market share in terms of 2021 sales revenue (excluding COVID-19 vaccines), reflecting the high market concentration due to the high entry barriers. According to CIC, China's vaccine market grew from RMB25.1 billion in 2015 to RMB76.1 billion in 2021, and is expected to further grow to RMB215.7 billion in 2030 (excluding COVID-19 vaccines), driven by the continuing innovation in vaccine development, continuing increase in demand for more and better vaccines, increasing public awareness of immunization necessity, improving affordability of vaccines, and increasing government expenditure for and policy support of preventive healthcare. By adding up the COVID-19 vaccine market, the overall PRC vaccine market is expected to increase from RMB303.6 billion in 2021 to RMB431.4 billion in 2030. We believe we are well positioned to benefit from market opportunities in the fast-growing PRC vaccine industry as a major and scalable market player that always keep doors and mind open for all quality industry resources.

BUSINESS

We strive to access the best industry resources. Through one decade of organic growth and external resource integration, we have become a major player in the Chinese vaccine industry. We currently commercialize eight vaccine products against six disease areas. We also have 22 vaccine candidates against 13 disease areas, of which five candidates (mRNA COVID-19 vaccine candidate against the Original Strain, inactivated COVID-19 vaccine candidate, PCV13, PPSV23 and MCV4) are at clinical stages. Out of these five vaccine candidates, we expect to launch at least four from 2023 to 2025. In addition, we plan to file over 10 CTAs by the end of 2023 to advance multiple CTA-enabling and preclinical candidates to clinical trial stages. The following table summarizes our vaccine portfolio consisting of both vaccine products and vaccine candidates:

Vaccine Portfolio

Indication	Vaccine Product/ Vaccine Candidate	In-house R&D/ Joint Development	Preclinical	CTA	Phase I	Phase II/III	NDA Approval /Market	Obtaining NDA Approval /Expected Timing to Market ^e
Vaccine Products ¹								
HBV	Recombinant HBV Vaccines (Hansenula Polymorpha) ²	In-house R&D	NDA approved in 2004					2004
HAV	Inactivated HAV Vaccines (HDC) ³	In-house R&D	NDA approved in 2015					2015
Mumps	Mumps Vaccine	In-house R&D	NDA approved in 2004					2004
HFRS	HFRS Inactivated Vaccine	In-house R&D	NDA approved in 2007					2007
Rabies	Human Rabies Vaccine (Vero Cell)	In-house R&D	NDA approved in 2007					2007
Meningococcal disease	MPSV4	In-house R&D	NDA approved in 2018					2018
Vaccine Candidates ⁴								
COVID-19	mRNA COVID-19 Vaccine	In-house R&D	Initiated Phase III in Q2 2022 ⁵					Q2 2023
	Inactivated COVID-19 Vaccine	Joint Development	Phase II ongoing (against the Original Strain); Start Phase I in 2022 (against the Delta Strain) ⁶					After launching mRNA COVID-19 vaccine ⁷
	Broad-spectrum COVID-19 Vaccine	Joint Development	File CTA in 2023 ⁸					2024 to 2025
HFMD	EV71-CA16 Bivalent HFMD Vaccine Candidate (HDC)	In-house R&D	Start Phase I in H2 2022					2026
Pneumococcal disease	PCV13	In-house R&D	Finish Phase III in Q2 2023 ⁹					2024
	PPSV23	In-house R&D	Finished Phase I ⁹ in Q1 2022 and initiated Phase III in Q3 2022					2023
	PCV20	In-house R&D	Start Phase I in 2022					2025
DTP ¹⁰	DTP-Hib Combination Vaccine	In-house R&D	File CTA in 2023					2026
	DTaP	In-house R&D	File CTA in 2023					2026
	DTcP	In-house R&D	File CTA in 2024					After 2026
	Absorbed Tetanus Vaccine	In-house R&D	File CTA in 2022					2025
Hib	Hib Vaccine	In-house R&D	File CTA in 2023					2026
Rabies	mRNA Human Rabies Vaccine	In-house R&D	File CTA in 2022					2025
	Human Rabies Vaccine (Vero Cell, Serum-free)	In-house R&D	Start Phase III in H1 2023 ¹¹					2025
	Human Rabies Vaccine (HDC)	In-house R&D	File CTA in 2023					2026
HPV	HPV2	In-house R&D	File CTA in 2023					After 2026
	HPV9	In-house R&D	File CTA in 2023					After 2026
Meningococcal disease	MCV4	In-house R&D	Start Phase II in H1 2023					2025
Influenza	Tetavalent Influenza Vaccine (MDCK Cells)	In-house R&D	File CTA in 2023					2026
	Universal Influenza Vaccine	Joint Development	File CTA in 2022 ⁸					2026
Herpes	Shingles/Herpes Zoster Vaccine	In-house R&D	File CTA in 2023					After 2026
RSV	mRNA RSV Vaccine	In-house R&D	File CTA in 2023					After 2026
<div><div></div> Viral Vaccine Platform</div> <div><div></div> Bacterial Vaccine Platform</div> <div><div></div> mRNA Vaccine Platform</div> <div><div></div> Genetically Engineered Vaccine Platform</div> <div><div></div> Combination Vaccine Platform</div>								

Notes:

- (1) Our human rabies vaccine (Vero cell) and MPSV4 are Class II vaccines.

For our recombinant HBV vaccines, the 10µg HBsAg/0.5ml dosage is a Class I vaccine for newborns and a Class II vaccine for other vaccinees, and the 20µg HBsAg/0.5ml dosage is a Class II vaccine in most cases, and a Class I vaccine procured under certain government procurement programs.

For our inactivated HAV vaccines, the 320Eu/0.5ml dosage is a Class I vaccine in Beijing, Shanghai, Tianjin and Jiangsu Province, and a Class II vaccine in other regions in the PRC, and the 640Eu/1.0ml dosage is a Class II vaccine.

Our HFRS vaccine and mumps vaccine are typically classified as Class II vaccines in the PRC. However, they may be procured by certain provincial level CDCs as a Class I vaccine under some special circumstances, such as local outbreaks.

- (2) We have developed two recombinant HBV vaccine products, differentiated in terms of HBsAg concentration: 10µg HBsAg per dose and 20µg HBsAg per dose. See “—Our Vaccine Products and Vaccine Candidates—Our Vaccine Products—Recombinant HBV Vaccines (Hansenula Polymorpha).”
- (3) We have developed two inactivated HAV vaccine products, differentiated in terms of isolated HAV antigen concentration: 320Eu/0.5ml per dose and 640Eu/1.0ml per dose. See “—Our Vaccine Products and Vaccine Candidates—Our Vaccine Products—Inactivated HAV Vaccines (HDC).”
- (4) We expect all of our vaccine candidates, except for DTaP, to be classified as Class II vaccines upon commercialization. We expect to commercialize our DTaP as a Class I vaccine.
- (5) As of the Latest Practicable Date, we entered Phase III clinical trial stage for our mRNA COVID-19 vaccine candidate (against the Original Strain). We expect such clinical trials to accelerate our R&D activities for mRNA vaccine candidates against other COVID-19 variants. We are currently in the CTA filing process for mRNA vaccine candidate against the Delta variant. We are also conducting preclinical studies for mRNA vaccine candidate against the Omicron variant.
- (6) As of the Latest Practicable Date, our inactivated COVID-19 candidate against the Original Strain was in Phase II clinical trial stage. We are also collaborating with Zhejiang Provincial CDC in the development of a second generation inactivated COVID-19 vaccine candidate against the Delta variant strain. See “—Research and Development—Collaboration Agreements—Collaboration with Zhejiang Provincial CDC”.
- (7) Considering that (i) our mRNA COVID-19 candidate has reached Phase III clinical trial stage, becoming one of the most advanced COVID-19 vaccine candidates in our pipeline; (ii) mRNA COVID-19 vaccines provide a higher degree of protection in comparison with other vaccination technology routes and there is no approved mRNA vaccine in the PRC to date; and (iii) major circulating COVID-19 virus variants in the globe and PRC are changing from time to time, and governmental disease prevention and control policies and measures as well as the vaccination strategy in China are continuously adjusting accordingly, we plan to accelerate and prioritize the development of our mRNA COVID-19 vaccine, in order to gain fast-to-market and first-mover advantages in the massive COVID-19 vaccine market. We target to launch our mRNA candidate first, and will then proceed with later stage clinical trials and ongoing CTA filing process of our inactivated candidates, subject to the changing pandemic epidemiology, circulating variants, containment measures and vaccination policies in China.
- (8) We are currently collaborating with SPHCC in the development of two novel recombinant adenoviral vector-based broad-spectrum candidates against coronavirus (including viruses causing COVID-19 and its variant strains) and influenza. See “—Research and Development—Collaboration Agreements—Collaboration with SPHCC.”
- (9) This refers to the completion of vaccination procedure for all test subjects in the relevant clinical trial.
- (10) DTP refers to three diseases, namely diphtheria, tetanus and pertussis. DTP-based combination vaccines also utilize bacterial vaccine technologies.
- (11) Per communications with the CDE, we may directly undertake Phase III clinical trials, without having to undertake Phase I or II clinical trials first.
- # Timing of obtaining NDA refers to the time when a vaccine product obtained NDA approval. Expected timing to market refers to the time we expect to launch a vaccine candidate onto the market.

BUSINESS

Our broad vaccine portfolio of large potential market size is illustrated as below:

- Our portfolio of vaccine products and vaccine candidates covers all top 10 vaccine products worldwide by 2021 global sales (totaling US\$101.9 billion);
- We have been relying on our HBV vaccines and human rabies vaccine, our key commercialized vaccine products that lead their respective vaccine markets in the PRC, during the Track Record Period. In 2021, we were the largest supplier of HBV vaccines and the second largest supplier of human rabies vaccines in the globe and in the PRC in terms of approved lot release volume. In 2019, 2020, 2021 and the four months ended April 30, 2021 and 2022, 84.2%, 90.2%, 93.0%, 94.3% and 92.0% of our total revenue, respectively, were derived from sales of these two vaccine types, with revenue contribution of RMB523.3 million and RMB937.4 million in 2021, respectively. We expect to continue to generate substantial revenue from these two product types in the near future;
- We are currently developing a robust vaccine pipeline, most of which target major vaccine-preventable infectious diseases with large-population base and five are potentially first-in-class in the globe or in the PRC. According to CIC, the total addressable market of our vaccine pipeline is estimated to be approximately US\$25.9 billion (excluding COVID-19 vaccines) or US\$55.6 billion (including COVID-19 vaccines) in 2030. Our vaccine candidates primarily include (i) three COVID-19 candidates adopting three technology routes validated by approved COVID-19 vaccines, namely mRNA, inactivated virus and recombinant adenoviral vector; (ii) a comprehensive pneumococcal vaccine portfolio, including PCV13, PCV20 and PPSV23; (iii) a potentially global innovative bivalent HFMD vaccine; and (iv) a number of others with high market potential, most of which target major vaccine-preventable infectious diseases with large-population base, such as DTP, meningococcal disease, influenza, human rabies, HPV and RSV.

We operate four individual Licensed Manufacturing Facilities in Rong'an Bio, AIM Honesty, AIM Kanghuai and AIM Weixin, with an aggregated GFA of approximately 128,219 sq.m. and a total designed annual production capacity of 91.3 million doses. According to CIC, the NMPA approved lot releases of 623.8 million doses of 46 vaccines against 26 diseases (exclusive of COVID-19 vaccines) in 2021, of which we contributed 7.4%, or approximately 46 million doses. In addition, all our four operating subsidiaries have maintained 100% pass rate in vaccine lot release audits by NIFDC under our operation.

Our sales and marketing function is centralized, and is specialized and market-oriented, which enables us to accelerate strategy formulation and execution, achieve high cost-efficiency and gain cross-selling opportunities. As of the Latest Practicable Date, we were one of the only four vaccine market players that sold vaccine products to all 31 provinces, direct-controlled municipalities and autonomous regions in China.

Our total revenue was RMB951.6 million, RMB1,638.0 million and RMB1,570.1 million in 2019, 2020 and 2021, respectively. Our gross profit was RMB732.8 million, RMB1,354.1 million and RMB1,294.7 million in 2019, 2020 and 2021, respectively. Our revenue and gross profit grew rapidly by 72.1% and 84.8% respectively from 2019 to 2020; then slightly decreased by 4.1% and 4.4% respectively in 2021 mainly due to the impact of the recurrence of COVID-19 in certain cities in China since late July 2021 on our sales volume in the second half of 2021. Our profit significantly increased by 234.2% from RMB119.8 million in 2019 to RMB400.4 million in 2020. We incurred a substantial loss of RMB675.9 million in 2021, which was resulted primarily from (i) our share-based compensation expenses totaling RMB952.1 million, including a one-off share-based compensation expense of RMB896.9 million and other share-based compensation expenses of RMB55.2 million for other share awards and options granted to our employees, and (ii) an increase in research and development costs from RMB157.8 million to RMB307.4

million to develop our rich pipeline of 22 vaccine candidates. Due to a slowdown in sales amid COVID-19 outbreaks in China, from the four months ended April 30, 2021 to the same period in 2022, our revenue decreased from RMB464.9 million to RMB275.3 million and our gross profit decreased from RMB384.1 million to RMB220.0 million. We had a profit of RMB57.7 million in the four months ended April 30, 2021 but recorded a loss of RMB95.8 million in the same period in 2022, mainly driven by the drop in revenue and as we rapidly advanced clinical trials of our vaccine candidates, which drove up our research and development costs.

Our mission is to develop and manufacture top quality vaccines to safeguard the health of the world. Our vision is to become a world-class vaccine company in the global vaccine market by keeping abreast of the most advanced platform technologies and innovation trends.

COMPETITIVE STRENGTHS

The second largest vaccine company in China by approved lot release volume covering the full value chain, empowered by a full spectrum of proven human vaccine platform technologies

We are the second largest vaccine company in China in terms of 2021 approved lot release volume (excluding COVID-19 vaccines), accounting for a 7.4% market share following state-owned CNBG. In terms of 2021 sales revenue (excluding COVID-19 vaccines), we accounted for a 2.1% market share in the PRC, whereas CNBG is the largest market player in China. Among all privately-owned vaccine companies, we are the largest one in terms of 2021 approved lot release volume. As a major vaccine company in China, we cover the full value chain from research and development to manufacturing and to commercialization. According to CIC, we are the only China-based vaccine player that has all five proven human vaccine platform technologies worldwide, namely bacterial vaccine technologies, viral vaccine technologies, genetically engineered vaccine technologies, combination vaccine technologies and mRNA vaccine technologies, with at least one approved product or one vaccine candidate at CTA or clinical stages under each platform. In particular, in response to the current COVID-19 pandemic, we have taken full advantages of our full-spectrum platform technologies and are developing three COVID-19 vaccine candidates spanning three technology routes validated by approved vaccines, namely mRNA, inactivated virus and recombinant adenoviral vector.

We currently commercialize eight vaccine products against six disease areas, of which the HBV vaccines and human rabies vaccine are our key commercialized market-leading vaccine products, from which we generated substantial revenue. We also have 22 vaccine candidates in our pipeline against 13 disease areas. According to CIC:

- Our portfolio of vaccine products and vaccine candidates covers all top 10 vaccine products worldwide by 2021 global sales (totaling US\$101.9 billion);
- In 2021, we were the largest supplier of HBV vaccines in the globe and in the PRC, possessing a 45.4% market share in China, in terms of approved lot release volume; in the PRC, anti-HBV vaccination is mandatory for all newborns within 24 hours of birth. In 2021, approximately 75% of China's newborns received our recombinant HBV vaccine (Hansenula Polymorpha);
- In 2021, we were the second largest supplier of human rabies vaccines in the globe and in the PRC, possessing 18.1% and 16.2% market shares of China market, respectively, in terms of approved lot release volume and sales revenue. In 2019, 2020, 2021 and the four months ended April 30, 2021 and 2022, 46.9%, 65.5%, 59.7%, 64.9% and 63.9% of our revenue, respectively, was derived from sales of our human rabies vaccine product; and

- We have three candidates against COVID-19 (adopting mRNA, inactivated virus and recombinant adenoviral vector technologies), one EV71-CA16 bivalent vaccine candidate against HFMD, three candidates against pneumococcal disease (PCV13, PCV20 and PPSV23), three combination candidates (DTcP, DTaP and DTP-Hib) and a number of others with high market potential, most of which target major vaccine-preventable infectious diseases with large-population base and five are potentially first-in-class in the globe or in the PRC.

Our comprehensive vaccine product portfolio is empowered by high-quality, commercial-scale manufacturing capabilities of our four individual Licensed Manufacturing Facilities, enabling us to achieve scalable and quality supply of multiple vaccines. According to CIC, the NMPA approved lot releases of 623.8 million doses of 46 vaccines against 26 diseases (exclusive of COVID-19 vaccines) in 2021, of which we contributed 7.4%, or approximately 46 million doses, making us the second largest vaccine manufacturer group in the PRC in terms of approved lot release volume. According to the same source, as of the Latest Practicable Date, a total of 45 production permits were granted by the NMPA to 33 vaccine manufacturers or manufacturer groups, of which only 27 had approved lot release record in 2021. Out of the 27 manufacturers or manufacturer groups, 19 had approved lot releases for only one or two products, and only seven had approved lot releases for four or more products in 2021, including our Group. By obtaining four production permits (with active lot releases under each in 2021), our Group is the largest holder of production permits in the PRC among all privately-owned companies, and the second largest holder overall. Under the increasingly tightened regulatory environment in the vaccine industry especially after the implementation of latest Vaccine Administration Law in the PRC, the requirements for issuance of new production permits have become highly stringent. This creates a significant barrier for new entrants, limits the expansion of most medium to small-sized market players and brings promising consolidation opportunities to us to capture more market share.

We have become a major player in the Chinese vaccine industry. As of the Latest Practicable Date, we were one of the only four vaccine market players that sold vaccine products to all 31 provinces, direct-controlled municipalities and autonomous regions in China.

Strive to access the best industry resources and innovative technologies to accelerate product development and commercialization

The vaccine market, according to CIC, is characterized by the tension between long development cycles and unmet public health needs especially during the pandemic, long learning curve before achieving high productivity and economies of scale, and extremely stringent safety and quality requirements. Only leading market players keeping doors and mind open can achieve scientific breakthroughs and growth in a sustainable and responsive manner. In order to accelerate building up a vaccine portfolio with true market potential, we are profoundly committed to striving to access the best industry resources.

We currently have four individual Licensed Manufacturing Facilities. We acquired Rong'an Bio, AIM Honesty, AIM Kanghuai and AIM Weixin between 2015 and 2017, together with their vaccine products against human rabies, HBV, HAV, mumps and HFRS. After these acquisitions, we upgraded the manufacturing infrastructure in each subsidiary to meet the latest GMP standards, improved manufacturing processes and techniques in pursuit of higher product quality and stronger supply capabilities, formulated and executed production plans which closely follow group marketing strategies and consolidated supply chains. Through our standardized management measures, we successfully set up four GMP-compliant, market-driven Licensed Manufacturing Facilities with differentiated product foci. We also have a centralized sales and marketing system to synchronize our marketing strategy and activities, as well as to maximize our brand value. As a result, from the year of our acquisition to the end of 2021:

- gross sales of AIM Honesty (focusing on recombinant HBV vaccines) increased by approximately five times, while gross sales of Rong'an Bio (focusing on human rabies vaccines) was approximately doubled;

- we successfully transformed AIM Kanghuai from a loss-making plant to the second largest supplier of inactivated HAV vaccines in the PRC, with an approved lot release of 0.9 million doses and revenue contribution of RMB86.1 million in 2021; and
- AIM Weixin has built commercial-scale production capabilities of bacterial polysaccharide vaccines and conjugation vaccines, leveraging which it successfully completed production scale-up and commercial launch of MPSV4 in 2020, and would continue to support the supply of our major investigational bacterial vaccines for clinical development, including pneumococcal vaccine candidates (PCV13, PCV20 and PPSV23), MCV4 candidate, DTP and Hib candidates and their combinations.

In addition, we turn science to high-quality vaccine products through a truly interactive R&D and manufacturing process with high efficiency. We have established dedicated R&D departments in each of the four operating subsidiaries, with a specific focus on developing new vaccine varieties based on their respective leading products and manufacturing specialties. For example, Rong'an Bio is developing two human rabies vaccine candidates on top of its current Vero cell generation. In addition, AIM Explorer, one of our three research institutions, focuses on offering technological support to the four operating subsidiaries with research on early-stage and cutting edge technologies as its priority. For example, for our bacterial vaccine candidates, the research work is conducted by AIM Explorer, and AIM Weixin is responsible for vaccine development, including investigational vaccine supply for clinical trials, production scale-up studies and production process verification. We believe such a cross-functional, cross-entity collaboration, which enables us to consider both biological attributes and sound engineering and manufacturing principles from program inception onwards, could significantly improve R&D success rates and vaccine delivery efficiency. More importantly, we realize a promotive synergy across vaccine R&D and manufacturing. On one hand, we have ready-for-use commercial-scale manufacturing facilities to harness development of various vaccine candidates, differentiating us from most market players. On the other hand, the intensive pilot and scale-up productions of diverse candidates also rapidly refine and improve our process know-how, production facilities, and productivity and skill set of production teams. Such a collaborative development path and culture enable us to generate 22 vaccine candidates across different development stages.

Furthermore, we are creating open research environment to enable scientists and institutions inside and outside of our Group to share knowledge and insight on vaccine technologies and conduct R&D on innovative vaccines. Representative examples include:

- *Acquisition of Liverna.* In May 2021, we acquired Liverna, a clinical-stage innovative biotech focusing on the R&D of mRNA drugs with patented mRNA platform technologies covering drug design, production and delivery. Liverna is one of the few domestic companies having a mRNA COVID-19 vaccine candidate undergoing clinical trial in the PRC. Through such acquisition, we not only add one mRNA COVID-19 vaccine candidate ready for clinical development, but industry-leading mRNA vaccine platform technologies and hands-on experience and expertise from top mRNA drug scientists, enabling us to pursue innovative mRNA vaccines for a broad spectrum of diseases. See “—Phase III mRNA COVID-19 vaccine candidate and mRNA platform technologies supported by proven manufacturing capabilities and established commercialization capabilities”.
- *Collaboration with Shanghai Public Health Clinical Center (SPHCC).* We are currently collaborating with SPHCC in the development of two novel recombinant adenovirus-based broad-spectrum candidates against coronavirus (including COVID-19 and its variant strains) and influenza, leveraging its established knowledge on recombinant adenoviral vector technologies. SPHCC is a WHO Clinical Research and Training Center for Emerging and Re-emerging Infectious Diseases, one of the first institutions in China that have a P3 Lab, and one of the most prominent institutions in the field of infectious diseases worldwide. It has a research team of more than 200 scientists, including world-class scientists in pathogenesis, epidemiology, vaccinology and immunology.

Benefiting from the synergies within the Group and beyond the Group, we could speed up delivery of high quality and innovative vaccines, and attract more partners and top talents to collaborate with or join us.

Broad COVID-19 candidates portfolio covering three validated technology routes, capturing massive market opportunities

The ongoing COVID-19 pandemic has created a massive and sustainable vaccine market in the globe and PRC. According to CIC, assuming 80% of the total population need to be vaccinated to achieve herd immunity and taking into account of booster shots and re-vaccinations needs caused by increasing types of variant strains and waning immunity of existing approved products, the number of vaccinees of COVID-19 vaccines in the PRC is estimated to increase from 1,150 million in 2021 to more than 1,300 million in 2025, and will remain stable at 1,400 million per year from 2026 to 2030, creating a market that is worth hundreds of billions of US dollars every year from 2021 to 2030. In addition, due to the limited supply capacity of and uneven access to COVID-19 vaccines on the global market, there is an increasing global shortage, presenting a significant opportunity to PRC vaccine manufacturers. See “Industry Overview—COVID-19 Vaccine in the PRC—Massive and Sustained Demand for COVID-19 Vaccines.”

To capture such massive and underserved vaccine market opportunities, we are developing three COVID-19 vaccine candidates by adopting three technology routes validated by approved COVID-19 vaccines, namely mRNA, inactivated and recombinant adenoviral vector candidates. According to CIC, these technology routes have different benefits in terms of side effect, efficacy, supply and storage conditions, and therefore are suitable to different population segments with different vaccination history, immunity conditions and technology preferences. We believe our comprehensive COVID-19 vaccine candidates enable us to address the diverse vaccination demand, and to develop and supply COVID-19 vaccines in an efficient manner by fully utilizing our established vaccine platforms and manufacturing capabilities. We plan to first obtain NDA approval for and/or launch our mRNA vaccine against the Original Strain in the second quarter of 2023 to address the urgent and near-term market demand. For the longer future, we plan to launch the broad-spectrum recombinant adenoviral vector vaccine, which is not only effective against COVID-19 variants, but also risks of other coronavirus. As such, we believe each type of our COVID-19 vaccines will all have significant market opportunities. Details of our COVID-19 vaccine portfolio is illustrated below:

- *mRNA*. We are currently conducting a Phase II clinical trial in the PRC and have initiated a global Phase III clinical trial in June 2022 for our mRNA vaccine candidate. According to CIC, among all four validated technology routes of COVID-19 vaccines worldwide, mRNA vaccines achieve the highest protective efficacy rates (94%-95%). Phase I and Phase II clinical trials data show that our candidate against the Original Strain has a good safety and immunogenicity profile, and that our candidate induces humoral and T cell immunity. Leveraging our mRNA vaccine platform technologies, it only took 14 months to advance this candidate from project initiation to the Phase I clinical trial stage which started in July 2021.

We expect to obtain NDA approval for and/or launch our mRNA COVID-19 vaccine in the second quarter of 2023, being one of the first few mRNA COVID-19 vaccines approved in China. In addition, for candidates against variant strains, we have successfully constructed and produced trial vaccines against different variant strains in preclinical studies, including the Omicron variant strain, and are currently in the CTA filing process for a vaccine candidate against the Delta variant strain. We believe mRNA COVID-19 vaccines, once approved, would rapidly gain market share in China due to higher protective efficacy rates;

- *Broad-spectrum recombinant adenoviral vector.* Our recombinant adenoviral vector-based candidate is a potentially global innovative universal vaccine against different coronaviruses, including the ones causing COVID-19, SARS, MERS and so on. We are collaborating with SPHCC in the development of a potentially global innovative recombinant adenovirus-based vaccine vector targeting a highly conserved viral epitope that is virtually possessed by substantially all kinds of coronaviruses, resulting in a potential universal vaccine against different coronaviruses. Our vaccine is able to activate T cell immune responses as well as the broadly neutralizing antibodies responses at the same time. We expect to file a CTA in 2023 and launch this product in 2024 to 2025. We expect this product to have a larger market coverage beyond the COVID-19 market, due to its potential universal application to various coronaviruses, and is an ideal choice for future potential coronavirus; and
- *Inactivated.* The inactivated vaccine technology is a classic vaccine development technology that has contributed to major public breakthroughs with well-recognized safety profile. Among all nine COVID-19 vaccines conditionally approved or granted for emergency use in China, five are inactivated viral-based. Our inactivated COVID-19 vaccine candidate against the Original Strain is currently in Phase II clinical trial. In addition, we are cooperating with Zhejiang Provincial CDC for the second generation against the Delta variant strain, which is currently in the CTA filing process. We believe this product would become a competitive choice for people that prefer the well-validated inactivated technology route with less side effect concern.

Phase III mRNA COVID-19 vaccine candidate and mRNA platform technologies supported by proven manufacturing capabilities and established commercialization capabilities

We are currently conducting a Phase II clinical trial in the PRC and have initiated a global Phase III clinical trial for our mRNA COVID-19 vaccine candidate. According to CIC, as of the Latest Practicable Date, there was no approved mRNA COVID-19 vaccine in the PRC. As of the same date, six PRC vaccine developers were undertaking clinical trials for their respective mRNA COVID-19 vaccine candidates in the PRC or overseas, two of which (including us) reached Phase III clinical trials. Therefore, our mRNA candidate is expected to be one of the few first to be approved in the PRC. In addition, half of these six vaccine developers were clinical-stage companies with no experience in commercial-scale vaccine production nor vaccine commercialization activities. We believe our proven manufacturing capabilities and our established commercialization capabilities, underpinned by our GMP-certified commercial-scale manufacturing facilities and years of experience in commercial-scale vaccine production, can provide strong support to accelerate new vaccine development and commercialization under our mRNA platform technologies. Under this platform, we have the advanced lipid nanoparticle (LNP) based delivery system, drug design and production technologies. Our production standards have been accepted by the NMPA, as evidenced by the CTA approval granted for our mRNA COVID-19 vaccine candidate against the Original Strain. See “—Research and Development—Vaccine Development Platform Technologies—mRNA Vaccine Platform Technologies”. Our mRNA vaccine pilot scale production facility is among the first one to reach GMP standards in the PRC, according to CIC. Moreover, we are in the process of constructing mRNA vaccines scale production facilities. As such, we expect to have the capacity to produce our mRNA COVID-19 vaccine once it is approved by the NMPA. See “—Manufacturing—Manufacturing Facilities and Production Capacity—New Production Facilities—Production Facilities for mRNA Vaccines”.

mRNA vaccines have a number of advantages over conventional vaccines. For example, compared to traditional human rabies vaccines, mRNA rabies vaccine has higher immunogenicity; has simpler administration regimen, since less doses (two or three) are required to acquire immunity, compared to traditional vaccines (four or five doses); is easier to produce, as its production does not involve the complex processes of cell cultivation; has less impurity brought by raw materials thus easier to purify; and has higher batch-to-batch quality consistency. Leveraging our mRNA technology platform across mRNA

sequencing, delivery and manufacturing processes, we have the potential to rapidly identify and develop new mRNA vaccines in various disease areas, which could further enhance our leadership in the vaccine market. For instance, we are developing mRNA vaccines against rabies and RSV. Through rapid response, effective planning and decisive execution, we are in pole position to capture the massive market opportunities of mRNA vaccines in the PRC.

Furthermore, mRNA technologies are next-generation treatment technologies, and their potential reaches far beyond the development of vaccines. We expect to leverage the flexibility afforded by our platform and the fundamental role mRNA plays in protein synthesis to develop mRNA drugs and treatments in a number of areas, such as tumor, replacement for monoclonal antibody and protein drugs, immunodeficiency related conditions, heart failure, rare diseases, assisted reproduction procedure and cosmetic medicine. We are actively conducting preclinical studies for drugs against tumor and Fabry disease.

Carefully selected vaccine portfolio consisting of market-leading vaccine products and vaccine candidates having large market size, targeting major vaccine-preventable infectious diseases

As of the Latest Practicable Date, we had eight vaccine products against six vaccine-preventable infectious diseases, and 22 vaccine candidates against 13 major vaccine-preventable infectious diseases. According to CIC, our portfolio of vaccine products and vaccine candidates covers all top 10 vaccine products worldwide by 2021 global sales (totaling US\$101.9 billion), addressing vast underserved market demands.

Vaccine products

Among our current vaccine products, HBV vaccines and human rabies vaccines are our key commercialized products that lead their respective vaccine markets in the PRC, from which we generated 84.2%, 90.2%, 93.0%, 94.3% and 92.0% of our total revenue in 2019, 2020, 2021 and the four months ended April 30, 2021 and 2022, respectively:

- Recombinant HBV vaccines (Hansenula Polymorpha): There are 87 million people who are chronic HBV carriers in China, accounting for about one-third of all HBV chronic carriers worldwide. In 2021, HBV vaccines are globally the fourth largest vaccine type, accounting for 7% of the global vaccine sales volume. According to CIC, the market size of HBV vaccines in the PRC was RMB2.2 billion in 2021 and is expected to increase to RMB5.2 billion by 2030. We were the largest supplier of HBV vaccines in the globe and in the PRC, possessing a 45.4% market share in China in terms of 2021 approved lot release volume. In the PRC, anti-HBV vaccination is mandatory for all newborns within 24 hours of birth. In 2021, approximately 75% of China's newborns received our recombinant HBV vaccine.

As of the Latest Practicable Date, we were the first and only vaccine company in China with steady production and approved lot release volume of HBV vaccines using Hansenula Polymorpha for antigen expression, which is widely recognized as the best manufacturing technology route for HBV vaccines among all three available manufacturing technologies (Hansenula Polymorpha, Saccharomyces cerevisiae and CHO cells), featuring with better genetic stability, higher purity and stronger antigen expression capabilities. In addition, we manufacture HBV vaccines with adjuvants under a patented process, which prolongs the action time of antigens in the human body and strengthens the stimulation of immune response, and allows no addition of preservatives to enhance product safety. See “—Our Vaccine Products and Vaccine Candidates—Our Vaccine Products—Recombinant HBV Vaccines (Hansenula Polymorpha)—Our Advantages.”

- Human rabies vaccine (Vero cell): In 2021, we were the second largest supplier of human rabies vaccines both in the globe and in the PRC, possessing 18.1% and 16.2% market shares of China market, respectively, in terms of approved lot release volume and sales revenue. According to CIC, China's CDCs required approximately 70 million doses of human rabies vaccines in average per year from 2015 to 2020, which is expected to grow to 80 million doses from 2021 to 2030. In addition, as a Class II private vaccine, human rabies vaccines enjoy greater pricing flexibility and higher profit margins as compared to Class I vaccine products in China. According to CIC, the market size of human rabies vaccines in the PRC is expected to grow from RMB5.6 billion in 2021 to RMB14.8 billion in 2030 at a CAGR of 11.4%.

High and stable product quality has and will continue to be critically significant to compete in this market especially after Changsheng Incident in 2018. In the past five years, we are the only human rabies vaccine manufacturer with 100% pass rate in lot release quality audits by NIFDC. See “—Our Vaccine Products and Vaccine Candidates—Our Vaccine Products—Human Rabies Vaccine (Vero cell)—Our Advantages.” According to CIC, among different technology routes, our current Vero cell-based vaccine has and is expected to continue to be the mainstream type of human rabies vaccines by 2030 in terms of approved lot release volume and by 2027 in terms of sales revenue. In addition, human rabies vaccines under other technology routes, i.e., Vero cell serum free, HDC and mRNA, are expected to take increasing market shares for which we have candidates under development. See “—Vaccine candidates—Human rabies vaccine candidates.”

Besides these two types of market-leading key commercialized vaccines, we have other vaccine products against HAV, meningococcal diseases, mumps and HFRS, which diversify our product portfolio and revenue sources:

- Inactivated HAV vaccines (HDC). We are the second largest supplier of inactivated HAV vaccines (HDC) in the PRC in terms of 2021 approved lot release volume. We generated revenue of RMB87.2 million, RMB97.2 million, RMB86.1 million, RMB20.5 million and RMB15.8 million from sales of our inactivated HAV vaccines, accounting for 9.2%, 5.9%, 5.5%, 4.4% and 5.7% of our total revenue in 2019, 2020, 2021 and the four months ended April 30, 2021 and 2022, respectively. According to CIC, from 2021 to 2030, the market size of HAV vaccines in the PRC is expected to grow from RMB858.8 million to RMB2,251.4 million, of which the percentage of inactivated vaccines will increase from 49.4% to 79.7%, due to less safety concerns and higher biological stability as compared to live attenuated HAV vaccines, indicating a promising revenue growth driver for us; and
- Other vaccine products. We are also selling MPSV4, mumps and HFRS vaccine products. According to CIC, MPSV4 is expected to have a market size over or around RMB800 million by 2024. We launched our MPSV4 in March 2020 and rapidly generated sales revenue of RMB26.7 million by the end of 2020. We believe it will continue to make meaningful revenue contribution and help us to build brand recognition and sales channels in China's meningococcal vaccine market to prepare for future launch of MCV4 by 2025. In addition, according to CIC, the market size of mumps vaccines (without taking into account the combination choices) would remain relatively stable at RMB100 million from 2022 to 2030, and the market size of HFRS vaccines in the PRC is expected to reach RMB135.4 million in 2030, each representing a sizable market. We have and expect to continue to derive revenue from these two products.

Vaccine candidates

Among 22 vaccine candidates in our pipeline against 13 disease areas, we have five candidates at clinical stages, and we plan to file over 10 CTAs by the end of 2023 to advance multiple CTA-enabling and preclinical candidates to clinical trial stages. Out of this robust pipeline, we expect to obtain NDA approvals for and/or launch new vaccine products every year from 2023 to 2025 and 12 other new products in and after 2026, to bring sustainable new growth drivers to our business with a continuously diversifying product portfolio. For details, see “—Our Strategies—Accelerate the development of vaccine candidates and continue to enrich our product portfolio.”

- COVID-19 vaccine portfolio: See “—Broad COVID-19 candidates portfolio covering three validated technology routes, capturing massive market opportunities”. We expect to obtain NDA approval for and/or launch the mRNA candidate against the Original Strain in the second quarter of 2023 and to launch the broad-spectrum recombinant adenoviral vector-based candidate in 2024 to 2025.
- EV71-CA16 Bivalent HFMD Vaccine Candidate: In China, HFMD is a contagious disease primarily infecting preschool children, of which EV71 and CA16 are the two most prevalent causative agents. According to CIC, after the first HFMD vaccine was launched in China in 2016, the HFMD vaccine market rapidly achieved RMB1.5 billion sales in the same year. In 2021, China’s HFMD vaccine market reached RMB3.7 billion, representing a CAGR of 20.2% from 2016. However, currently, all approved HFMD vaccines in China are monovalent vaccines that target EV71, while another most prevalent causative agent CA16 has not been covered by preventive vaccines. We are developing a potentially global innovative bivalent HFMD vaccine that simultaneously targets EV71 and CA16, which we believe would gradually replace current monovalent vaccines with critically enhanced protection against HFMD. We filed a CTA with the NMPA in July 2022 and plan to commence Phase I clinical trial in the second half of 2022.
- Pneumococcal vaccine portfolio: We are developing a portfolio of pneumococcal vaccines, including clinical stage PCV13 and PPSV23, representing two major pneumococcal vaccine types in China, as well as a PCV20 candidate.
 - *PCV13 candidate*. PCV13 products, such as Prevnar 13, are the current world-class standard for pneumococcal vaccines and achieved a global sales of US\$5.3 billion in 2021. However, China’s PCV13 products are significantly underserved due to limited coverage and supply. In China, there are only three PCV13 products indicated for children below six years old and the penetration rate for approved age groups in 2021 was only around 11%. Such low penetration rate indicates a significant market potential in the PRC. CIC estimates that China’s PCV13 market will reach RMB26.2 billion in 2030 at a CAGR of 17.2% from 2021, and will become the largest segment of the overall pneumococcal vaccine market in the PRC. We are undergoing a Phase III clinical trial for our PCV13 candidate and had completed administration of the first dose of PCV13 for all test subjects in the Phase III clinical trial as of the Latest Practicable Date. We took only three years and six months to advance the development of our PCV13 vaccine candidate from preclinical studies to Phase III clinical trial. We expect to file NDA with the NMPA in 2023 and launch this vaccine in 2024;
 - *PCV20 candidate*. Our PCV20 candidate is potentially the first 20-valent pneumococcal conjugate vaccine in the PRC. It is expected to induce stronger immune response than PCV13 by covering seven more serotypes, and to offer stronger protection than PPSV23 benefiting from the immune memory elevated by the polysaccharide conjugation technology. We filed a CTA in June 2022 and plan to initiate Phase I clinical trial by the end of 2022; and

- *PPSV23 candidate.* PPSV23 is a primary pneumococcal vaccine type in China, accounting for a market share of 52.8% and 26.8% in 2021 in terms of approved lot release volume and sales revenue, respectively. Since the COVID-19 outbreak, PPSV23 has been recommended to be given in combination with influenza vaccines, which has increased the market demand. Our PPSV23 candidate is currently in a Phase I clinical trial. We completed vaccination procedure for all test subjects in the Phase I clinical trial in January 2022. We expect to initiate Phase III clinical trial in 2022, file NDA with the NMPA and launch this vaccine in 2023.
- DTP-based combination vaccine portfolio: Our DTP-based combination vaccine portfolio includes:
 - *DTP vaccine candidates.* We are developing both DTaP and DTcP vaccines, two major DTP combination choices in the PRC market. DTaP is a Class I vaccine type and dominates the PRC DTP vaccine market in terms of approved lot release volume, and DTcP is an advanced generation without approved products in the PRC to date; and
 - *DTP-Hib combination vaccine candidate.* We are developing a Hib vaccine candidate, which will enable us to leverage our DTP vaccines to form combination vaccines. According to CIC, DTP-Hib combination vaccines in the PRC achieved sales of RMB1.5 billion in 2021, representing a vast market.

We believe combination vaccines can significantly reduce the health care visits and costs of stocking and administering separate vaccines, and simplify administration process to allow vaccinees especially newborns to take additional vaccines if necessary. We expect to file CTAs for our DTaP and DTP-Hib combination vaccine candidates in 2023, and our DTcP vaccine candidate in 2024.

- Human rabies vaccine candidates: We are developing three human rabies vaccine candidates consisting of (i) one potentially global innovative mRNA human rabies vaccine utilizing our mRNA platform technologies, for which we plan to file CTA in 2022; (ii) one candidate using serum-free Vero cells with potentially improved safety profile, for which we plan to commence clinical trial (a Phase III clinical trial without having to undertake Phase I or II trials first) in the first half of 2023; and (iii) one preclinical candidate using HDC, which will have better safety profile, for which we plan to file CTA in 2023;
- MCV4 candidate: According to CIC, the market size of MCV4 products is expected to reach RMB4.0 billion in 2030 in the PRC and become the largest segment of China's meningococcal vaccine market. Unlike MPSV products, MCV products can induce immune responses in children aged 2 or below, which is very important because the incidence of meningococcal disease is highest in infants below 12 months old. As of the Latest Practicable Date, there was only one MCV4 in the PRC, which was recently approved in December 2021, indicating a significant market potential to us. We have obtained CTA approval and initiated a Phase I clinical trial in the fourth quarter of 2021;
- Influenza vaccine candidates: We have (i) one potentially global innovative universal influenza vaccine candidate based on recombinant adenoviral vector, which is expected to provide broad-spectrum and longer-lasting influenza protection; and (ii) one cell-based quadrivalent candidate with the potential to offer better safety profile than traditional, egg-based influenza vaccines. We plan to file CTAs for these influenza vaccine candidates in 2022 and 2023, respectively; and
- Other vaccine candidates with large market potential, including two HPV vaccine candidates (HPV2 and HPV9), one herpes vaccine candidate and one RSV vaccine candidate.

Strong R&D capabilities fueled up by the full-spectrum proven human vaccine platform technologies

We are the only China-based vaccine company that possesses all five proven human vaccine platform technologies worldwide, namely bacterial vaccine technologies, viral vaccine technologies, genetically engineered vaccine technologies, combination vaccine technologies and mRNA vaccine technologies. It is widely recognized that vaccine platform technologies could offer the potential for far greater speed and flexibility in vaccine development, and our full coverage of different technology platforms lays the backbone of our R&D capabilities.

- *Bacterial vaccine platform technologies.* We have developed technologies related to bacterial polysaccharides production, proprietary carrier protein (TT and CRM197) production and binding, and polysaccharide protein conjugation, which collectively represent the global most advanced bacterial vaccine technologies to date, and for which we have obtained nine invention patents. The polysaccharides conjugated vaccines, by producing memory-enhancing immune function and inducing a more permanent immunity, could provide clinically-meaningful protection for children at or below 2 years old and the immune-compromised elderly. Under this platform, we have successfully developed and commercialized MPSV4, and our investigational PCV13 and PPSV23 have been in the clinical stage, and we have obtained CTA approval for the MCV4 candidate and initiated Phase I clinical trial in the fourth quarter of 2021.
- *Viral vaccine platform technologies.* Our core technologies under this platform include the virus scale-up culture and the virus extraction and purification. We have established a broad suite of cell culture matrix for virus scale-up production, including chicken embryo cells, Vero cells and HDC. We have also accumulated proprietary know-how on how to control and optimize key process parameters of cell culture, which enables us to continuously improve virus production yields. We have two approved products utilizing this platform, namely inactivated HAV vaccines (HDC) and human rabies vaccine (Vero cell). We also have a number of vaccine candidates derived from this platform, such as one EV71-CA16 HFMD vaccine candidate and two improved human rabies vaccine candidates (HDC and serum-free Vero cell).
- *Genetically engineered vaccine platform technologies.* Such technologies take advantage of recombinant DNA technologies to generate antigens, which are easy to be produced on a large scale and able to induce strong and long-lasting immune responses, and therefore the resulting vaccines typically have simpler vaccination procedures. Under this platform, we have developed our recombinant HBV vaccines (Hansenula Polymorpha), and are currently developing two recombinant adenovirus-based broad-spectrum candidates targeting coronavirus and influenza.
- *Combination vaccine platform technologies.* We focus on DTP-based combination vaccines, with appropriate selection and utilization of adjuvant to increase the immunogenicity and reduce the number of vaccination shots, in order to lower administration pain and burden on newborns and their parents, as well as to reduce the adverse events after injections.
- *mRNA vaccine platform technologies.* See “—Research and Development—Vaccine Development Platform Technologies—mRNA Vaccine Platform Technologies”.

Mass-scale manufacturing capabilities with proven quality management

As of the Latest Practicable Date, we operate four individual Licensed Manufacturing Facilities in Rong'an Bio, AIM Honesty, AIM Kanghuai and AIM Weixin, with a GFA of approximately 25,318 sq.m., 11,877 sq.m., 18,711 sq.m. and 72,313 sq.m., respectively, and a designed annual production capacity of 25.0 million doses, 45.0 million doses, 5.3 million doses and 16.0 million doses, respectively, or 91.3 million doses in aggregate. Each Licensed Manufacturing Facility is responsible for producing one or more specific types of vaccines with different production processes and techniques. According to CIC, vaccine quality and safety attributes are highly dependent on the production processes and techniques, which take time to accumulate and are very hard to copy or switch. In addition, vaccine companies in China are generally prohibited from outsourcing manufacturing to CMOs. As a result, our four individual Licensed Manufacturing Facilities create a highly competitive edge for us. By equipping us with extensive hands-on experiences, process know-how and ready-for-use large-scale production capacity for multiple vaccine products, they enable us to promptly respond to increasing commercial demand and shorten vaccine development cycle. For example:

- In 2021, the NMPA approved lot releases of 623.8 million doses of 46 vaccines against 26 diseases (exclusive of COVID-19 vaccines), of which we contributed 7.4%, or approximately 46 million doses, making us the second largest vaccine manufacturer in terms of approved lot release volume and the largest privately-owned vaccine manufacturer, according to CIC;
- We rapidly increased production volume of our human rabies vaccine by approximately 28% in 2020 to address the urgent market demand, with 100% pass rate in the lot release audits performed by NIFDC; and
- We have tested and proven our manufacturing techniques for PCV13 through scaled-up production, and have produced samples of PCV13 for our Phase I and Phase III clinical trials. As a result, we expect to rapidly advance its clinical development and launch this product in 2024.

We have established a comprehensive quality management from vaccine research, development and manufacturing, with high and consistent quality as our top priority. All our four Licensed Manufacturing Facilities have maintained 100% pass rate in vaccine lot release audits by NIFDC under our operation, higher than the industry average level, according to CIC. We are the only human rabies vaccine manufacturer with 100% pass rate in lot release quality audits by NIFDC over the past five years, and our 10µg HBsAg/0.5ml recombinant HBV vaccine (Hansenula Polymorpha) has maintained 100% pass rate in lot release quality audits for 15 years since commercial launch.

Extensive sales network and highly experienced and efficient commercialization team

Our sales and marketing function is centralized, and is specialized and market-oriented. We have a professional and dedicated in-house sales and marketing team assembled at the Group level, consisting of over 100 members with an average of more than 10 years' experience in sales of pharmaceuticals or vaccines. Our core commercial leadership team has an average of 12 years of experiences in vaccine commercialization in leading multinational pharmaceutical companies, and has excellent track records in marketing international blockbuster vaccines, including global first HPV, IPV and DTaP-IPV-Hib.

By centralizing sales and marketing function, we can accelerate marketing strategy formulation with a focused vision and quickly execute all strategies in a united manner. In addition, we consolidate and integrate quality resources at the Group level instead of dispersing into four operating subsidiaries, which enables us to achieve a high cost-efficiency especially in team building and management. Through the sales and marketing centralization, we have built effective sales channels for and strong CDC recognition of our products, enabling us to cross-sell existing vaccine products and rapidly ramp up sales of vaccine products. As of the Latest Practicable Date, we sold vaccine products to all 31 provinces, direct-controlled municipalities and autonomous regions in the PRC, covering all provincial CDCs and over 2,000 of county-level CDCs.

BUSINESS

Our sales and marketing team is responsible for formulating overall marketing and promotion strategies. In executing such strategies and performing relevant marketing and promotion activities, we adopt a two-pronged approach. Our in-house sales and marketing team covers areas in a few number of direct-controlled municipalities and large-population provinces for all or part of our products. To a larger extent, we engage third-party CSOs with local resources, proven industry experience and marketing expertise to assist our sales in areas where our in-house team has not established specific sales coverage, which we believe is the most cost-effective manner to increase our market outreach and penetration. We closely monitor the performance of CSOs, with a focus to increase their stickiness and our sales efficiency. During the Track Record Period, we consolidated our CSO team by decreasing the number from approximately 60 to less than 40, increasing the average share of wallet from CSOs from RMB12.0 million in 2019 to RMB35.7 million in 2021. As a result, our selling and distribution expenses as a percentage of our revenue decreased from 34.7% in 2019 to 32.6% in 2020 and further to 29.3% in 2021.

Our sales and marketing efforts put a strong emphasis on academic promotion. Through our in-house sales and marketing team and with the support of CSOs, we keep frequent communications with CDCs, vaccination sites and related healthcare professionals through academic events, regular visits, on-site trainings and post-injection follow-ups. After years of efforts to introduce our products through such interactions, we have gained recognition of CDCs at all levels and related healthcare professionals. We believe such recognition will also allow us to effectively market and sell new vaccines to be launched from our pipeline.

Visionary founder with strong support from experienced execution team and industry-leading scientists

Our core management team comprises a group of seasoned vaccine industry professionals with a strong track record and proven execution capabilities. In particular, we are led by the chairman of our Board and CEO, Mr. Yan ZHOU, who has led the Group development with a vision to build a world-class vaccine company in the PRC. His high-level perspective and deep understanding of the unmet medical needs of China's vaccine industry and insightful strategies to address such issues have spearheaded our business growth.

Mr. Yan ZHOU leads our businesses along with other members of our core management team. Mr. Wen GUAN, our executive Director and executive president, has extensive experience in corporate management and investment. Mr. Shaojun JIA, our executive Director and executive president, has over 30 years of experience in corporate investment and management. Ms. Lixin NIU, our chief financial officer, has many years of experience in financial management, including over a decade in the biopharmaceutical industry. Ms. Ling LIU, the secretary to the Board and our chief investment officer, has been with our Group since inception and has in-depth understanding of our products, development focus and execution strategies.

Under the leadership of Mr. Yan ZHOU and our core management team, we have leading scientists joining or collaborating with us to support our vaccine development and manufacturing. Within our Group, Dr. Yucai PENG (彭育才) is our chief scientist and has over 20 years of experiences in biopharmaceutical industry including extensive top-class knowledge in mRNA drugs. We have also established a Group-level vaccine expert panel, and the members include: Mr. Fan ZHANG (張凡), the general manager of AIM Explorer R&D center, with over 10 years of vaccine development experiences, including research, pilot and scaled-up production for MCV4, PCV13 and DTP combination vaccine candidates; Ms. Li JIANG (姜莉), the deputy general manager of AIM Kanghuai, previously serving as the research department director of the Institute of Medicinal Biotechnology Chinese Academy of Medical Sciences (中國醫學科學院醫藥生物學研究所科研處) where she was deeply involved in the development of Sabin IPV vaccine and genetically engineered mumps vaccine in China; Mr. Jinan WU (吳季南), the general manager of Rong'an Bio, was the former division director of human rabies vaccines in Wuhan Institute of Biological Products

(武漢生物製品研究所) where he led the clinical research of DTP-HBV combination vaccine, the production process development of genetic-engineered HBV vaccine and human rabies vaccine; and Dr. Gaofeng LIN (林高峰), the chief scientist of Rong'an Bio, who has over 20 years of experiences working in biotechnology and bio-pharmaceutical companies in the U.S.. In addition, outside our Group, we have established a scientific advisory board that comprises prominent scientists in China's vaccine industry to offer advice and recommendations on the direction of our R&D efforts, members include: Dr. Yu WANG (王宇), former chief director of national CDC from June 2004 to August 2017; Dr. Jianqing XU (徐建青), former director of research and development department and current senior researcher of SPHCC with special focus on infectious disease prevention and vaccination; Dr. Dongming ZHOU (周東明), a distinguished Professor of SPHCC with special focus on novel vaccine viral vectors and gene therapy; Dr. Ningning MA (馬寧寧), former senior principal scientist in Pfizer and former vice director of the Cell Engineering Research Center of Peking Union Medical College, who has over 20 years of experience in research and development of antigens and carrier proteins; and Dr. Xiaofeng QIN (秦曉峰), professor, chief scientist and researcher at the Chinese Academy of Medical Sciences & Peking Union Medical College; Suzhou Institute of Systems Medicine., who has over 20 years of experience in tumor and immunotherapy.

These scientists, in together, have and would continue to cultivate their scientific insights, deep industry knowledge and rich experience in our vaccine development and production processes, and have helped to shape a dedicated, quality-forward and market-oriented culture in our Group.

OUR STRATEGIES

Our objectives are to strengthen our competitive strengths in China's vaccine market and to become a world-class company in the global vaccine market. To achieve these goals, we intend to implement the following strategies:

Continue to strive to access to quality industry resources to expand and optimize our business

We will continue to strengthen the interactions among our operating subsidiaries and research centers to accelerate pipeline development, especially on CMC development and production process improvement. We are also committed to provide our people with ready opportunities to translate their direct, on-the-job experiences to potential product ideas, such as cross-team secondments and collaborations.

In addition, we are keen to work with the best scientists in the vaccine industry. We intend to continue to work with scientists on our R&D activities on flexible terms, and are open to assignment from universities, academic institutions or governmental programs. We are also open to young scientists and plan to establish graduate, PhD and/or postdoctoral programs with universities and academic institutions and offer the young talents tailored trainings and funds in vaccine-related research areas, especially innovative vaccine development.

Furthermore, we will continue to actively explore strategic opportunities for collaborations, in-licensing and acquisitions of high-potential vaccine assets and technologies. We will primarily seek vaccine candidates and technologies that can build synergies with our existing portfolio. We may also consider to invest in or acquire companies with innovative technologies or sales and marketing resources that can supplement our business capabilities.

Accelerate the development of vaccine candidates and continue to enrich our product portfolio

We plan to advance the development of our vaccine pipeline, primarily including:

- ***COVID-19 vaccine portfolio.*** We expect to (i) continue to advance clinical trials for our mRNA vaccine candidate, and to receive the conditional NDA approval and/or launch this vaccine in the second quarter of 2023, and will then proceed with later stage clinical trials and ongoing CTA filing process of our inactivated candidates, subject to the changing pandemic epidemiology, circulating variants, containment measures and vaccination policies in China; and (ii) file a CTA for our broad-spectrum coronavirus vaccine candidates in 2023, and launch this vaccine in 2024 to 2025;
- ***Pneumococcal vaccine portfolio.*** We are undergoing a Phase III clinical trial for our PCV13 candidate and had completed administration of the first dose of PCV13 for all test subjects in the Phase III clinical trial as of the Latest Practicable Date, and plan to initiate Phase III clinical trial for our PPSV23 candidate in 2022. We aim to rapidly advance their clinical development. We plan to commercially launch PPSV23 and PCV13 in 2023 and 2024, respectively. For the PCV20 candidate, we filed a CTA with the NMPA in June 2022 and plan to initiate Phase I clinical trial by the end of 2022; we plan to file the NDA with the NMPA in 2024 and launch this vaccine in 2025;
- ***EV71-CA16 Bivalent HFMD Vaccine Candidate.*** We plan to commence Phase I clinical trial for our EV71-CA16 Bivalent HFMD Vaccine Candidate in the second half of 2022. We plan to carry out clinical trials from the second half of 2022 to 2025. Based on the positive results of clinical studies, we expect to file an NDA with the NMPA in 2025 and launch this vaccine in 2026;
- ***DTP-based combination vaccine portfolio.*** We plan to file CTAs and receive approvals for our DTaP and DTP-Hib combination vaccine candidates in 2023, and our DTcP vaccine candidate in 2024. We expect to rapidly advance clinical trials for this portfolio leveraging our combination vaccine platform technologies and launch DTaP and DTP-Hib vaccines in 2026;
- ***Human rabies vaccine candidates.*** We plan to file the CTAs for the mRNA human rabies vaccine candidate and human rabies vaccine candidate (HDC) in 2022 and 2023, respectively. Furthermore, we plan to commence clinical trial (a Phase III clinical trial without having to undertake Phase I or II trials first) for our human rabies vaccine candidate (Vero cell, serum free) in the first half of 2023. We plan to launch these three new human rabies vaccines from in or after 2025, which will continue to help us to solidify the market-leading position and increase our market share in China's human rabies vaccine market, in addition to our current Vero cell-based vaccine;
- ***MCV4.*** We have obtained CTA approval and initiated a Phase I clinical trial in the fourth quarter of 2021. We expect to rapidly advance clinical trials leveraging our bacterial vaccine platform technologies and launch this vaccine in 2025; and
- ***Influenza vaccine candidates.*** We plan to file CTAs for the universal influenza vaccine candidate and cell-based quadrivalent influenza vaccine candidate in 2022 and 2023, respectively, and expect to launch these two vaccines in 2026.

We will also continue to develop other preclinical vaccine candidates. For example, we expect to file CTAs for our Herpes and mRNA RSV vaccine candidates in 2023. Leveraging our vaccine platform technologies, we would continue to develop vaccines with significant clinical value and high market potential. For example, we plan to devote significant efforts to mRNA vaccines leveraging our mRNA platform technologies, bacterial vaccines using our polysaccharide production and conjugation technologies as well as therapeutic vaccines for cancers. In addition, we will further enrich product portfolio against rabies. Besides three human rabies vaccine candidates, we are also exploring anti-rabies antibody candidates. Leveraging our established human rabies vaccine sales channels, we believe we can rapidly ramp up sales of relevant anti-rabies antibody products, and further enhance our leadership among biologics products against human rabies. We plan to finance our research and development activities by a combination of cash and cash equivalents on hand, banking facilities, cash inflow from our operations, and approximately 60%, or HK\$42.00 million of the net proceeds from the Global Offering. See “Future Plans and Use of Proceeds—Use of Proceeds.”

Continue to solidify and expand market leadership by increasing sales and marketing efforts for approved vaccine products and commercializing new products

We are committed to strengthening our highly specialized sales and marketing network and will continue to expand and empower our skilled in-house sales force, in order to support the launch of new products in the future and to deepen our market penetration. We plan to expand our in-house commercialization team to reach approximately 500 to 800 members in the next three to five years based on development and launch plans of our new vaccine products, with an initial focus on vaccines with large market potential including COVID-19 vaccines, pneumococcal diseases vaccines and HFMD vaccine. We also plan to train current local sales personnel to become sales heads in respective areas, to lead new members and to execute our marketing strategy for new products. We would continue to adjust the geographic and product coverage of our in-house sales force and third-party CSOs for existing and new products based on respective network advantages, historical performance and cost efficiency.

In addition, we will continue to carry out academic communications with CDCs and related healthcare professionals in our vaccines and focused disease prevention areas, to help them to understand and recognize the advantages of our products. Such communication channels include industry consultations on vaccination programs initiated by CDCs, academic events and medical conferences, regular visits and training activities for county-level hospitals and community clinics, among others, for which we will continue to devote more resources. We will also continue to increase public awareness of the benefits of vaccination for different age groups by targeting parents of newborns and the elderly population as well as high-risk populations.

Furthermore, leveraging our comprehensive vaccine portfolio, mass-scale manufacturing capabilities and quality management, we plan to select emerging international markets where there is a potential demand for our products.

We expect to allocate approximately 5%, or HK\$3.51 million, to our future sales and marketing activities, including to expand our sales and marketing team, fund more academic promotion activities, and conduct pre-launch marketing activities for our new vaccine products. See “Future Plans and Use of Proceeds—Use of Proceeds.”

Expand our production capabilities to support our future growth

We believe the speed, quality, reliability and scalability of our manufacturing capabilities will continue to be a core competitive advantage of commercial success. According to CIC, from 2021 to 2030, the approved lot release volumes of HBV vaccines in China are expected to increase from 66.6 million doses to 98.2 million doses, of which recombinant HBV vaccines (Hansenula Polymorpha) would remain the largest segment. For the same period, the approved lot release volumes of human rabies vaccines would

be approximately 80 million doses per year in average, 10 million doses higher than the average level in the past five years. According to the same source, there is also expected to be significant market demand for our new vaccine products to be launched in the next few years. For example, the number of vaccinees of COVID-19 is expected to increase from 1,150 million in 2021 to more than 1,300 million in 2025, and will remain stable at 1,400 million per year from 2026 to 2030. In addition, from 2020 to 2030, the markets of pneumococcal vaccines, DTP-based combination vaccines and MCV4 will continue to increase in China with increasing vaccination awareness and public demand for better and new vaccines. As the second largest vaccine manufacturer in China by approved lot release volume with a comprehensive vaccine portfolio, we believe we are well-positioned to capture such market demand and industry opportunities.

To ensure our production capacity is sufficient to meet our business expansion goals, we plan to further enhance manufacturing efficiency and utilization of existing facilities. We plan to continue to optimize manufacturing processes, to timely adjust production plans in accordance with the market demand, and to advance production automation for higher production efficiency.

For new bacterial vaccine products to be launched in the next few years, we plan to expand production capacity in AIM Weixin. AIM Weixin underwent upgrades of existing production lines and workshops for pneumococcal vaccines with a designed annual production capacity of 47 million doses, and has commenced trial production for clinical trial supply in the first half of 2021. It is currently constructing new production lines and workshops for MCV4, DTP and DTP-Hib combination vaccines with a designed annual production capacity up to 75 million doses. In addition, for new viral vaccine production, we will establish new production facilities in accordance with GMP standards and NMPA requirements, and invest in state-of-the-art production equipment. For example, Rong'an Bio was constructing production facilities for our serum free Vero cell human rabies vaccines. The production facilities for serum free Vero cell human rabies vaccines have a designed annual production capacity of 50 million doses, and a designed GFA of over 45,000 sq.m.. We have commenced trial production for clinical supply in 2021. We expect to commence trial production for clinical supply for serum free Vero cell human rabies vaccines in 2022. Moreover, Rong'an Bio is also constructing a P3 Lab. We are one of the first two human vaccine companies in the PRC that have been granted permission under the Fourteenth Five Year Plan of the PRC to build a P3 Lab. We are also in the process of setting up production facilities for new mRNA vaccines in Ningbo, with a designed annual production capacity of 200 million doses. See “—Manufacturing—Manufacturing Facilities and Production Capacity—New Production Facilities” for details. We plan to finance the required capital expenditures by a combination of cash and cash equivalents on hand, banking facilities, cash inflow from our operations, and 35% of the net proceeds from the Global Offering or HK\$24.50 million. See “Future Plans and Use of Proceeds—Use of Proceeds.”

Continue to attract, train and retain talents to further expand our capabilities

A talent pool of experienced senior management and professional employees is critical to our success. We plan to continue to attract and train talented employees, including those in research and development, manufacturing, business development and corporate management. We plan to recruit researchers with exceptional expertise in mRNA technologies and related production process, focusing on vaccine engineering and delivery, as well as technicians with well-rounded quality management knowledge and experiences in vaccine industry.

We always provide our management personnel and other key employees, particularly those in our research and development, manufacturing and sales and marketing teams, with compensation packages that we believe to be competitive in our industry. We intend to continue to provide our talented and promising employees who have management potential with trainings and rotation programs to help them develop professional skills and work experience necessary for being a competent manager. We intend to continue to provide a wide range of training programs for our employees across different departments. With a continual focus on the development of our human resources, we believe we will be successful in retaining and motivating our employees and continue to attract more talented individuals.

OUR VACCINE PRODUCTS AND VACCINE CANDIDATES

Overview

As of the Latest Practicable Date, we commercialized eight vaccine products against six vaccine-preventable diseases in the PRC, including rabies, HBV, HAV, mumps, HFRS and meningococcal diseases. As of the same date, we also have 22 vaccine candidates against 13 diseases areas, of which five candidates (mRNA COVID-19 vaccine candidate against the Original Strain, inactivated COVID-19 vaccine candidate, PCV13, PPSV23 and MCV4) are at clinical stages. Out of these five vaccine candidates, we expect to launch at least four from 2023 to 2025. In addition, we plan to file over 10 CTAs by the end of 2023 to advance multiple CTA-enabling and preclinical candidates to clinical trial stages. The following table summarizes our vaccine portfolio consisting of both vaccine products and vaccine candidates:

Vaccine Portfolio

Indication	Vaccine Product/ Vaccine Candidate	In-house R&D/ Joint Development	Preclinical	CTA	Phase I	Phase II/III	NDA Approval /Market	Obtaining NDA Approval /Expected Timing to Market [#]
Vaccine Products ¹								
HBV	Recombinant HBV Vaccines (Hansenula Polymorpha) ²	In-house R&D	NDA approved in 2004					2004
HAV	Inactivated HAV Vaccines (HDC) ³	In-house R&D	NDA approved in 2015					2015
Mumps	Mumps Vaccine	In-house R&D	NDA approved in 2004					2004
HFRS	HFRS Inactivated Vaccine	In-house R&D	NDA approved in 2007					2007
Rabies	Human Rabies Vaccine (Vero Cell)	In-house R&D	NDA approved in 2007					2007
Meningococcal disease	MPSV4	In-house R&D	NDA approved in 2018					2018
Vaccine Candidates ⁴								
COVID-19	mRNA COVID-19 Vaccine	In-house R&D	Initiated Phase III in Q2 2022 ⁵					Q2 2023
	Inactivated COVID-19 Vaccine	Joint Development	Phase II ongoing (against the Original Strain); Start Phase I in 2022 (against the Delta Strain) ⁶					After launching mRNA COVID-19 vaccine ⁷
	Broad-spectrum COVID-19 Vaccine	Joint Development	File CTA in 2023 ⁸					2024 to 2025
HFMD	EV71-CA16 Bivalent HFMD Vaccine Candidate (HDC)	In-house R&D	Start Phase I in H2 2022					2026
Pneumococcal disease	PCV13	In-house R&D	Finish Phase III in Q2 2023 ⁹					2024
	PPSV23	In-house R&D	Finished Phase I in Q1 2022 and initiated Phase III in Q3 2022					2023
	PCV20	In-house R&D	Start Phase I in 2022					2025
DTP ¹⁰	DTP-Hib Combination Vaccine	In-house R&D	File CTA in 2023					2026
	DTaP	In-house R&D	File CTA in 2023					2026
	DTcP	In-house R&D	File CTA in 2024					After 2026
	Absorbed Tetanus Vaccine	In-house R&D	File CTA in 2022					2025
Hib	Hib Vaccine	In-house R&D	File CTA in 2023					2026
Rabies	mRNA Human Rabies Vaccine	In-house R&D	File CTA in 2022					2025
	Human Rabies Vaccine (Vero Cell, Serum-free)	In-house R&D	Start Phase III in H1 2023 ¹¹					2025
	Human Rabies Vaccine (HDC)	In-house R&D	File CTA in 2023					2026
HPV	HPV2	In-house R&D	File CTA in 2023					After 2026
	HPV9	In-house R&D	File CTA in 2023					After 2026
Meningococcal disease	MCV4	In-house R&D	Start Phase II in H1 2023					2025
Influenza	Tetavalent Influenza Vaccine (MDCK Cells)	In-house R&D	File CTA in 2023					2026
	Universal Influenza Vaccine	Joint Development	File CTA in 2022 ⁸					2026
Herpes	Shingles/Herpes Zoster Vaccine	In-house R&D	File CTA in 2023					After 2026
RSV	mRNA RSV Vaccine	In-house R&D	File CTA in 2023					After 2026
<div><div></div> Viral Vaccine Platform</div> <div><div></div> Bacterial Vaccine Platform</div> <div><div></div> mRNA Vaccine Platform</div> <div><div></div> Genetically Engineered Vaccine Platform</div> <div><div></div> Combination Vaccine Platform</div>								

Notes:

- (1) Our human rabies vaccine (Vero cell) and MPSV4 are Class II vaccines.

For our recombinant HBV vaccines, the 10µg HBsAg/0.5ml dosage is a Class I vaccine for newborns and a Class II vaccine for other vaccinees, and the 20µg HBsAg/0.5ml dosage is a Class II vaccine in most cases, and a Class I vaccine procured under certain government procurement programs.

For our inactivated HAV vaccines, the 320Eu/0.5ml dosage is a Class I vaccine in Beijing, Shanghai, Tianjin and Jiangsu Province, and a Class II vaccine in other regions in the PRC, and the 640Eu/1.0ml dosage is a Class II vaccine.

Our HFRS vaccine and mumps vaccine are typically classified as Class II vaccines in the PRC. However, they may be procured by certain provincial level CDCs as a Class I vaccine under some special circumstances, such as local outbreaks.

- (2) We have developed two recombinant HBV vaccine products, differentiated in terms of HBsAg concentration: 10µg HBsAg per dose and 20µg HBsAg per dose. See “—Our Vaccine Products—Recombinant HBV Vaccines (Hansenula Polymorpha).”
- (3) We have developed two inactivated HAV vaccine products, differentiated in terms of isolated HAV antigen concentration: 320Eu/0.5ml per dose and 640Eu/1.0ml per dose. See “—Our Vaccine Products—Inactivated HAV Vaccines (HDC).”
- (4) We expect all of our vaccine candidates, except for DTaP, to be classified as Class II vaccines upon commercialization. We expect to commercialize our DTaP as a Class I vaccine.
- (5) As of the Latest Practicable Date, we entered Phase III clinical trial stage for our mRNA COVID-19 vaccine candidate (against the Original Strain). We expect such clinical trials to accelerate our R&D activities for mRNA vaccine candidates against other COVID-19 variants. We are currently in the CTA filing process for mRNA vaccine candidate against the Delta variant. We are also conducting preclinical studies for mRNA vaccine candidate against the Omicron variant.
- (6) As of the Latest Practicable Date, our inactivated COVID-19 candidate against the Original Strain was in Phase II clinical trial stage. We are also collaborating with Zhejiang Provincial CDC in the development of a second generation inactivated COVID-19 vaccine candidate against the Delta variant strain. See “—Research and Development—Collaboration Agreements—Collaboration with Zhejiang Provincial CDC”.
- (7) Considering that (i) our mRNA COVID-19 candidate has reached the Phase III clinical trial stage, becoming one of the most advanced COVID-19 vaccine candidates in our pipeline; (ii) mRNA COVID-19 vaccines provide a higher degree of protection in comparison with other vaccination technology routes and there is no approved mRNA vaccine in the PRC to date; and (iii) major circulating COVID-19 virus variants in the globe and PRC are changing from time to time, and governmental disease prevention and control policies and measures as well as the vaccination strategy in China are continuously adjusting accordingly, we plan to accelerate and prioritize the development of our mRNA COVID-19 vaccine, in order to gain fast-to-market and first-mover advantages in the massive COVID-19 vaccine market. We target to launch our mRNA candidate first, and will then proceed with later stage clinical trials and ongoing CTA filing process of our inactivated candidates, subject to the changing pandemic epidemiology, circulating variants, containment measures and vaccination policies in China.
- (8) We are currently collaborating with SPHCC in the development of two novel recombinant adenoviral vector-based broad-spectrum candidates against coronavirus (including viruses causing COVID-19 and its variant strains) and influenza. See “—Research and Development—Collaboration Agreements—Collaboration with SPHCC.”
- (9) This refers to the completion of vaccination procedure for all test subjects in the relevant clinical trial.
- (10) DTP refers to three diseases, namely diphtheria, tetanus and pertussis. DTP-based combination vaccines also utilize bacterial vaccine technologies.
- (11) Per communications with the CDE, we may directly undertake Phase III clinical trials, without having to undertake Phase I or II clinical trials first.
- # Timing of obtaining NDA refers to the time when a vaccine product obtained NDA approval. Expected timing to market refers to the time we expect to launch a vaccine candidate onto the market.

BUSINESS

Our Vaccine Products

Overview

We have commercialized eight vaccine products, including a human rabies vaccine (Vero cell), two recombinant HBV vaccines (high dosage and low dosage), two inactivated HAV vaccines (HDC) (high dosage and low dosage), mumps vaccine, HFRS vaccine and MPSV4. During the Track Record Period, we sold substantially all of our products to different levels of CDCs in the PRC. During the Track Record Period, we derived revenue from the sale of eight vaccine products against six disease areas, of which human rabies vaccine (Vero cell) and recombinant HBV vaccines (Hansenula Polymorpha) are our two market-leading commercialized vaccine products. We have been relying on our HBV and human rabies vaccine products during the Track Record Period, from which we generated 84.2%, 90.2%, 93.0%, 94.3% and 92.0% of our total revenue in 2019, 2020, 2021 and the four months ended April 30, 2021 and 2022, respectively. The following table sets forth a breakdown of our revenue by product and percentage of our revenue for the periods indicated:

	Year ended December 31,						Four months ended April 30,			
	2019		2020		2021		2021		2022	
	Amount	% of revenue	Amount	% of revenue	Amount	% of revenue	Amount	% of revenue	Amount	% of revenue
(unaudited)										
(in thousands of RMB, except for percentages)										
Vaccine products										
Human rabies vaccine										
(Vero cell)	446,114	46.9	1,072,854	65.5	937,414	59.7	301,548	64.9	175,765	63.9
Recombinant HBV vaccines										
(Hansenula Polymorpha) ⁽¹⁾	354,910	37.3	404,781	24.7	523,252	33.3	136,872	29.4	77,425	28.1
Inactivated HAV vaccines										
(HDC) ⁽²⁾	87,249	9.2	97,221	5.9	86,057	5.5	20,473	4.4	15,819	5.7
MPSV4	—	—	26,739	1.6	18,666	1.2	4,411	1.0	6,218	2.3
Mumps vaccine	39,551	4.2	35,505	2.2	1,893	0.1	1,622	0.3	—	—
HFRS vaccine	23,824	2.4	870	0.1	—	—	—	—	—	—
Sub-total	<u>951,648</u>	<u>100.0</u>	<u>1,637,970</u>	<u>100.0</u>	<u>1,567,282</u>	<u>99.8</u>	<u>464,926</u>	<u>100.0</u>	<u>275,227</u>	<u>100.0</u>
Research and development										
services	—	—	—	—	2,847	0.2	—	—	28	*
Total	<u>951,648</u>	<u>100.0</u>	<u>1,637,970</u>	<u>100.0</u>	<u>1,570,129</u>	<u>100.0</u>	<u>464,926</u>	<u>100.00</u>	<u>275,255</u>	<u>100.00</u>

Notes:

* Less than 0.1%

(1) We have developed two recombinant HBV vaccine products, differentiated in terms of HBsAg concentration: 10µg HBsAg per dose and 20µg HBsAg per dose. See “—Recombinant HBV Vaccines (Hansenula Polymorpha).”

(2) We have developed two inactivated HAV vaccine products, differentiated in terms of isolated HAV antigen concentration: the 320Eu/0.5ml per dose indicated for the age group of one to 15 years old, and the 640Eu/0.5ml per dose indicated for people older than 15. See “—Inactivated HAV Vaccines (HDC).”

BUSINESS

Our net profit increased from RMB119.8 million in 2019 to RMB400.4 million in 2020, primarily driven by our revenue growth as well as improved operation cost and expense control. However, in 2021, we had a loss of RMB675.9 million, which was primarily due to (i) our share-based compensation expenses totaling RMB952.1 million, including a one-off share-based compensation expense of RMB896.9 million, and (ii) an increase of RMB149.6 million in research and development costs to advance our rich vaccine pipeline. We recorded a loss of RMB95.8 million in the four months ended April 30, 2022, mainly because of a slowdown in sales amid the resurgence of COVID-19 in certain cities and the high R&D expenses incurred for development acceleration of our vaccine candidates. For a detailed discussion of our financial performance during the Track Record Period, see “Financial Information—Consolidated Statements of Profit or Loss.” We expect to record net loss for the year ending December 31, 2022, which is primarily attributable to a significant forecast increase in our research and development costs driven by the advancement of multiple vaccine candidates, especially candidates expected to be launched in near term, such as the mRNA COVID-19 vaccine candidate, PCV13, PPSV23 and serum-free Vero cell human rabies vaccine candidates.

We expect to further improve our financial performance and achieve net profitability primarily through the following:

- Increasing sales of existing products through strengthening marketing efforts. We will strengthen our professional and academic marketing to facilitate sales, including active communications with CDCs and vaccination points, regular visits and training activities for county-level hospitals and community clinics, especially for Class II vaccines. In particular, CIC estimates that, from 2021 to 2025, the market size of HBV vaccines in the PRC would increase from RMB2.2 billion to RMB3.5 billion, and the market size of human rabies vaccines would increase from RMB5.6 billion to RMB9.0 billion, which both indicate large and continuously growing market demand, and therefore we expect to continue to generate increasing revenue from these two vaccine products as the market-leading players with strengthening sales and marketing efforts. We also expect to increase sales of HAV vaccines after we complete the production facilities upgrades and resume normal commercial sales from the fourth quarter of 2022 onwards, by leveraging its technical advantages over live attenuated HAV vaccines in the marketing activities;
- Advancing the development of our pipeline products to add new revenue sources. For example, the Company’s mRNA COVID-19 vaccine candidate has initiated Phase III clinical trial, being one of the only two domestically-developed mRNA vaccines reaching such late stage. We plan to accelerate this trial and launch this product under conditional NDA approval in 2023, considering that mRNA vaccines provide a higher degree of protection in comparison with other vaccination technology routes against COVID-19 and there is no approved mRNA vaccine in the PRC to date, and we would enjoy first-mover advantages to capture a sizeable share in the multi-billion COVID-19 vaccine market. We also plan to launch PPSV23 product in 2023 for which we have initiated the Phase III clinical trial. In order to support launch of new products, we plan to expand our in-house commercialization team and to train current local sales personnel to become sales heads in respective areas, to lead new members and to execute our marketing strategy for new products. Such new products will bring additional sustainable growth drivers to further increase our revenue; and
- Continuing to control our operating expenses and to optimize our cost structure. Going forward, we expect to budget and incur substantial research and development expenses for our vaccine candidates. We would closely monitor the development results of and market demand for relevant vaccines on an ongoing basis. Spending of budgeted R&D expenses will be on a milestone basis and depend on latest available outcomes of prior development step undertaken and we will incur substantial R&D expenses especially for late-stage clinical trials only if we

anticipate a high certainty of significant revenue from the trial activities and product launch. In addition, we will continue to improve our production efficiency through upgrading our manufacturing facilities as well as dynamically adjusting the production capacity allocation to ensure high utilization of labor force. We will also continue to strive for commercially favorable pricing of raw materials by leveraging on long-term agreements and bulk purchases if applicable as well as closely monitoring market price fluctuations. Moreover, to optimize our selling and distribution expenses management, we will devote resources for pre-launch activities for new products only if there is a great certainty to its marketing approvals and launch windows based on communications with the NMPA and CDCs.

Based on above measures and plans, we believe we are able to thoughtfully manage our business with an aim of continuously growing our overall revenues and quickly achieving profitability.

Out of our robust pipeline, we expect to (i) launch up to two new vaccine products in 2024 (i.e. broad-spectrum COVID-19 vaccine and PCV13); (ii) launch at least five new vaccine products in 2025 (such as mRNA human rabies vaccine and PCV20); and (iii) launch 12 other new vaccine products such as EV71-CA16 Bivalent Vaccine Candidate, HPV vaccines, DTcP, DTP-Hib, Herpes vaccine and RSV vaccine in and after 2026. See “—Vaccine Portfolio.” Substantially all of these products target major vaccine-preventable diseases with significant unmet vaccination needs, representing substantial market opportunities for us to capture. For example, CIC forecasts that the PRC pneumococcal vaccine market will increase from RMB8.6 billion to RMB43.8 billion from 2021 to 2030 at a CAGR of 19.9% with significant increases in PCV13 segment, and the DTP-based combination vaccine market, MCV4 market and HFMD vaccine market in China will increase by 6.2%, 34.0% and 6.3% from 2021 to 2030, respectively, reaching RMB10.6 billion, RMB4.0 billion and RMB6.4 billion in 2030, respectively. See “—Industry Overview.” As a result of foregoing, we expect our sales revenue in the future will be increasingly diversified and driven by various other products especially the new products to be launched.

Recombinant HBV Vaccines (Hansenula Polymorpha)

Recombinant HBV vaccine products have been and are expected to continue to be one major type of our commercialized products. In 2019, 2020, 2021 and the four months ended April 30, 2021 and 2022, 37.3%, 24.7%, 33.3%, 29.4% and 28.1% of our revenue, respectively, was derived from sales of the HBV vaccine products. Our recombinant HBV vaccine products have maintained 100% pass rate in lot release quality audits of NIFDC since their approvals. During the Track Record Period, approximately 95.6 million doses of our recombinant HBV vaccine have been sold to provincial CDCs of all 31 provinces, direct-controlled municipalities and autonomous regions in the PRC and over 1,800 county-level CDCs, which covered 66% of all county-level CDCs nationwide.

We have developed two recombinant HBV vaccine products, differentiated in terms of HBsAg concentration: 10µg HBsAg per dose and 20µg HBsAg per dose. HBsAg is a part of the HBV and a marker for HBV infection and high viral replication, and is utilized as the antigen to induce specific humoral antibodies against HBV. Both products are recommended to be administered under the standard schedule of zero, one and six months, one dose each time, three doses in total. The 10µg HBsAg dosage is allowed to be administered in all age groups, including newborns. The 20µg HBsAg dosage is approved for people with infection risks in age groups of 16 years old or above, especially healthcare professionals and laboratory personnel handling blood. In terms of packaging, each dosage is available in either prefilled syringe or single-dose vial packaging. We have developed these two different packagings for each of our two HBV products to offer us flexibility in terms of pricing when making a bid at public tenders. The prefilled syringe has advantages such as improved safety and administration convenience, owing to its premeasured accurate dose that reduces dosing errors and the risk of microbial contamination, and therefore products in such packaging are more expensive in general.

BUSINESS

	Dosage (in terms of HBsAg concentration/dose)	Packaging/Shelf life	Indicated age groups
Specification 1	10µg/0.5ml	Single vial/36 months	All age groups, including newborns
Specification 2	10µg/0.5ml	Prefilled syringe/ 36 months	All age groups, including newborns
Specification 3	20µg/0.5ml	Single vial/36 months	Over 16 and at high risk of HBV exposure
Specification 4	20µg/0.5ml	Prefilled syringe/ 36 months	Over 16 and at high risk of HBV exposure

Our 10µg/0.5ml recombinant HBV vaccine is a Class I vaccine for newborns and a Class II vaccine for other vaccinees, and our 20µg HBsAg/0.5ml recombinant HBV vaccine is a Class II vaccine in most cases, and a Class I vaccine procured under certain government procurement programs. Due to their relatively lower prices, single-dose vial packaged HBV vaccines are generally sold as Class I vaccines, whereas prefilled syringe packaged HBV vaccines are sold as Class II vaccines. In the PRC, anti-HBV vaccination is mandatory for all newborns within 24 hours of birth. In 2021, approximately 75% of China's newborns received our recombinant HBV vaccine (Hansenula Polymorpha).

AIM Honesty obtained the NDA approvals for the 10ug/0.5ml specifications and the 20ug/0.5ml in March 2004 and August 2013, respectively, and manufacture both products under the GMP certificate initially obtained in June 2004.

Market Opportunities and Competition

According to CIC, HBV vaccine market is the fourth largest vaccine segment globally in 2021, accounting for 7% of the global vaccine sales volume, and China has the largest HBV-infected population worldwide, making China the largest HBV vaccine market. According to the same source, the market size of HBV vaccines in the PRC was RMB2.2 billion in 2021 and is expected to increase to RMB5.2 billion by 2030.

There are three types of recombinant HBV vaccines on the PRC market, the Hansenula Polymorpha-based, the Saccharomyces cerevisiae-based and the CHO cell-based, of which Hansenula Polymorpha uses the recombinant technology to generate virus-like particle antigens, and therefore has better genetic stability, higher purity and stronger antigen expression capabilities and is well-recognized as the better manufacturing technology route for recombinant HBV vaccines.

According to CIC, in 2021, our recombinant HBV vaccines (Hansenula Polymorpha) were the best-selling in the PRC and globally in terms of approved lot release volume, accounting for 45.4% of China market. See "Industry Overview—Hepatitis B Vaccine in the PRC—Competitive Landscape."

Our Advantages

Our recombinant HBV vaccine products have the following advantages compared to other competing HBV vaccine products:

- *Domestic first-in-class Hansenula Polymorpha manufacturing technology.* As of the Latest Practicable Date, there were only two China-based companies using Hansenula Polymorpha to manufacture HBV vaccines, and we are the first and only one with steady production and approved lot release volume every year since commercialization.

- *Better immunogenicity.* As *Hansenula Polymorpha* has stronger antigen expression capabilities and superior genetic stability, antigen purity can be as high as 99.99% after purification, which leads to high immunogenicity. For vaccinees above the age of 16, our recombinant HBV vaccine has a seroconversion rate of 94.2% during 28 to 45 days after primary administration, compared to 88.7% of *saccharomyces cerevisiae*-based HBV vaccines in China. For adult vaccinees, our recombinant HBV vaccine has a seroconversion rate of 97.46% one year after primary administration, compared to 87.1% of *saccharomyces cerevisiae*-based HBV vaccines.
- *Better safety profile.* *Hansenula Polymorpha* as the expression platform has no risk of tumorigenicity as compared to the CHO-based expression. Furthermore, the amount of endotoxin content and formaldehyde residues contained in our recombinant HBV vaccine products are lower than that required under the National Pharmacopoeia, the CHO-based HBV vaccine and *saccharomyces cerevisiae*-based HBV vaccines.
- *Patented adjuvant formation process.* Aluminum-based adjuvants are the most common adjuvants approved for human use to improve immunogenicity and efficacy of vaccines. Unlike traditional adjuvant processes, we directly produce aluminum hydroxide adjuvants during the dilution and mixture of the HBsAg antigen bulk, therefore the adjuvants adsorb antigens during the process of adjuvant formation (i.e., the “*in situ*” absorption). This *in situ* absorption process has a high adsorption rate of antigens, which prolongs the action time of antigens in the human body and strengthens the stimulation of immune response. In addition, the patented adjuvant formation process allows our recombinant HBV vaccine products to be manufactured without the addition of preservatives, which also enhances the safety of the product. We have been granted patents for this process in the PRC valid until May 2032, distinguishing our recombinant HBV vaccine products from others and creating a technology high entry barrier for later entrants.

Human Rabies Vaccine (Vero Cell)

The human rabies vaccine (Vero cell) is one of our major products. In 2019, 2020, 2021 and the four months ended April 30, 2021 and 2022, 46.9%, 65.5%, 59.7%, 64.9% and 63.9% of our revenue, respectively, was derived from sales of this vaccine product. Since the commercialization in 2007, our human rabies vaccine (Vero cell) has maintained 100% pass rate in lot release quality audits by the NIFDC for 15 years. As of the Latest Practicable Date, we sold this product to over 2,000 county-level CDCs in all 31 provinces, direct-controlled municipalities and autonomous regions.

Our human rabies vaccine (Vero cell) is an injectable vaccine administered under the intramuscular route to persons of all ages to prevent rabies after exposure or at a high risk of exposure to rabies. We manufacture this vaccine product in Rong'an Bio, which obtained the NDA approval in September 2007 and the GMP certificate in June 2008. The human rabies vaccine (Vero cell) has been classified as a Class II vaccine in the PRC since its approval.

Our human rabies vaccine (Vero cell) is available in freeze-dried form, which is undertaken in a vacuum and low-temperature environment, and could preserve the original physical qualities and biological characteristics of vaccine products. In addition, our products are offered in both single dose and Essen five-dose regimen packaging. We offer two different packages to provide treatment, storage and transportation flexibility and convenience for both end-users and physicians. Shelf life of our human rabies vaccine (Vero cell) is 36 months.

Market Opportunities and Competition

According to CIC, the market of human rabies vaccines in the PRC grew from RMB5.2 billion in 2015 to RMB5.6 billion in 2021 with an average annual demand of 70 million doses, and is expected to further grow to RMB14.8 billion in 2030 with an average annual demand of approximately 80 million doses from 2021 to 2030, of which Vero cell-based human rabies vaccines has and would remain as the largest segment of the overall market in terms of approved lot release volume.

High product quality has and will continue to be critically significant to compete in this market especially after Changsheng Incident in 2018. According to CIC, Changchun Changsheng had supplied approximately 10 million doses of human rabies vaccines in the PRC every year from 2014 to 2017 before its collapse, and its market share has now been taken up by manufacturers of truly quality vaccines. In 2021, we were the second largest supplier of human rabies vaccines globally and in the PRC in terms of both approved lot release volume and sales revenue. We have and expect to continue to mainly compete with domestic manufacturers in this market. See “Industry Overview—Human Rabies Vaccine Market in the PRC—Competitive Landscape.”

Our Advantages

Our human rabies vaccine (Vero cell) has the following advantages compared to other major human rabies vaccine products in the PRC:

- *Proven top quality under large-scale supply.* Our human rabies vaccine (Vero cell) has 100% pass rate in lot release quality audits of the NIFDC for consecutive 15 years since commercialization, setting the longest record among all human rabies vaccines suppliers in the PRC.
- *Better immunogenicity.* Our human rabies vaccine (Vero cell) has a registered potency of no less than 4.7 IU/dose upon release, which is significantly higher than the National Pharmacopoeia standard of no less than 2.5 IU/dose upon release, and is also higher than the products of our main competitor.

Inactivated HAV Vaccines (HDC)

We are the second largest supplier of inactivated HAV vaccines (HDC) in the PRC in terms of approved lot release volume in 2021. In 2019, 2020, 2021 and the four months ended April 30, 2021 and 2022, 9.2%, 5.9%, 5.5%, 4.4% and 5.7% of our revenue, respectively, was derived from sales of inactivated HAV vaccines, respectively. During the Track Record Period, approximately 4.8 million doses of our inactivated HAV vaccine products have been sold to all 31 provinces, direct-controlled municipalities and autonomous regions in the PRC.

We have developed two inactivated HAV vaccine products, differentiated in terms of isolated HAV antigen concentration: the 320Eu/0.5ml per dose indicated for the age group of one to 15 years old, and the 640Eu/1.0ml per dose indicated for people older than 15. A complete vaccination schedule for both dosages consists of one primary administration and one booster dose with an interval of six months. In terms of packaging, each dosage is available in either single-dose vial or prefilled syringe packaging, which have different pricing. The reason for developing two different packagings for each of our two HAV vaccine products is the same as that for our two HBV products. See “—Recombinant HBV Vaccine (Hansenula Polymorpha).”

BUSINESS

	Dosage (in terms of HAV antigen concentration)	Packaging/Shelf life	Indicated age group
Specification 1	320Eu/0.5ml	Single vial/36 months	1-15 years old (inclusive)
Specification 2	320Eu/0.5ml	Prefilled syringe/ 24 months	1-15 years old (inclusive)
Specification 3	640Eu/1.0ml	Single vial/36 months	> 15 years old
Specification 4	640Eu/1.0ml	Prefilled syringe/ 24 months	> 15 years old

Our 320Eu/0.5ml inactivated HAV vaccine is a Class I vaccine in Beijing, Shanghai, Tianjin and Jiangsu, and a Class II vaccine in other parts of the PRC. Our 640Eu/1.0ml inactivated HAV vaccine is a Class II vaccine in the PRC. AIM Kanghuai obtained the NDA approval in April 2015 and GMP certificate in January 2016 for both inactivated HAV vaccines.

Market Opportunities and Competition

Hepatitis A is caused by HAV, which has a worldwide distribution and human are the only reservoir. According to CIC, HAV causes approximately 25,000 cases of clinical hepatitis each year in the PRC with the relapse rate of 3% to 20%. There is no effective therapy against HAV to date. According to the same source, the market size of HAV vaccines in the PRC was RMB0.9 billion in 2021 and is expected to grow to RMB2.3 billion in 2030.

In 2021, there were six HAV vaccines in the PRC receiving lot release approval, including three live attenuated vaccines and three inactivated vaccines, of which the live attenuated ones accounted for a majority of the market share of 54.0% in term of approved lot release volume. Although both vaccine types are considered highly immunogenic, internationally published evidence on the safety and tolerability of the live attenuated HAV vaccines is more limited. Compared with live attenuated vaccine, the virus of inactivated vaccine does not replicate in the liver nor does it have the risk of virulence reversion. In addition, inactivated vaccines are believed to be able to reduce the risk of public sanitation contamination and secondary transmission. The live attenuated HAV vaccines are not used in developed countries, and are not recommended to be used in pregnant women and in immunocompromised patients. Among inactivated HAV vaccines with approved lot release volumes, we are the second largest supplier of inactivated HAV vaccines (HDC) in the PRC in 2021. It is expected that inactivated HAV vaccines would gradually take market share from live attenuated HAV vaccines and become the largest HAV vaccine segment in the PRC by 2030.

Mumps Vaccine

Our mumps vaccine is an live attenuated single-dose vaccine product indicated for vaccinees aged eight months and above with infection risks. AIM Weixin obtained the NDA approval for the mumps vaccine in October 2004, and obtained the GMP certificate for its production in January 2005. Our mumps vaccine has been classified as a Class II vaccine, and may be procured by provincial level CDCs as a Class I vaccine in the case of local outbreaks. Shelf life of our mumps vaccine is 18 months.

During the Track Record Period, approximately 1.7 million doses of our mumps vaccine were sold to 24 provinces, direct-controlled municipalities and autonomous regions in the PRC. Our mumps vaccine has maintained 100% pass rate in lot release quality audits of the NIFDC every year after its commercialization.

Market Opportunities and Competition

According to CIC, the market size of mumps vaccines in the PRC was RMB1.9 billion in 2021, and is expected to remain relatively stable towards RMB2.1 billion in 2030. We compete with both domestic and overseas vaccine manufacturers in the PRC's mumps vaccine market. See "Industry Overview—Mumps Vaccine in the PRC."

Our Advantages

Our mumps vaccine has the following advantages compared to other mumps vaccine products sold in the PRC:

- *High safety level.* Our advanced production equipment utilize technologies such as ultrasonic cleaning, constant temperature magnetic stirring aseptic liquid preparation and aseptic isolation technology to ensure the highest level of safety for our mumps vaccine products. We do not add any antibiotics or preservatives to our mumps vaccine products;
- *High quality.* Several key quality indicators of our mumps vaccine surpass the relevant PRC national standards. For example, the endotoxin in one dose of our mumps vaccine product is around 10Eu, which is significantly lower than the National Pharmacopoeia cap of 50Eu per dose. Furthermore, water content in our mumps vaccine products is around 1.8%, which is also lower than the National Pharmacopoeia cap of 3.0%, providing superior stability for our vaccine. Our mumps vaccine has 100% pass rate in lot release quality audits of the NIFDC every year since its commercialization.

HFRS Vaccine

Our HFRS vaccine is one of the only five approved HFRS vaccines in the PRC as of the Latest Practicable Date. AIM Weixin obtained the NDA approval for this vaccine in September 2007 and GMP certificate for its production in February 2008. In the PRC, HFRS vaccines are a Class I vaccine for individuals aged 16 to 60 in high risk areas, such as certain regions in Shaanxi, Heilongjiang and Shandong provinces, and a Class II vaccine for vaccinees in other areas. See "Industry Overview—HFRS Vaccines in the PRC". Since commercialization in February 2009, the HFRS vaccine has been sold to more than 300 county-level CDCs in the PRC.

Our HFRS vaccine contains inactivated Hantaan virus and Seoul virus, which cause HFRS in the PRC. Our HFRS vaccine is available in suspension liquid form and is administered under intramuscular route. Full vaccination requires two doses administered with a two-week interval, and a booster vaccination is recommended one year after initial immunization. Shelf life of our HFRS vaccine is 20 months.

Market Opportunities and Competition

In the PRC, viruses that cause HFRS are predominantly Hantaan and Seoul viruses. According to CIC, the market size of HFRS vaccines in the PRC shrank to RMB10.9 million in 2021 due to COVID-19 pandemic, which is expected to recover and grow to RMB135.4 million in 2030. Among all five approved HFRS vaccines in the PRC as of the Latest Practicable Date, we were the largest supplier every year from 2015 to 2019 in terms of approved lot release volume. Due to a relocation of production line, we did not produce HFRS vaccine products from 2020. See "—Manufacturing—Manufacturing Facilities and Production Capacity—Our Production Capacity."

Our Advantages

We utilize advanced production equipment and technologies such as β -PL inactivation and column chromatography purification to ensure the product safety. In addition, bacteria inspection procedures are performed in all key checkpoints of the production process to ensure the bacteria-free environment of the entire production process.

Meningococcal Polysaccharide Group A, C, Y and W135 Vaccine (MPSV4)

We launched MPSV4 in March 2020, and generated revenue of RMB26.7 million, RMB18.7 million, RMB4.4 million and RMB6.2 million in 2020, 2021 and the four months ended April 30, 2021 and 2022, respectively, from sales of this product. We obtained the NDA approval for the MPSV4 in October 2018 and the GMP certificate in November 2018. Our MPSV4 is a Class II vaccine and is available in either single-dose vial packaging. Shelf life of our MPSV4 vaccine is 24 months.

Our MPSV4 covers A, C, Y, and W135 serogroups, and can be administered to individuals over the age of two. With reference to overseas guidance for the same vaccine, a booster vaccination is only recommended for individuals to inject within three to five years after basic immunization, if antibody level decreases significantly after two to three years after basic immunization, and for individuals with immune deficiency.

Market Opportunities and Competition

In the PRC, MPSVs are the primary meningococcal vaccines in terms of approved lot release volume. According to CIC, the market size of meningococcal vaccines was RMB2.2 billion in 2021 and is expected to grow to RMB5.4 billion in 2030. As of the Latest Practicable Date, there were six approved MPSV4s in the PRC, including ours launched in March 2020 with a 7.9% market share in terms of approved lot release volume in 2021. We are also developing a MCV4 candidate. See “—Our Vaccine Candidates—Meningococcal Conjugate Group A, C, Y and W135 Vaccine (MCV4) Candidate.”

Our Advantages

We believe our MPSV4 has the following advantages:

- *High quality.* Several key quality indicators of our MPSV4 surpass the relevant PRC national standards. For example, the endotoxin per dose of our MPSV4 product is less than 750Eu, which is significantly lower than the National Pharmacopoeia cap of no more than 1500Eu per dose. Furthermore, water content in our MPSV4 is around 1.5%, which is also lower than the National Pharmacopoeia cap of 3.0%, enabling high stability for our vaccine; and
- *High safety level.* We utilize advanced production equipment and technologies such as high speed continuous flow centrifugation and phenol extraction to ensure the highest level of safety for our MPSV4. We do not add any antibiotics or preservatives to our MPSV4.

Our Vaccine Candidates

COVID-19 Vaccine Candidates

Market Opportunities

The COVID-19 pandemic, caused by a coronavirus named SARS-CoV-2, has had a devastating social and economic impact in the PRC and globally, with over 248.0 thousand confirmed infections and over 5.2 thousand deaths in the PRC alone as of the Latest Practicable Date. According to CIC, the global economic negative impact of the COVID-19 pandemic is estimated to be US\$5.8 trillion to US\$8.8 trillion, accounting for 6.4% to 9.7% of the global GDP in 2020 even after the implementation of quarantine measures.

It is widely recognized that safe and effective vaccines are essential to control the COVID-19 pandemic. According to CIC, assuming 80% of the total population need to be vaccinated to achieve herd immunity globally and in the PRC, approximately 6,300 million and 1,134 million people will require vaccination, respectively. In addition, increasing number of variants of the SARS-CoV-2 virus have and are expected to continue emerge and circulate globally, of which the Delta variant strain has led to a new outbreak wave worldwide in the second half of 2021, and the Omicron variant, although milder in terms of symptoms, has become the dominant variant in China's latest COVID-19 outbreak in the first quarter of 2022. The different characteristics of these variants from the Original Strain have been revealed, and there is a growing public awareness of the necessity to receive vaccination against emerging variant strains especially the Delta strain. Moreover, additional boosting might be required because of waning immunity to the primary vaccination. Some recent studies have shown that the antibody concentration declined in the third month after administration of two doses of inactivated vaccines, and the protection rate of currently approved mRNA vaccines declined to approximately 40% in six months. These indicate a significantly larger and longer-term market demand for booster shots and re-vaccination of COVID-19 vaccines. According to CIC, assuming the COVID-19 pandemic will remain and additional one or two dose(s) of vaccine are needed each year to boost immunity against different variant strains, the number of vaccinees of COVID-19 vaccines in the PRC is estimated to increase from 1,150 million in 2021 to more than 1,300 million in 2025, and will remain stable at 1,400 million per year from 2026 to 2030, creating a market that is worth hundreds of billions of US dollars every year since 2021. In addition, due to the limited supply capacity of and uneven access to COVID-19 vaccines on the global market, there is an increasing global shortage, presenting a significant opportunity to PRC vaccine manufacturers.

As of the Latest Practicable Date, nine COVID-19 vaccines were conditionally approved or were granted for emergency use in the PRC. In addition, there were 16 vaccine candidates in clinical development. See "Industry Overview—COVID-19 Vaccine in the PRC—Competitive Landscape."

Our COVID-19 vaccine portfolio consists of three vaccine candidates, of which (i) the mRNA candidate against the Original Strain has reached the Phase III clinical trial stage; (ii) the inactivated candidate against the Original Strain is currently in the Phase II clinical trial and its second generation against the Delta variant strain is in the CTA filing process; and (iii) the recombinant adenoviral vector candidate is a potential broad-spectrum vaccine against different coronaviruses such as SARS-CoV-2, SARS, MERS and so on. We believe our comprehensive COVID-19 vaccine candidates enable us to address the diverse vaccination demand, and to develop and supply COVID-19 vaccines in an efficient manner by fully utilizing our established vaccine platforms and manufacturing capabilities. We plan to first obtain NDA approval for and/or launch our mRNA vaccine against the Original Strain in the second quarter of 2023, to address the urgent and near-term market demand. We will then proceed with later stage clinical trials and ongoing CTA filing process of our inactivated candidates, subject to the changing pandemic epidemiology, circulating variants, containment measures and vaccination policies in China. For the longer future, we plan to launch the broad-spectrum recombinant adenoviral vector coronavirus vaccine, which is not only effective against COVID-19 variants, but also risks of other coronavirus outbreaks. As such, we believe each type of our COVID-19 vaccines will all have significant market opportunities.

mRNA COVID-19 Vaccine Candidate

mRNA vaccines are a new type of vaccines that use genetically engineered mRNA. As of the Latest Practicable Date, on the global market, Pfizer/BioNTech's and Moderna's mRNA COVID-19 vaccines had received emergency use authorization from the FDA with the highest protective efficacy rates (94% to 95%) among all approved COVID-19 vaccines worldwide, indicating a significant market potential for such vaccines with a superior efficacy advantage. There was no approved mRNA COVID-19 vaccine in the PRC as of the Latest Practicable Date. Our mRNA COVID-19 vaccine candidate against the Original Strain entered Phase I, Phase II and Phase III clinical trials in July 2021, March 2022 and June 2022,

respectively. It only took 14 months for our candidate to advance from project initiation to Phase I clinical trial stage. In addition, for candidates against variant strains, we have successfully constructed and produced trial vaccines against different variant strains in preclinical studies, including the Omicron variant strain, and are currently in the CTA filing process for a vaccine candidate against the Delta variant strain. In April 2021, we received a government grant of RMB1.0 million from the Guangzhou Regenerative Medicine and Health Guangdong Laboratory for our mRNA COVID-19 vaccine candidate.

Mechanism of action

The crown-like surface proteins named “spike proteins” on SARS-CoV-2, which causes COVID-19, are ideal targets for vaccines. Once the mRNA vaccine is administered, the instructions (mRNA) are inside the immune cells, and the cells use them to make the spike protein piece. After the protein piece is made, the cell breaks down the instructions and gets rid of them. Next, the cell displays the spike protein piece on its surface. The human body’s immune systems recognize that the protein does not belong there and begin building an immune response and making antibodies against SARS-CoV-2. At the end of the process, our bodies have learned how to protect against future infection.

Competition

According to CIC, as of the Latest Practicable Date, there was no approved mRNA COVID-19 vaccine in the PRC. As of the same date, six PRC vaccine developers were undertaking clinical trials for their respective mRNA COVID-19 vaccine candidates in the PRC or overseas, two of which (including us) reached Phase III clinical trials. Therefore, our mRNA candidate is expected to be one of the first few to be approved in the PRC. In addition, half of these six vaccine developers were clinical-stage companies with no experience in commercial-scale vaccine production nor vaccine commercialization activities. We believe our proven manufacturing capabilities and our established commercialization capabilities can provide strong support to accelerate new vaccine development and commercialization under our mRNA platform technologies. According to CIC, due to the efficacy advantages and continuous improvement in technologies, mRNA COVID-19 vaccines would gain increasing market share from the current mainstream inactivated vaccines. See “Industry Overview—COVID-19 Vaccine in the PRC—Competitive Landscape—mRNA COVID-19 vaccines.”

Preclinical studies

Safety

- *Acute toxicity test.* Rats were injected intramuscularly with a single-dose of our mRNA COVID-19 vaccine candidate. No obvious toxic reactions were observed after 14 days, indicating no acute toxicity in rat subjects. The maximum tolerated dose of our mRNA COVID-19 vaccine candidate in rats is higher than 450 µg, which is nine times higher than the designed single clinical dose for humans.
- *Repeated intramuscular injection toxicity test.* After three repeated intramuscular injections in rats, no systemic toxic reactions were observed, indicating no systematic toxicity. The safe dose of our mRNA COVID-19 vaccine in rats is equivalent to 40 times the designed human single clinical dose (calculated by µg/kg).

Immunogenicity

Our mRNA COVID-19 vaccine candidate was intramuscularly injected in hACE2 knock-in mice (hACE2-KI/NIFDC) in two study groups, including one 15 µg/time group (high dose group) and one 5 µg/time group (low dose group), with 10 mice in each group. Another control group of eight mice received placebo treatment. The mice were vaccinated twice, primary vaccination at day 0 and boost vaccination at day 21. The neutralization antibody titers in mice were analyzed seven days after boost vaccination (day 28). On the 33rd day after boost vaccination (day 54), all three groups were challenged with SARS-CoV-2. Five days after the challenge, lung tissues of the mice were isolated for viral RNA load detection and pathology analysis.

Our results showed that: (i) 7 days after boost vaccination, neutralized antibodies with dose-dependent manner can be detected in all mice serums from vaccination groups; (ii) five days after viral challenge, virus loads in both vaccination groups were dramatically lower than the control group, indicating that our mRNA COVID-19 vaccine candidate could effectively reduce viral replication in mice lungs; and (iii) five days after viral challenge, mice in control group developed typical lung lesions, whereas no such pathological changes were seen in lung sections in high dose vaccination animals. Such results demonstrated that two doses of our mRNA COVID-19 vaccine could confer effective protection against the challenge of the SARS-CoV-2.

Conclusion

Preclinical studies of our mRNA COVID-19 vaccine candidate showed (i) good immunogenicity; (ii) that our candidate induces humoral and T cell immunity; and (iii) good safety without severe adverse reactions in animals, which meant it was ready for clinical trials.

Summary of Phase I Clinical Trial

We commenced the first part of a two-part Phase I clinical trial for our mRNA COVID-19 vaccine candidate against the Original Strain in July 2021. We completed subject enrollment in September 2021, completed all the 28-day post-vaccination follow-up visits in November 2021, and received the primary safety and immunogenicity results in December 2021. We will continue to monitor the AEs in the following six-month and 12-month follow-up visits. As of the Latest Practicable Date, we had commenced the second part of the Phase I clinical trial, for which we target to complete vaccination procedure on all test subjects by the end of September 2022.

Study objective

The objective of the Phase I clinical trial was to evaluate the safety and tolerability and conduct preliminary exploration of the immunogenicity of our mRNA COVID-19 vaccine candidate against the Original Strain in healthy vaccinees over 18 years old. The primary endpoints included all AEs and vaccine-related AEs within 28 days after each dose and the full course of vaccination. The secondary endpoints included AEs and vaccine-related AEs at grade 3 or higher grades, SAEs and vaccine-related SAEs within 28 days, three months, six months and 12 months after the first dose and full course of vaccination.

Study design

Our Phase I clinical trial is a double-blind, randomized, placebo-controlled, ascending dose trial divided into two parts. In the first part, we enrolled 72 healthy adults between 18 to 59 years of age. The 72 subjects were randomized into three groups each consisting of 24 individuals. Each group consisted of six subjects that received placebo and 18 subjects that received two doses of our mRNA COVID-19 vaccine candidate against the Original Strain at either 25µg (low dosage group), 50µg (medium dosage group) or 100µg (high dosage group), in total 54 subjects received our mRNA vaccine candidate and 18 subjects received placebo. As of the Latest Practicable Date, we had completed the first part of our Phase I clinical trial, from which we collected and analyzed data as set out below.

In the second part, we plan to enroll 72 healthy adults over 60 years of age. The subjects will be randomized into three groups each consisting of 24 individuals. Each group consists of six subjects that will receive placebo and 18 subjects that will receive two doses of our mRNA COVID-19 vaccine candidate against the Original Strain at either 25µg (low dosage group), 50µg (medium dosage group) or 100µg (high dosage group). As of the Latest Practicable Date, we had completed enrollment and the first dose of vaccination and the 28-day follow-up visits for the low dosage group. As of the same date, no test subject in the second part had experienced AEs at or above grade 3 or SAEs.

Safety data from the first part of Phase I clinical trial

The primary safety data after completion of all the 28-day follow-up visits exhibited a favorable safety and tolerability profile of our mRNA vaccine candidate. Based on current results, none of the subjects experienced any AEs at grade 3 or above vaccine-enhanced disease or any SAE, irrespective of vaccine-related or vaccine-unrelated. None of the subjects discontinued the trial. The majority of AEs were local AEs, and among all local and systemic AEs, most were grade 1 (mild). There were higher incidences of AEs after the first dose as compared to the second dose, but the systemic AEs occurred more after the second dose.

Primary AEs	First Dose 18-59 years old % (n/N)⁽¹⁾	Second Dose 18-59 years old % (n/N)⁽¹⁾
Local Pain	28% (15/54)	11% (6/54)
Local Swelling	6% (3/54)	6% (3/54)
Local Redness	0% (0/54)	6% (3/54)
Local Pruritus	0% (0/54)	6% (3/54)
Rash	0% (0/54)	2% (1/54)
Fever	4% (2/54)	15% (8/54)
Fatigue	2% (1/54)	9% (5/54)
Headache	0% (0/54)	6% (3/54)
Muscle Pain	2% (1/54)	4% (2/54)
Diarrhea	0% (0/54)	4% (2/54)
Joint Pain	0% (0/54)	4% (2/54)
Nausea	0% (0/54)	4% (2/54)
Chills	0% (0/54)	2% (1/54)
Vomiting	0% (0/54)	2% (1/54)

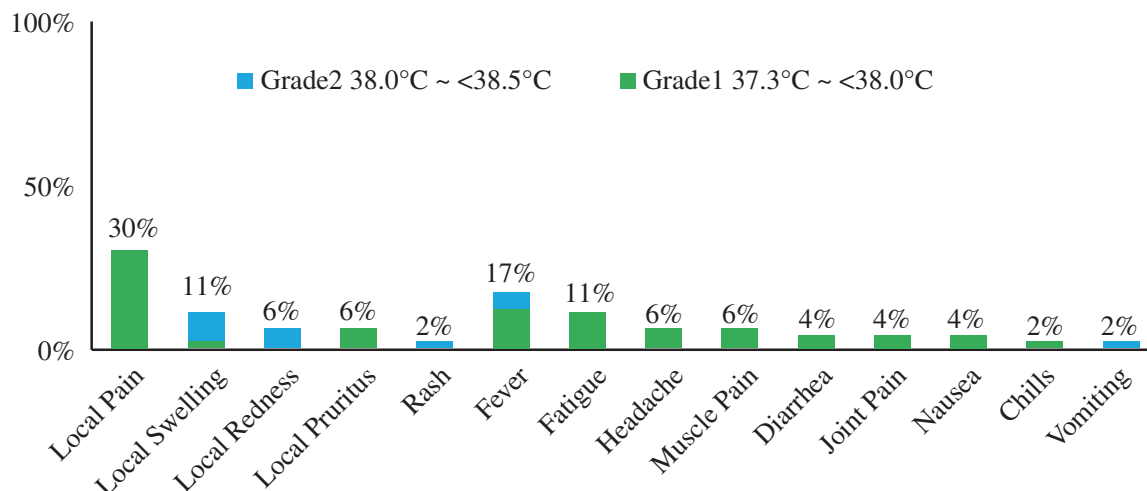
Note:

- (1) n = the number of subjects that received our mRNA COVID-19 vaccine candidate and experienced the relevant AE; N = 54 (all subjects received our mRNA COVID-19 vaccine candidate). The percentage refers to the percentage of subjects that experienced the relevant AE. Subjects received the placebo were not included.

Source: Company's internal clinical data

BUSINESS

The below chart illustrates the percentage of grade 1 (mild) and grade 2 (moderate) AEs. No subject experienced AEs at or above grade 3 or SAEs.



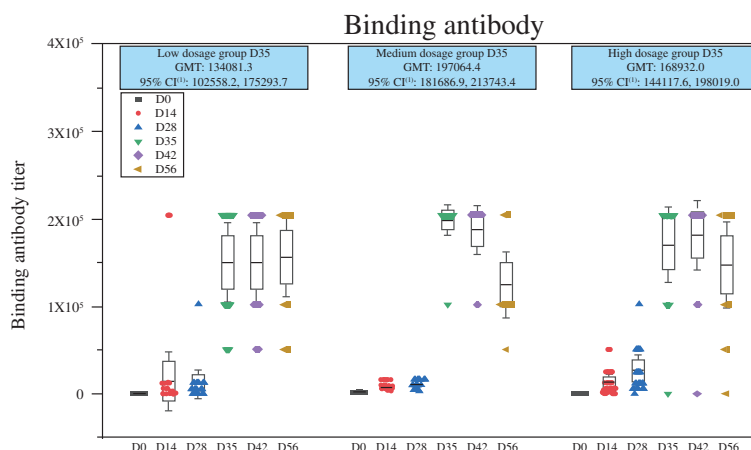
Note:

- (1) n = the number of subjects that received our mRNA COVID-19 vaccine candidate and experienced the relevant AE; N = 54 (all subjects received our mRNA COVID-19 vaccine candidate). The percentage refers to the percentage of subjects that experienced the relevant AE. Subjects received the placebo were not included.

Source: Company's internal clinical data

Immunogenicity data from the first part of Phase I clinical trial

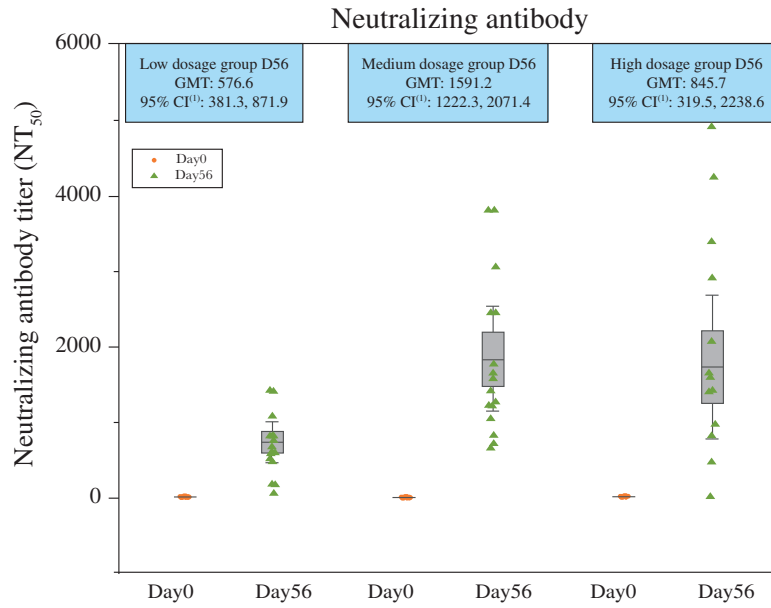
In terms of binding antibody. The level of binding antibodies is an important indicator for humoral immunogenicity of COVID-19 vaccines. In all three groups, the binding antibody (IgG) titers increased significantly in subjects after the administration of the second dose, with the most significant increase observed in the medium dosage group. The binding antibody (IgG) titers in the majority of subjects in all three groups persisted at the maximum detectable level 7, 14 and 28 days after the full course of vaccination (being Day 35, Day 42 and Day 56, respectively). The below chart shows the binding antibody (IgG) titers tested using the ELISA method.



- (1) 95% CI refers to 95% confidence interval, indicating 95% of the subjects fall into the relevant range.

Source: Company's internal clinical data

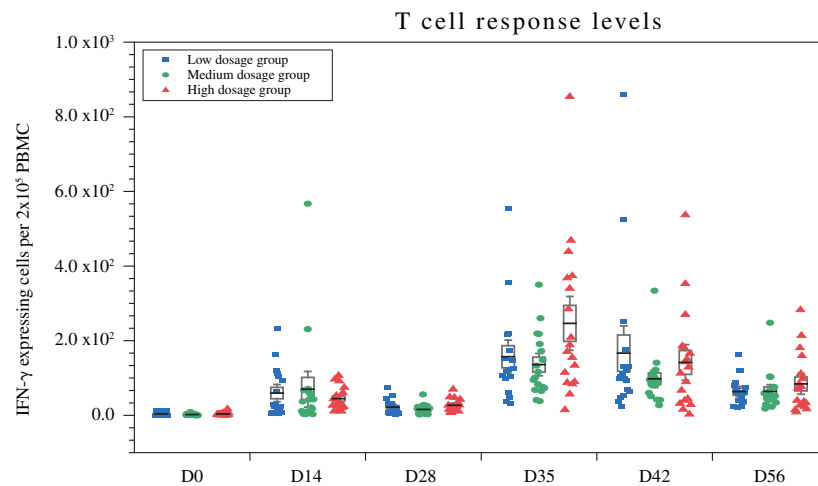
In terms of neutralizing antibody. High levels of neutralizing antibodies against the Original Strain of the SARS-CoV-2 virus, another important indicator for humoral immunogenicity of COVID-19 vaccines, were observed in all test groups. The highest geometric mean titer (GMT) level of neutralizing antibody was detected in subjects in the medium dosage group, reaching 1,591.2 [95% CI⁽¹⁾: (1222.3, 2071.4)] 28 days after the full course of vaccination (Day 56).



(1) 95% CI refers to 95% confidence interval, indicating 95% of the subjects fall into the relevant range.

Source: Company's internal clinical data

In terms of CD4+ Th1 cell response. The Phase I clinical trial shows that our mRNA vaccine candidate can effectively activate CD4+ Th1 cell response. Virus-specific T-cell immune responses were detected in patients who had recovered from COVID-19, including CD4+ T-cell immune responses. These are mainly associated with CD4+ Th1 cytokines, such as IFN- γ cytokine. This suggests that the level of IFN- γ cytokines contributes to T cell-mediated immune responses, which in turn contribute to vaccine efficacy, according to CIC. It is believed that the higher the cytokine levels, the higher the activation rates of T-cells, the stronger the immune responses. As shown in the chart below, in all three groups, IFN- γ cytokine level increased significantly after subjects received the second dose. IFN- γ cytokine level decreased slowly within 28 days after the full course of vaccination, which contributed to the activation of CD4+ Th1 cell.



Conclusion

The first part of our Phase I clinical trial showed that our mRNA COVID-19 vaccine candidate against the Original Strain had a favorable safety profile and was well-tolerated by subjects aged between 18 to 59 years of age. It also induced strong functional immune responses in these subjects.

Summary of Ongoing Phase II Clinical Trial

We are currently conducting a Phase II clinical trial in the PRC. Similar to our Phase I clinical trial, the objective of the Phase II clinical trials is to evaluate the safety and immunogenicity of our mRNA COVID-19 vaccine candidate against the Original Strain in healthy vaccinees over 18 years old. As of the Latest Practicable Date, we had completed the vaccination procedures and 28-day post-vaccination visits for all of the test subjects.

Study design

We commenced our Phase II clinical trial in the PRC in March 2022. Our trial is a single center, blinded, randomized, placebo-controlled trial. We enrolled 420 healthy adults between 18 to 59 years of age. The subjects are randomized into medium dosage, high dosage, and placebo groups at a ratio of 3:3:1. Each group will receive two doses of our mRNA COVID-19 vaccine candidate against the Original Strain at either 50µg (medium dosage group), 100µg (high dosage group) or placebo. The primary endpoints are the respective levels of the SARS-CoV-2 virus S protein antibody (IgG) and SARS-CoV-2 virus neutralizing antibodies at 28 days after full course of vaccination. The secondary endpoints include AEs and vaccine-related AEs at grade 3 or higher grades, SAEs and vaccine-related SAEs within 28 days, three months, six months and 12 months after the first dose and full course of vaccination, and the respective levels of the SARS-CoV-2 virus S protein antibody (IgG) and SARS-CoV-2 virus neutralizing antibodies at 14 days, three months, six months and 12 months after full course of vaccination.

Safety data from the ongoing Phase II clinical trial

The primary safety data after completion of all the 28-day follow-up visits exhibited a favorable safety and tolerability profile of our mRNA vaccine candidate. According to data collected after 28-day post vaccination visits after full course of vaccination, there were three incidents of grade 3 SAEs, none of which was vaccine-related, and there were no grade 4 or above SAEs. The majority of AEs were local AEs, and among all local and systemic AEs, most were grade 1 (mild).

	First dose 18-59 years old % (n/N) ⁽¹⁾		Second dose 18-59 years old % (n/N) ⁽¹⁾	
	50µg (medium dosage group)	100µg (high dosage group)	50µg (medium dosage group)	100µg (high dosage group)
Primary AEs				
Local Pain	55.56% (100/180)	61.11% (110/180)	38.42% (68/177)	45.20% (80/177)
Local Induration . .	0.56% (1/180)	0.56% (1/180)	0.00% (0/177)	1.13% (2/177)
Local Swelling . . .	13.33% (24/180)	15.56% (28/180)	10.17% (18/177)	12.99% (23/177)
Local Rash	1.11% (2/180)	1.11% (2/180)	0.56% (1/177)	1.13% (2/177)
Local Redness	12.22% (22/180)	10.56% (19/180)	13.56% (24/177)	16.95% (30/177)
Local Pruritus	15.00% (27/180)	12.22% (22/180)	9.04% (16/177)	9.04% (16/177)
Local Cellulitis . . .	0.00% (0/180)	0.00% (0/180)	0.00% (0/177)	0.00% (0/177)
Fever	1.67% (3/180)	3.33% (6/180)	8.47% (15/177)	19.77% (35/177)

BUSINESS

Primary AEs	First dose 18-59 years old % (n/N) ⁽¹⁾		Second dose 18-59 years old % (n/N) ⁽¹⁾	
	50µg (medium dosage group)	100µg (high dosage group)	50µg (medium dosage group)	100µg (high dosage group)
Headache	3.89% (7/180)	4.44% (8/180)	5.08% (9/177)	11.86% (21/177)
Chills	0.00% (0/180)	0.56% (1/180)	0.56% (1/177)	1.69% (3/177)
Anorexia	1.67% (3/180)	0.56% (1/180)	1.69% (3/177)	3.39% (6/177)
Diarrhea	0.56% (1/180)	0.00% (0/180)	0.56% (1/177)	1.13% (2/177)
Nausea	2.22% (4/180)	0.56% (1/180)	1.13% (2/177)	3.39% (6/177)
Vomiting	0.00% (0/180)	0.00% (0/180)	0.00% (0/177)	0.00% (0/177)
Fatigue	2.78% (5/180)	5.00% (9/180)	5.08% (9/177)	6.21% (11/177)
Weakness	3.33% (6/180)	5.00% (9/180)	6.78% (12/177)	11.30% (20/177)
Joint Pain	0.00% (0/180)	1.11% (2/180)	2.26% (4/177)	3.95% (7/177)
Muscle Pain	1.11% (2/180)	1.67% (3/180)	1.69% (3/177)	2.82% (5/177)
Chest Pain	0.00% (0/180)	0.00% (0/180)	0.00% (0/177)	0.56% (1/177)
Acute Allergic Reaction	0.00% (0/180)	0.00% (0/180)	0.00% (0/177)	0.00% (0/177)

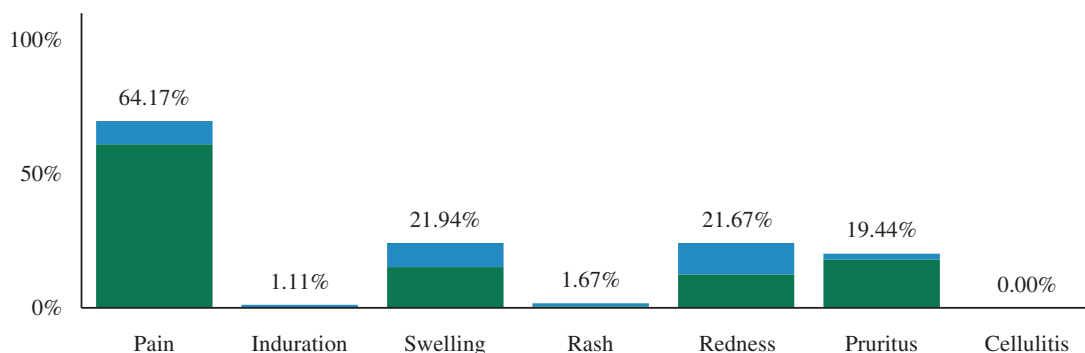
Note:

- (1) n = the number of subjects that experienced the relevant AE; N = 180 (first dose) or 177 (second dose). The percentage refers to the percentage of subjects that experienced the relevant AE.

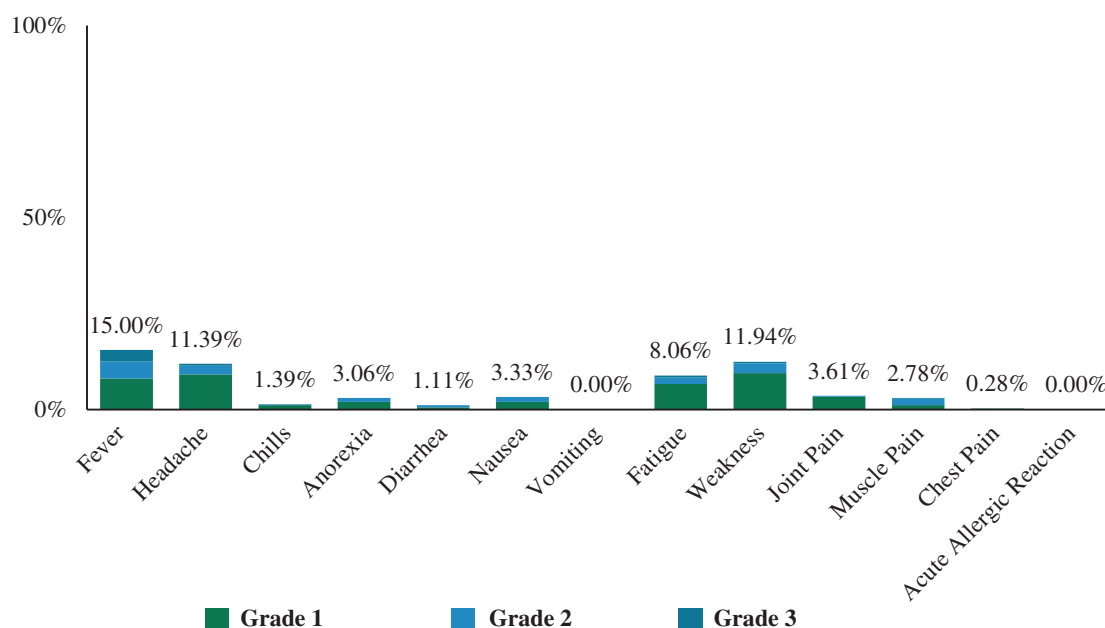
Source: Company's internal clinical data

The charts below illustrate subjects who experienced AEs by grade:

Local AEs



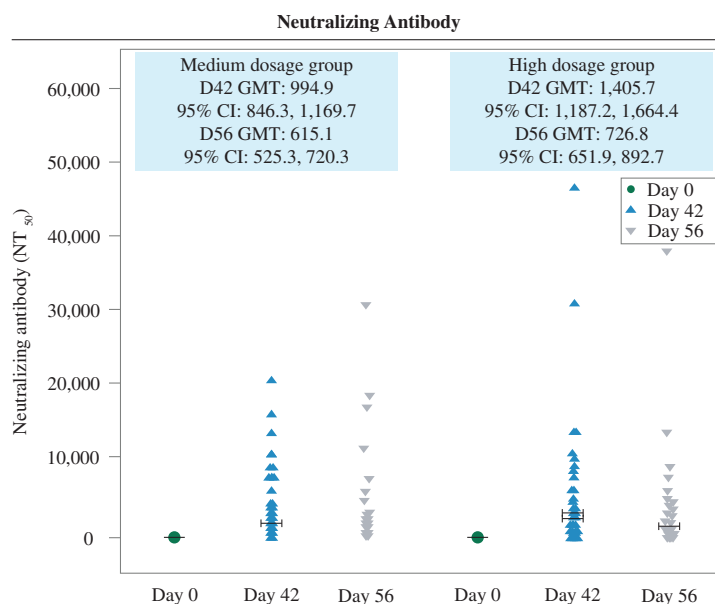
Systemic AEs



Source: Company's internal clinical data

Immunogenicity data from the ongoing Phase II clinical trial

High levels of neutralizing antibodies against the Original Strain of the SARS-CoV-2 virus, an important indicator for humoral immunogenicity of COVID-19 vaccines, were observed in all test groups. The highest geometric mean titer (GMT) level of neutralizing antibody was detected in subjects in the high dosage group, reaching 1,405.7 [95% CI(1): (1,187.2, 1,664.4)] 14 days after the full course of vaccination (Day 42).



(1) 95% CI refers to 95% confidence interval, indicating 95% of the subjects fall into the relevant range.

Source: Company's internal clinical data

Although our mRNA COVID-19 vaccine has proven to be effective against the Original Strain in Phase I and II clinical trials, there is limited clinical research data to prove its efficacy on variant strains.

Clinical development plan

We have initiated a global multi-center, double-blind and placebo-controlled Phase III clinical trials in June 2022, to further evaluate the vaccine immunogenicity against COVID-19 infections. We plan to recruit subjects aged 18 or above for the clinical trials, who will receive either medium dosage of our mRNA COVID-19 vaccine or a placebo. We expect to complete vaccination procedures for all subjects by the end of 2022 and 28-day post-vaccination visits in the first quarter of 2023. Interim data for the Phase II and Phase III clinical trials are expected to be ready, based on which we plan to apply for conditional NDA approval from the NMPA, in the first quarter of 2023. We expect to receive conditional approval and/or launch our mRNA COVID-19 vaccine in the second quarter of 2023. Going forward, we also plan to conduct clinical trials to expand our indicated age group to people younger than 18 years old.

Inactivated COVID-19 Vaccine Candidate

We are developing an inactivated COVID-19 vaccine candidate against the Original Strain, which was in Phase II clinical trial stage as of the Latest Practicable Date. In addition, we are developing a second generation vaccine candidate against the Delta variant strain in cooperation with Zhejiang Provincial CDC. See “—Research and Development—Collaboration Agreements—Collaboration with Zhejiang Provincial CDC.” This second generation COVID-19 inactivated candidate triggers immune responses using the classic inactivated virus technologies.

We have commenced CTA filing process as of the Latest Practicable Date for our inactivated COVID-19 vaccine candidate against the Delta variant strain. According to CIC, we are one of the first vaccine companies to use isolated Delta variant strain to develop vaccine in the PRC. We plan to proceed with the ongoing CTA filing process after launching our mRNA vaccine candidate, subject to the changing pandemic epidemiology, circulating variants, containment measures and vaccination policies in China.

Mechanism of action

Our inactivated COVID-19 vaccine candidate is produced by completely inactivating or killing the pathogen. It contains the whole virus antigens of the Original Strain or the Delta variant strain. The antigen of the virus strain may prevent immune escape caused by certain mutations in the virus strain’s S protein. Once inactivated COVID-19 viruses get presented to the human body’s immune system, they stimulate the production of antibodies and make the body ready to respond to an infection with live SARS-CoV-2 viruses.

Preclinical studies of the inactivated candidate against the Delta variant strain

As of the Latest Practicable Date, we were in the process of CTA filing with the NMPA for the inactivated COVID-19 vaccine candidate against the Delta variant strain. Representative safety studies include:

- *Acute toxicity test.* A single dose of the inactivated COVID-19 vaccine was administered intramuscularly to SD rats. The dosage level was four times of the human dose (common model for preclinical toxicity studies). No significant abnormalities were observed in all rats during the study, including clinical observations, body weight and food intake. No significant toxic reactions were observed at the end of the study in rat autopsies.

- *Systemic active allergic reaction test.* Guinea pigs were injected intramuscularly at different dose level of the inactivated COVID-19 vaccine. No signs of allergic reactions were observed when the animals were sensitized by intramuscular injection and stimulated by intravenous injection at different doses. The guinea pigs were negative for allergic reactions.

Competition and our advantages

As of the Latest Practicable Date, five out of all nine COVID-19 vaccines approved conditionally or for emergency use in the PRC were inactivated vaccines. As of the same date, there were two (including ours) inactivated COVID-19 pipeline candidates in the PRC being developed. According to CIC, inactivated vaccines would be a major COVID-19 vaccine type in the PRC from 2020 to 2023. For details, see “Industry Overview—COVID-19 Vaccine in the PRC—Competitive Landscape—Inactivated COVID-19 vaccines.” We believe such a huge market demand requires more suppliers of inactivated COVID-19 vaccines in the near future. See “Industry Overview—COVID-19 Vaccine in the PRC—Competitive Landscape”.

Broad-spectrum COVID-19 Vaccine Candidate

We are collaborating with SPHCC to develop a broad-spectrum COVID-19 vaccine candidate. See “—Research and Development—Collaboration Agreements—Collaboration with SPHCC.” This vaccine candidate is currently undergoing preclinical studies, and we target to file a CTA in 2023 in the PRC.

Mechanism of action

Our adenovirus-based vaccine candidate utilizes AdC68 viral vector, which infects target cells through Coxsackie adenovirus receptor (CAR). Once entered into the host cell, recombinant adenoviruses start to transcribe foreign mRNA and express antigens. Coronavirus T (CovT) cell antigens were expressed inside the target cells, and were digested into small peptides through the proteasome pathway. Then the CoVT cell peptides were presented to CD8+ T cells through the MHC class I pathway to activate T cell responses. Moreover, RBD antigens were expressed and displayed on the target cell membrane and finally recognized by B cell receptors to activate the antibody responses.

Competition and our advantages

As of the Latest Practicable Date, there is no COVID-19 adenoviral vector vaccine against broad-spectrum coronavirus that is approved or undergoing clinical trial in the world. See “Industry Overview—COVID-19 Vaccine in the PRC—Competitive Landscape—Adenoviral vector COVID-19 vaccines.” Our broad-spectrum COVID-19 vaccine candidate is a potentially global innovative vaccine, giving it a broader virus coverage as compared against other types of COVID-19 vaccines and a potential to protect people against other coronaviruses.

We plan to enroll subjects over 18 years old for our clinical trials, which we target to undertake during 2023 to 2024 in Southeast Asia, South America, the Middle East, Central Asia and Africa.

Pneumococcal Disease Vaccine Candidates

We are developing three pneumococcal vaccines, each targeting a distinct market segment: (i) our PCV13 candidate, indicated for children aged six weeks to five years old, is expected to address the significantly underserved PRC PCV13 market; (ii) our PCV20 candidate is a next-generation upgrade on PCV13 and potentially the first 20-valent pneumococcal conjugate vaccine in the PRC; and (iii) the PPSV23 candidate is indicated for all vaccinees above two years old.

We strategically developed multiple pneumococcal vaccine candidates in the vast PRC pneumococcal vaccine market: (i) we expect our PPSV23 to be launched in 2023, being our first pneumococcal vaccine product, which will help us quickly capture market share and build up brand recognition, market acceptance and sales channels for future PCV13 and PCV20 products; (ii) we expect our PCV13 to also be a fast-to-market product to capture a meaningful market share. It only took us 3.5 years to bring our PCV13 candidate from preclinical studies to the Phase III clinical trial, much faster than the two domestic PCV13 products and the other three Phase III PCV13 candidates in China. We expect to launch PCV13 in 2024. Considering that PCV13 market will reach RMB26.2 billion in 2030 at a CAGR of 17.2% from 2021, and will become the largest segment of the overall pneumococcal vaccine market in the PRC, we expect our PCV13 product will contribute significant revenue to us; and (iii) we expect our PCV20 to be potentially the first 20-valent pneumococcal conjugate vaccine in China. Our PCV20 is a next-generation pneumococcal vaccine candidate that can induce stronger immune response than PCV13 by covering seven more serotypes, and offer stronger protection than PPSV23 benefiting from the immune memory elevated by the polysaccharide conjugation technology. We expect to launch PCV20 in 2025 to gradually take up market share in the longer future. As a result of foregoing, we believe such a strategically assembled portfolio gives us a unique advantage over most of our competitors.

Market Opportunities

Streptococcus pneumoniae (*S. pneumoniae*) is the causative bacteria of pneumococcal infections. High risk populations are those with relatively weaker immune systems, especially the youth and the elderly. To date, around 100 *S. pneumoniae* serotypes have been distinguished.

According to CIC, the market size of pneumococcal disease vaccines in the PRC increased from RMB1.4 billion in 2015 to RMB8.6 billion in 2021 at a CAGR of 35.5%, in which PCV13 and PPSV23 are the only two pneumococcal vaccine types, respectively accounted for 47.2% and 52.8% of the overall pneumococcal vaccine market by approved lot release volume, and 73.2% and 26.8% by sales revenue. With better immuno-protection in infants, polysaccharide conjugation vaccines will gradually gain more market share. It is expected that China's pneumococcal vaccine market will further grow to RMB43.8 billion in 2030 at a CAGR of 19.9% from 2021, of which PCV13 will account for 59.8% and 52.9% market shares in terms of sales revenue and approved lot release volume, respectively. In addition, there are certain innovative pneumococcal vaccines currently under development and are expected to enter the market in the next decade.

PCV13 Candidate

Our PCV13 candidate is a pneumococcal conjugate vaccine to be indicated for children aged from six weeks to five years old. According to CIC, Pfizer's Prevnar 13, the global first PCV13 vaccine, has been a blockbuster vaccine since its approval in the U.S. in 2010; it was the best-selling vaccine worldwide from 2015 to 2020 and remains one of the globally best-selling vaccines to date with a global sales revenue of US\$5.3 billion in 2021. The fact that it can be administered on infants unlike the traditional polysaccharide vaccines, and its higher serogroup coverage compared to the previous PCV7, have been the main contributors to its success.

However, China's PCV13 products are significantly underserved. According to CIC, as of the Latest Practicable Date, only three PCV13 products were approved in China, including Prevnar 13 approved in 2017 and indicated for children aged between six weeks to 15 months, Walvax's Weuphoria approved in 2019 and indicated for children between six weeks to below six years of age, and Minhai's PCV13 product approved in 2021 and indicated for children between two months to below five years of age. Due to limited supply, the penetration rate of PCV13 for approved age groups in 2021 was only around 11%. As a result, sales revenue of PCV13 vaccines in the PRC only amounted to RMB6.3 billion in 2021. China's low penetration rate indicates significant market potential for PCV13 products.

We obtained the CTA approval for our PCV13 vaccine candidate in October 2020 and commenced the Phase I clinical trial in February 2021. We are undergoing a Phase III clinical trial for our PCV13 candidate and had completed administration of the first dose of PCV13 for all test subjects in the Phase III clinical trial as of the Latest Practicable Date. We took only three years and six months to advance the development of our PCV13 vaccine candidate from preclinical studies to Phase III clinical trial. We target to launch this product in 2024 to tap the vast unmet medical needs for PCV13 products in the PRC.

We have tested and proven our manufacturing techniques of the PCV13 vaccine using our bacterial platform technologies. See “—Research and Development—Vaccine Development Platform Technologies—Bacterial Vaccine Platform Technologies”. As of the Latest Practicable Date, we have conducted scaled-up production of our PCV13 candidate, and have produced samples for our Phase I and Phase III clinical trials.

Mechanism of action

The vaccine includes purified capsular polysaccharide of 13 *S. pneumoniae* serotypes. As a conjugate vaccine, our PCV13 vaccine candidate are covalently linked to a clinically well-validated carrier protein, TT, which can elicit a T-cell dependent immune response with the involvement of T helper cells, and therefore generates the signals needed for maturation of the B-cell response. This type of response induces immune memory and enhances the immunologic properties of the polysaccharides.

Competition and our advantages

According to CIC, infants’ demand for quality pneumococcal vaccines is vast and underserved in the PRC. According to the same source, the number of newborns in the PRC remained relatively stable at around 14 million from 2015 to 2021. The increasing awareness of pneumococcal vaccines amongst Chinese parents and market recognition of PCV13 products further boosted the demand. In 2021, children in approved age groups who received PCV13 only accounted for around 11% of the total number of this age group, which is primarily due to the limited supplies from Pfizer and Walvax, from which the approved lot release volume was only 5.5 million doses and 4.9 million doses, respectively, which are only enough to inoculate around 25% of the newborns in the PRC.

As of the Latest Practicable Date, there were six PCV13 candidates undergoing clinical trials in the PRC, including our candidate. See “Industry Overview—Pneumococcal Vaccines in the PRC—Competitive Landscape.”

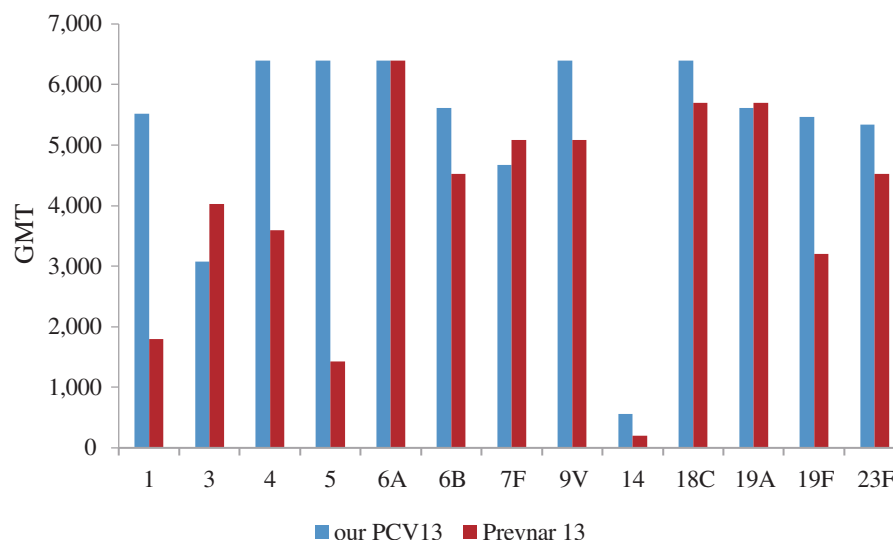
Preclinical studies

Safety

- *Acute toxicity test.* Rhesus monkeys were injected intramuscularly with two doses once (1.0 ml) of our PCV13 candidate. No obvious toxic reactions were observed after 14 days, indicating no acute toxicity in rhesus monkeys subject. The maximum tolerated dose of our PCV13 candidate in rhesus monkeys is higher than 1 dose (0.5 ml), which is equivalent to the designed single clinical dose for humans.
- *Repeated intramuscular injection toxicity test.* After repeated intramuscular injections in rhesus monkeys, four times in total with five doses per time (every two weeks), no systematic toxic reactions were observed indicating no systematic toxicity in rhesus monkeys. The safe dose of our PCV13 candidate in rhesus monkeys is five doses (2.5 ml in total), which is equivalent to five times of the designed human single clinical dose.

Immunogenicity

Our PCV13 candidate and Prevnar 13 were intramuscularly injected in four study groups of New Zealand white rabbits, six rabbits in each group. Two groups received our PCV13 candidates, which had been diluted to safe dosing levels for rabbits; one group received 0.5ml of Prevnar 13; and there was also a control group receiving only adjuvant. After vaccinations on day 0, day 14, and day 28, positive seroconversion rate and GMT were detected in the groups receiving our PCV13 candidate and Prevnar 13 on day 21 and day 35 after immunization, respectively. The following charts set out the GMT of our PCV13 compared to that of Prevnar 13.



Source: Preclinical studies results summary

Conclusion

Preclinical studies of our PCV13 candidate showed promising immunogenicity and favorable safety profile, indicating that the PCV13 candidate could be proceeded into clinical trials.

Summary of Phase I Clinical Trial

We commenced the Phase I clinical trial in February 2021, completed enrolling test subjects in June 2021 and completed vaccination procedure for all test subjects in December 2021. As of the Latest Practicable Date, we had collected preliminary safety data from all test subjects.

Study objective

The objective of the Phase I clinical trial was to evaluate the safety and tolerability and conduct preliminary exploration on the immunogenicity of our PCV13 vaccine candidate in persons aged from six weeks to 59 years. The primary endpoints included all AEs and SAEs in the first 30 minutes, seven days and 30 days after vaccination. Secondary endpoints included SAEs from the first dose of vaccination to six months after the full course of vaccination and the vaccine-specific serotype pneumococcus antibody (IgG) levels (number of test subjects with $\geq 0.35\mu\text{g/ml}$ as well as the geometric mean concentration value in all test subjects) 30 days after full course of vaccination.

Study design

Our Phase I clinical trial was a single-center, randomized, blinded and positive controlled trial. We enrolled 200 test subjects aged from six weeks to 59 years, which consisted of six age groups, namely two months group, three months group, seven to 23 months group, two to five years group, six years to 17 years group and 18 to 59 years group. All age groups except for the six years to 17 years group and 18 to 59 years group had two test groups of 20 subjects, with one group receiving our PCV13 vaccine candidate and the other group receiving either Prevnar 13 or the PCV13 vaccine produced by Walvax. The six years to 17 years group and 18 to 59 years group received our PCV13 candidate only, since there was no approved PCV13 products for these two age groups in the PRC at the time of trial. Details of the study design for each age group in our Phase I clinical trial are set out in the below table:

No.	Age at which first dose is administered	Vaccine	Sample size	Dosing schedule
1	18 to 59 years	PCV13 candidate	20	1
2	six years to 17 years	PCV13 candidate	20	1
3	two to five years	PCV13 candidate	20	1
		Walvax PCV13	20	1
4	seven to 23 months	PCV13 candidate	20	2 (0, 2) ⁽¹⁾
		Walvax PCV13	20	2 (0, 2) ⁽¹⁾
5	three months	PCV13 candidate	20	3 (0, 1, 2) ⁽²⁾
		Walvax PCV13	20	3 (0, 1, 2) ⁽²⁾
6	two months (minimum six weeks)	PCV13 candidate	20	3 (0, 2, 4) ⁽³⁾
		Prevnar 13 ⁽⁴⁾	20	3 (0, 2, 4) ⁽³⁾

Source: Phase I clinical trial study design

- (1) 2 (0, 2) refers to two doses in total, with the first dose being given when the subject was between seven to 23 months old, and the second dose being given two months after the first dose.
- (2) 3 (0, 1, 2) refers to three doses in total, with the first dose being given when the subject was three months old, the second dose being given one month after the first dose and the third dose being given two months after the first dose.
- (3) 3 (0, 2, 4) refers to three doses in total, with the first dose being given when the subject was two months old, the second dose being given two months after the first dose and the third dose being given four months after the first dose.
- (4) We had considered using Prevnar 13 as the positive control vaccine for the three months group and seven to 23 months group as well, but Prevnar 13's dosing schedule could only match that of our PCV13 candidate in the two months age group.

Preliminary safety data

As of the Latest Practicable Date, we had not finalized our Phase I clinical trial data. According to preliminary safety data as of the same date, our PCV13 candidate had shown good safety profile. Most AEs were grade 1 or 2.

Summary of Ongoing Phase III Clinical Trial

We commenced the Phase III clinical trial in December 2021, for which we enrolled 3,780 subjects. As of the Latest Practicable Date, we had completed administration of the first dose vaccination for all test subjects in the Phase III clinical trial.

Study objective

The main objective of the Phase III clinical trial is to further evaluate the immunogenicity of our PCV13 vaccine candidate in persons aged from two months (minimum six weeks) to 71 months. The primary endpoints include vaccine-specific serotype pneumococcus antibody (IgG) levels in persons aged between two months (minimum six weeks) and six months after full course of vaccination. Secondary endpoints include (i) the opsonophagocytic activity (OPA) of vaccine-specific serotype pneumococcus antibody in all test subjects after full course of vaccination; (ii) the immune persistence in test subjects aged between two months (minimum six weeks) and six months after full course of vaccination; and (iii) AEs and SAEs during the full course of vaccination in all test subjects.

Study design

Our Phase III clinical trial is a single-center, randomized, double-blinded and controlled non-inferiority comparison trial. We enrolled 3,780 test subjects aged from six weeks to 71 months. Test subjects consisted of four age groups, namely two months (minimum six weeks) to six months group, seven to 11 months group, 12 to 23 months group and 24 to 71 months group. All age groups except for the two months (minimum six weeks) to six months group have two test groups of 360 subjects, with one group receiving our PCV13 vaccine candidate and the other group receiving the PCV13 vaccine produced by Walvax. The two months (minimum six weeks) to six months age group consists of three test groups of 540 subjects, one received our PCV13 candidate at the age of two months (minimum six weeks), one received our PCV13 candidate at the age between three to six months, and the other one received Prevnar 13 at the age of two months (minimum six weeks). Details of the study design for each age group in our Phase III clinical trial are set out in the below table:

No.	Age at which first dose is administered	Vaccine	Sample size	Dosing schedule	
				Primary administration	Booster dose
1	two months (minimum six weeks)	PCV13 candidate	540	3 (0, 2, 4) ⁽¹⁾	1 (at age 12 to 15 months)
	two months (minimum six weeks)	Prevnar 13 ⁽⁴⁾	540	3 (0, 2, 4) ⁽¹⁾	1 (at age 12 to 15 months)
	three to six months	PCV13 candidate	540	3 (0, 1, 2) ⁽²⁾	1 (at age 12 to 15 months)
2	seven to 11 months	PCV13 candidate	360	2 (0, 2) ⁽³⁾	1 (at age 12 to 15 months, and at least two months after the second dose of primary administration)
		Walvax PCV13	360	2 (0, 2) ⁽³⁾	1 (at age 12 to 15 months, and at least two months after the second dose of primary administration)
3	12 to 23 months	PCV13 candidate	360	2 (0, 2) ⁽³⁾	N/A
4	24 to 71 months	Walvax PCV13	360	2 (0, 2) ⁽³⁾	N/A
		PCV13 candidate	360	1	N/A
		Walvax PCV13	360	1	N/A

Source: Phase III clinical trial study design

- (1) 3 (0, 2, 4) refers to three doses in total, with the first dose being given when the subject was two months old, the second dose being given two months after the first dose and the third dose being given four months after the first dose.
- (2) 3 (0, 1, 2) refers to three doses in total, with the first dose being given when the subject was three to six months old, the second dose being given one month after the first dose and the third dose being given two months after the first dose.
- (3) 2 (0, 2) refers to two doses in total, with the first dose being given when the subject was at the age as indicated in the table, and the second dose being given two months after the first dose.
- (4) We had considered using Prevnar 13 as the positive control vaccine for the seven to 11 months group and 12 to 23 months group as well, but Prevnar 13's dosing schedule could only match that of our PCV13 candidate in the two months age group.

Clinical development plan

After obtaining the Phase III clinical data, we plan to file a NDA with the NMPA in 2023. We expect to launch our PCV13 in 2024 after completing its GMP inspection and certification work.

PCV20 Candidate

Our PCV20 candidate contains purified capsular polysaccharide of all of the *S. pneumoniae* serotypes present in our PCV13 candidate, and seven new serotypes. Six of these seven new serotypes are linked with diseases with a high fatality rate. Its mechanism of action is the same as our PCV13 candidate. For details, see “—PCV13 Candidate.” Our PCV20 candidate is planned to be indicated for people above the age of six weeks. It is potentially the first 20-valent pneumococcal conjugate vaccine in the PRC.

Competition and our advantages

As of the Latest Practicable Date, there was no PCV20 vaccine approved for sale or in the clinical development in the PRC. Currently in the PRC, for children under two years old, PCV13 products are the only available pneumococcal vaccines, as PPSV23 cannot be administered. Compared to PCV13, our PCV20 vaccine candidate covers seven additional prevalent serotypes of *S. pneumoniae* and therefore potentially have a stronger immunogenicity and better protection against pneumococcal diseases.

Furthermore, we expect to be able to produce PCV20 vaccines at scale once it is approved for commercialization. Since PCV20 contains a large number of *S. pneumoniae* serotypes, its production process is complex and margin for error is small. Nonetheless, we have proven platform technologies for its production, as we will use the same technologies as those used to produce our PCV13 vaccine. See “—PCV13 Candidate” and “—Research and Development—Vaccine Development Platform Technologies—Bacterial Vaccine Platform Technologies”. Since we have tested the scaled-up production capacity of PCV13 vaccines, we can apply the proven manufacturing techniques to the production of PCV20 vaccines. As of the Latest Practicable Date, we have submitted samples to the NIFDC for inspection. We therefore expect our ability to be able to produce PCV20 vaccine at scale to be a key advantage.

Preclinical studies

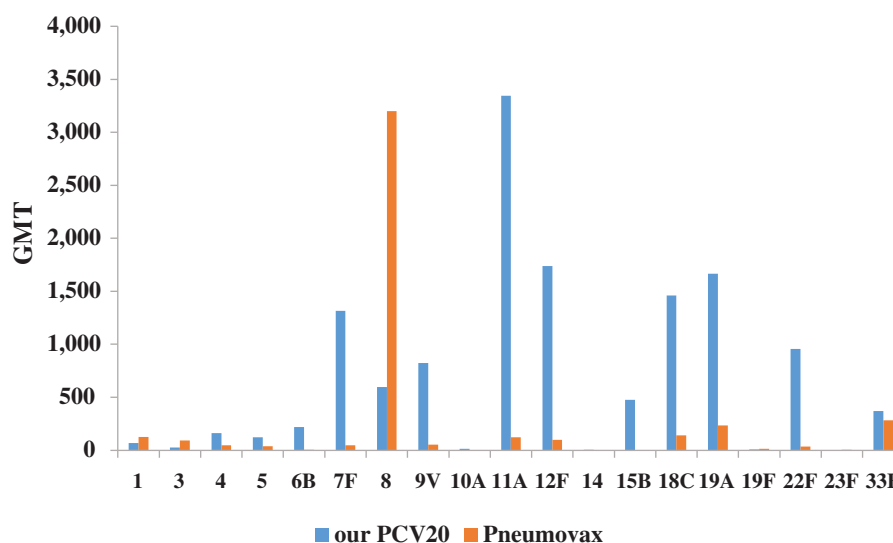
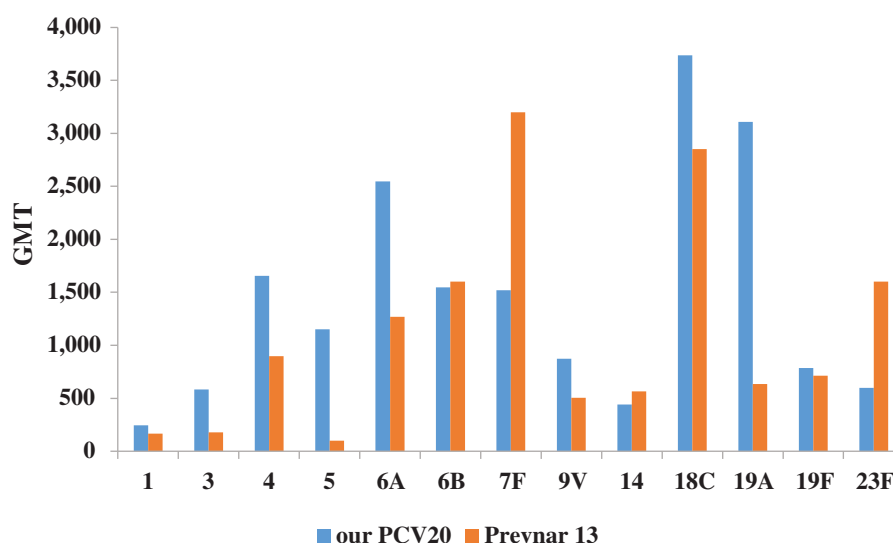
Safety

Acute toxicity test. The maximum tolerated dose of our PCV20 candidate in rhesus monkeys is higher than 1 dose (0.5 ml), which is equivalent to the designed single clinical dose for humans. Rhesus monkeys were injected intramuscularly with two doses once (1.0 ml) of our PCV20 candidate. No obvious toxic reactions were observed after 14 days, indicating no acute toxicity in rhesus monkeys subject.

Repeated intramuscular injection toxicity test. The safe dose of our PCV20 candidate in rhesus monkeys is five doses (2.5 ml in total), which is equivalent to five times the designed human single clinical dose. After repeated intramuscular injections, four times with five doses per time (every two weeks), no systematic toxic reactions were observed, indicating no systematic toxicity in rhesus monkeys.

Immunogenicity

New Zealand white rabbits were intramuscularly injected PCV20 candidate, Prevnar 13 and Pneumovax, which had been diluted to safe dosing levels for rabbits. We used five six-rabbit groups for the studies against Prevnar 13 and Pneumovax, respectively. Three of the five groups received our PCV20 candidate, and the other two groups received Prevnar 13 and Pneumovax. The following charts set out the GMT levels compared between our PCV20 on the one hand, and Prevnar 13 and Pneumovax, respectively, on the other.



Source: Preclinical studies results summary

Conclusion

Preclinical studies of our PCV20 candidate showed good immunogenicity and safety without adverse reactions in animals, which meant the PCV20 candidate was ready for clinical trials.

Clinical development plan

We submitted a CTA in June 2022 and plan to commence Phase I clinical trial by the end of 2022. We plan to test the safety of the immunogenicity on 220 subjects aged over six weeks in Phase I clinical trial, and on 3,520 subjects aged between six weeks to 71 months (divided in five different age groups) in Phase III clinical trial. We plan to quickly advance Phase I to III clinical trials for PCV20 from 2022 to 2024, and to file the NDA with the NMPA in 2024. We expect to launch our PCV20 in 2025 after completing its GMP inspection and certification work.

PPSV23 Vaccine Candidate

Our PPSV23 candidate is indicated for the age groups above two years old. Since the COVID-19 outbreak, PPSV23 vaccine has been recommended to be given in combination with influenza vaccines, which increases the market demand for such vaccines. In 2021, the total sales revenue of PPSV23 products reached RMB2.3 billion in the PRC.

We have initiated Phase I clinical trial for our PPSV23 vaccine candidate since May 2021 by setting up a clinical trial site. We completed vaccination procedure for all test subjects in the Phase I clinical trial in January 2022. We expect to initiate the Phase III clinical trial in 2022. As of the Latest Practicable Date, we had conducted scaled-up production of our PPSV23 candidate and produced the samples needed for Phase III clinical trial. As of the same date, we had submitted samples to the NIFDC for inspection. We expect to file NDA with the NMPA in 2023.

Mechanism of action

Our PPSV23 contains purified capsular polysaccharide of 23 *S. pneumoniae* serotypes which account for most serotypes of *S. pneumoniae* to date. Polysaccharide vaccines primarily elicit antibody responses through B cells.

Competition

As of the Latest Practicable Date, there were five PPSV23 vaccine products sold in the PRC, and two PPSV23 vaccine candidates had completed clinical trials but were pending NDA approvals for at least four years. In addition to our candidate, there was one PPSV23 candidate undergoing clinical trial, as of the Latest Practicable Date. See “Industry Overview—Pneumococcal Vaccines in the PRC—Competitive Landscape.”

EV71-CA16 Bivalent HFMD Vaccine Candidate

We are developing a global innovative EV71-CA16 Bivalent HFMD Vaccine Candidate. Enterovirus type 71 (EV71) and coxsackievirus A16 (CA16) are the major pathogens of HFMD. As of the Latest Practicable Date, all commercialized HFMD vaccines were monovalent vaccines, which protect only against the EV71 viral strain. Our EV71-CA16 Bivalent HFMD Vaccine Candidate is the first vaccine candidate in the world designed to provide immunization against both the EV71 and CA16 viral strains. We filed a CTA to the NMPA in July 2022. We plan to carry out clinical trials from the second half of 2022 to 2025. Based on the positive results of clinical studies, we expect to file an NDA with the NMPA in 2025 and launch this vaccine in 2026.

Mechanism of Action

Our EV71-CA16 Bivalent HFMD Vaccine Candidate contains whole virus particles of inactivated EV71 and CA16 viruses. Once administered through intradermal injection, the innate lymphoid cells (ILCs) in the skin surrounding the point of delivery are activated by inactivated viruses. The ILCs will then release natural immunization particles, which in turn activate another type of natural immunization particles, dendritic cells. Complete acquired immunity was subsequently stimulated to form a protective effect on EV71 and CA16 virus infection.

Preclinical Studies

Safety

- Acute toxicity test. ICR mice and young Sprague Dawley rats (both are general-purpose models used for preclinical studies) were selected, and two to eight human doses of the EV71-CA16 Bivalent HFMD Vaccine Candidate were given by intradermal injection. No obvious clinical symptoms and toxic reactions were observed in experimental animals during the entire study period. There was no abnormal change to body weight, and no abnormal change was found in the necropsy of the surviving animals at the end of the experiment.
- Long-term toxicity test. ICR mice were selected to receive the EV71-CA16 Bivalent HFMD Vaccine Candidate with different antigen content by intradermal injection. The long-term toxicity test results showed that after receiving one to four human doses for three times, the administration site of the mice showed irritation response, which gradually recovered. No obvious clinical symptoms and toxic reactions were observed.

Immunogenicity

Our EV71-CA16 Bivalent HFMD Vaccine Candidate was administered either intradermally or intramuscularly in mice. The results (Figure 1, a to d) showed that the intradermal route can cause a significantly higher level of neutralization antibody against EV71 and CA16 viral strains (in terms of antibody titers) and cellular immune response (in terms of T-cell immune response against EV71 and CA16 viral strains) than the intramuscular route. After the completion of the full course of immunization, a lethal dose of viral challenge was administered to newborn mice within 24 hours after birth. The results showed that a bivalent vaccine with both the CA16 antigen and EV71 antigen could achieve a 100% protection rate in the immunized subjects under the intradermal immunization route.

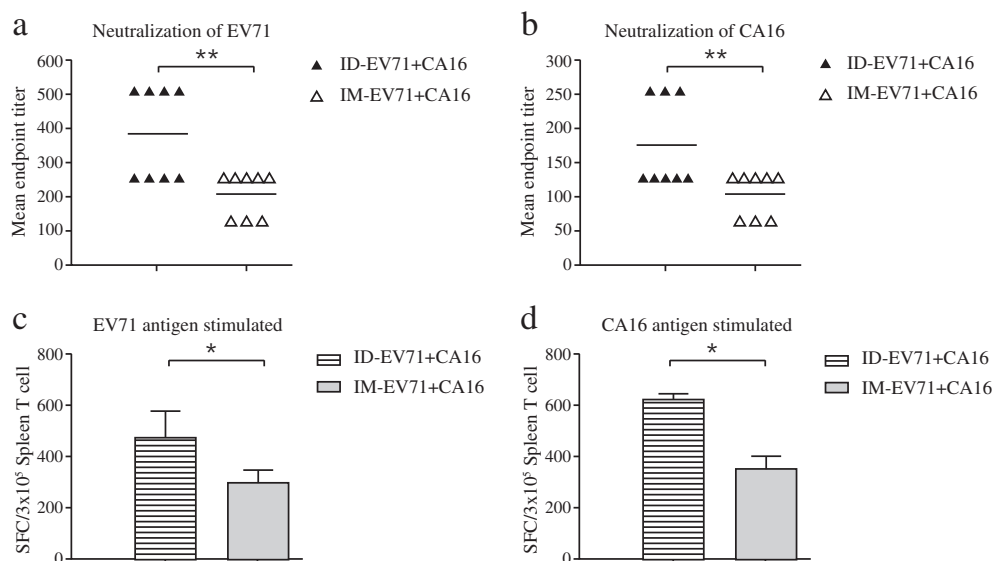


Figure 1 Immunological Evaluation of Mice Immunized with EV71-CA16 Bivalent HFMD Vaccine Candidate

* ID = intradermal administration; IM = intramuscular administration

Source: Preclinical studies results summary

Clinical development plan

We submitted a CTA to the NMPA in July 2022. Based on the epidemiological characteristics of HFMD, we plan to carry out Phase I, Phase II and Phase III clinical trials from the second half of 2022 to 2025. Based on the positive results of clinical studies, we expect to file an NDA with the NMPA for our EV71-CA16 Bivalent HFMD Vaccine Candidate in 2025.

Competition and Our Advantages

HFMD vaccines were not available in China until 2016, which rapidly achieved RMB1.5 billion sales in the same year. In 2021, China's HFMD vaccine market reached RMB3.7 billion, at a CAGR of 20.2% from 2016. According to CIC, as of the Latest Practicable Date, there had been no commercialized HFMD vaccine against other HFMD viruses except for EV71 worldwide. Our combination vaccine candidate could therefore become the first bivalent HFMD vaccine product to enter the market.

DTP and DTP-based Combination Pipeline Candidates

We are developing two DTP vaccine candidates, one DTaP and one DTcP. These vaccines are two of the most commonly used DTP combination vaccines in the PRC. DTaP is a Class I vaccine type and dominates the PRC DTP vaccine market in terms of approved lot release volume, whereas DTcP is an advanced generation without approved products developed by domestic companies to date in the PRC. In addition, we are also developing a DTP-Hib combination vaccine candidate. According to CIC, DTP-Hib combination vaccine, which is the combination vaccine that can target the widest range of diseases produced by domestic PRC companies, has a vast market in the PRC. Sales revenue of DTP-Hib vaccines reached RMB1.5 billion in 2021. We plan to file CTAs for our DTaP and DTP-Hib combination vaccine candidates in 2023, and our DTcP vaccine candidate in 2024.

We believe combination vaccines can significantly reduce the health care visits and costs of stocking and administering separate vaccines, and simplify administration process to allow vaccinees, especially newborns, to take additional vaccines if necessary. These preclinical combination candidates are under concurrent development to ensure R&D efficiency and also allow us to consider combination technologies based on relevant biologic attributes at an earlier stage.

According to CIC, five DTP or DTP-based combination vaccines obtained approved lot releases in 2021 in the PRC. Seven DTP or DTP-based combination pipeline candidates are in clinical trial stage or pending NDA approval in the PRC. See “Industry Overview—DTP-based Combination Vaccines in the PRC—Competitive Landscape.”

In addition, we are developing one absorbed tetanus vaccine candidate, which is the only tetanus vaccine recommended for adults and children older than 6 years in the specifications for diagnosis and treatment of non-neonatal tetanus in the PRC, indicating a market that worths billions of RMB.

Meningococcal Conjugate Group A, C, Y and W135 Vaccine (MCV4) Candidate

In addition to our MPSV4, we are also developing a MCV4 candidate. The main advantage of a MCV4 over a MPSV4 is that it can be administered on children younger than two years old. This indicates a significant market, since the incidence of meningococcal meningitides is highest in infants below 12 months old, according to CIC. Our MCV4 candidate is designed to provide immunization for infants between two to five months old under a three-dose administration regimen, for infants between six to 23 months old under a two-dose administration regimen, and for vaccinees over 24 months old under a one-dose administration regimen. We have obtained CTA approval and initiated a Phase I clinical trial in the fourth quarter of 2021.

Mechanism of Action

Our MCV4 candidate contains four purified capsular polysaccharides A, C, W135 and Y, which are conjugated with a carrier protein, CRM197. The conjugation mechanism is the same as our PCV13 candidate. For details, see “—Pneumococcal Disease Vaccine Candidates—PCV13 Candidate.”

Competition and Our Advantages

As of the Latest Practicable Date, there was only one MCV4 product in the PRC, which was recently approved in December 2021, and there were five MCV4 vaccine candidates in clinical development. See “Industry Overview—Meningococcal Vaccines in the PRC—Competitive Landscape.” The technologies for manufacturing our MCV4 vaccine have been developed by leveraging our know-how in the extraction and purification of polysaccharide antigen, which has been proven on commercialized products such as our MPSV4. As such, we expect to be able to produce our MCV4 at scale once it is approved, and achieve the same high quality standards as our MPSV4.

Other Vaccine Candidates With Large Market Potential

We are also developing a number of other vaccine candidates with large market potential, which primarily include:

- *Human rabies pipeline candidates:* We are developing
 - (i) one potentially global innovative mRNA human rabies vaccine utilizing our mRNA platform technologies, which we expect to file CTA in 2022. See “—Research and Development—Vaccine Development Platform Technologies—mRNA Vaccine Platform

Technologies”. The production process of our mRNA rabies vaccine does not involve inactivating rabies virus or growing host cells. This potentially delivers a better safety profile by reducing risks relating to injection of inactivated virus or foreign cells into human bodies.

In a preclinical study, beagle dogs were randomly divided into two groups, one received intramuscular administration of our mRNA human rabies vaccine candidate before exposure to rabies virus (prevention group), and the other received administration after virus exposure (treatment group). In each group, two sub-groups were vaccinated at low dose (5 µg/dose) and at high dose (25 µg/dose), respectively (at each dose level, one sub-group received two doses and the other sub-group received three doses), and one additional positive comparison sub-group received an approved human rabies vaccine on market (Vero-cell). The sub-groups that were inoculated under the “2-dose” vaccination procedure received vaccination on day 0 and day 7; and those that were inoculated under the “3-dose” vaccination procedure received vaccination on day 0, day 7 and day 21. The “2-dose” sub-groups in the prevention group were challenged with rabies virus on day 28 after the full course of vaccination, and the “3-dose” sub-groups were challenged with rabies virus on day 14 after the full course of vaccination. As for the treatment group, the “2-dose” sub-groups and “3-dose” sub-groups were both challenged with rabies virus 6 hours before receiving the first dose. There was one additional negative comparison sub-group in the treatment group that did not receive any vaccines after exposure to rabies virus. Results of this preclinical study indicates our mRNA human rabies vaccine achieved the desired immunogenicity effect. It provided comparable protection to the marketed vaccine in pre-exposure evaluation with a reduced administration number and maintained a high level of rabies virus neutralizing antibody titer. In the post-exposure evaluation, the pass rate of our mRNA vaccine candidate was 100% for both low dose and high dose sub-groups, which is significantly higher than that of the marketed vaccine. Specifically, neutralizing antibodies to rabies virus were detected at around seven days after the full course of vaccination for both “2-dose” and “3-dose” vaccination procedures. When pre-exposure prophylaxis was administered at both high and low doses, both procedures provided 100% immune protection against rabies virus from day 4 after the vaccination of the second dose (day 11). This suggests that the minimum effective dosage is two doses of 5 µg/dose. Both vaccination procedures at both dose levels provided a higher protection rate than the traditional “5-dose” post-exposure immunization procedure of the marketed vaccine. At the end of the period, all surviving dogs maintained high levels of rabies virus-neutralizing antibodies above the lower limit of protection (0.5 IU/mL) prescribed under the Technical Guidelines for Human Rabies Prevention and Control (2016) published by the Chinese CDC. The following tables set forth the antibody GMT and pass rate of the prevention group and the treatment group, respectively.

Table A

0d inoculated				7d inoculated		21d inoculated		35d challenge				90d survival					
Groups		Immunization Schedule	Dosage	# of animals	7d		9d		11d		13d		35d		90d		
					Antibody GMT	Pass rate	Antibody GMT	Pass rate	Antibody GMT	Pass rate	Antibody GMT	Pass rate	Antibody GMT	Pass rate	# of survived animals	Antibody GMT	Pass rate
A (prevention group)	A-1	0.7	Low dosage (5µg)	6	0.17	0	0.98	67	4.85	100	16.32	100	34.5	100	6/6	73.3	100
	A-2	0.7	High dosage (25µg)	6	0.29	17	3.61	100	24.5	100	36	100	120.0	100	6/6	96.2	100
	A-3	0.7,21	Low dosage (5µg)	6	0.14	17	1.37	83	15.7	100	21.7	100	197.6	100	6/6	24.9	100
	A-4	0.7,21	High dosage (25µg)	6	0.17	33	1.06	83	15.2	100	25.5	100	278.6	100	6/6	64.2	100
	A-5	Positive control group (0.3,7,14,28)	/	6	1.94	100	4.18	100	20.36	100	34.4	100	91.8	100	6/6	18.2	100

Note: Pass rate represents the rate of subjects with antibody level > 0.5IU/ml, as prescribed under the Technical Guidelines for Human Rabies Prevention and Control (2016) published by the Chinese CDC.

Source: Preclinical studies results summary

Table B

<div style="display: flex; justify-content: space-around; align-items: center;"> <div style="background-color: red; color: white; padding: 5px; border: 1px solid black;">35d challenge</div> ➡ <div style="background-color: lightblue; padding: 5px; border: 1px solid black;">35d+6h inoculated</div> ➡ <div style="background-color: lightblue; padding: 5px; border: 1px solid black;">42d inoculated</div> ➡ <div style="background-color: darkblue; color: white; padding: 5px; border: 1px solid black;">56d inoculated</div> ➡ <div style="background-color: green; color: white; padding: 5px; border: 1px solid black;">90d survival</div> </div>							
Group		Immunization schedule (inoculated after challenge)	Dosage	# of animals	90d		
					# of survived animals	Pass rate	Antibody GMT
B (treatment group)	B-1	0, 7	Low dosage (5μg)	6	5/6	100	11.1
	B-2	0, 7	High dosage (5μg)	6	6/6	100	22.0
	B-3	0, 7, 21	Low dosage (5μg)	6	5/6	100	25.2
	B-4	0, 7, 21	High dosage (5μg)	6	6/6	100	93.3
	B-5	Positive control group (0, 3, 7, 14, 28)	/	6	2/6	100	81.0
	6	Challenged control group	/	6	0/6	/	/

Note: Pass rate represents the rate of subjects with antibody level > 0.5IU/ml, as prescribed under the Technical Guidelines for Human Rabies Prevention and Control (2016) published by the Chinese CDC. Subjects that did not survive were not tested for antibody levels.

Source: Preclinical studies results summary

- (ii) one candidate using serum-free Vero cells and with potentially improved safety and immunogenicity profile and less adverse side effects. In addition, our serum-free rabies vaccine candidate will not have any of the biosafety risks relating to the use of serum in production. The solution used to grow Vero cell is artificially synthesized, thereby providing superior stability and composition consistency compared to serum, which in turn results in higher batch-to-batch consistency; and
- (iii) one preclinical program using HDC, which will have better safety profile and simpler administration regimen, is easier to produce with consistently high quality and convenient to transport and store. HDC is safer than animals' cells with fewer adverse effects on vaccinee, and it also allows production of virus strains with high level of quality control. Among these three candidates, the serum-free Vero cell candidate is a new-generation vaccine that we expect to have a fast-growing market share due to its better safety profile. In addition, we expect mRNA and HDC rabies vaccines to take up increasing shares of the market in the longer future as they target the higher end of the market due to their better quality, technological advantages and subsequently higher prices.

We submitted a CTA to the NMPA in July 2022 for our serum-free Vero cell human rabies vaccine candidate, and plan to commence clinical trial (a Phase III clinical trial without having to undertake Phase I or II trials first) in the first half of 2023. We plan to file the CTAs for the mRNA human rabies vaccine candidate and human rabies vaccine candidate (HDC) in 2022 and 2023, respectively. We plan to launch these three new human rabies vaccines from 2025 to 2026; and

- *Influenza pipeline candidates:* We have one potentially global innovative adenovirus-based universal influenza vaccine candidate using the same technology as our adenovirus-based COVID-19 vaccine candidate and one cell-based quadrivalent candidate with the potential to offer better safety than traditional, egg-based flu vaccines. Compared to the conventional seasonal influenza vaccines, our influenza candidates are both designed to have broader protective efficacy against all types of strains of influenza, so that vaccinees would not have to receive vaccinations every year to have effective protection against influenza. We plan to file CTAs for the universal influenza vaccine candidate and cell-based quadrivalent influenza vaccine candidate in 2022 and 2023, respectively, and expect to launch these two vaccines in 2026.

As of the Latest Practicable Date, we had been undertaking preclinical studies for:

- two HPV candidates (HPV2 and HPV9);
- one herpes vaccine candidate;
- one Hib candidate; and
- one mRNA RSV vaccine candidate.

RESEARCH AND DEVELOPMENT

In-House Research and Development

Our in-house R&D team is responsible in all stages of vaccine candidate development, from preclinical studies, laboratory research, to clinical trials, regulatory filings and manufacturing process development. Our in-house R&D team primarily consists of (i) three vaccine research institutes, namely AIM Explorer, Liverna and AIM Jianchi; and (ii) the R&D team in each of our four vaccine manufacturing subsidiaries, namely AIM Honesty, AIM Kanghuai, Rong'an Bio and AIM Weixin. Each R&D team has its own research foci. AIM Explorer mainly develops vaccine candidates using bacterial vaccine platform technologies. Liverna develops mRNA vaccines, including our mRNA COVID-19 vaccine candidate, leveraging its expertise in mRNA technologies. AIM Jianchi focuses on the research and development and commercialization of genetically engineered recombinant vaccines. AIM Kanghuai and Rong'an Bio focus on viral vaccine platform technologies. AIM Honesty concentrates on genetically engineered vaccine platform technologies. In addition, AIM Weixin is developing several vaccine candidates using combination and bacterial vaccine platform technologies. Our R&D activities are led by a team of world-class scientists. Our chief scientist, Dr. Yucai PENG, has more than 20 years of experience working in biopharmaceutical companies in the U.S. and the PRC, including extensive top-class knowledge in mRNA drugs. He is a permanent member of the Nucleic Acid Vaccines Subcommittee of the China Association of Vaccines. Dr. Yucai PENG is in charge of the R&D activities of Liverna. We have also established our R&D management center at the Group level to coordinate and supervise all R&D activities across the research institutes and operating subsidiaries. Mr. Fan ZHANG, who leads our R&D management center, has over 10 years of experiences in vaccine development, including research as well as pilot and scaled-up production for PCV13, PCV20, PPSV23, MCV4 and DTP combination vaccine candidates.

BUSINESS

Our in-house R&D team is supported by an external scientific advisory board that comprises prominent scientists in the PRC's vaccine industry:

Name	Positions Held and Experience
Dr. Yu WANG (王宇)	<ul style="list-style-type: none"> Former vice director of the Center for Biological Engineering Center of the Ministry of Science and Technology of the PRC Former chief director of the national CDC of PRC Over 30 years of experiences in the biomedical industry, including R&D and regulatory experiences
Dr. Jianqing XU (徐建青)	<ul style="list-style-type: none"> Researcher at the Institute of Biomedical Sciences of Fudan University Head of the Translational Medical College of SPHCC Over 20 years of R&D experiences in infectious disease prevention and vaccination
Dr. Dongming ZHOU (周東明)	<ul style="list-style-type: none"> Distinguished Professor of SPHCC with special focus on novel vaccine viral vectors and gene therapy Former researcher of Institut Pasteur of Shanghai, Chinese Academy of Sciences Over 15 years of R&D experiences in infectious disease prevention and vaccination
Dr. Ningning MA (馬寧寧)	<ul style="list-style-type: none"> Former Senior Principal Scientist of Pfizer Former Vice Director of the Cell Engineering Research Center of Peking Union Medical College Over 20 years of experience in R&D of antigens and carrier proteins
Dr. Xiaofeng QIN (秦曉峰)	<ul style="list-style-type: none"> Professor, chief scientist and researcher at the Chinese Academy of Medical Sciences & Peking Union Medical College; Suzhou Institute of Systems Medicine Honorary professor, Clinical Research Institute, Tianjin Nankai Hospital Over 20 years of experience in tumor and immunotherapy

In addition, we also rely on the first-hand technical know-how of the R&D teams in the four manufacturing subsidiaries to develop the next generation vaccines that are expected to gradually replace existing products. For example, the R&D team at AIM Kanghuai predominantly develops vaccine candidates using viral vaccine platform technologies. AIM Kanghuai's R&D team is led by Ms. Li JIANG, who has more than 30 years of experience in vaccine R&D and is currently in charge of the development of our EV71-CA16 Bivalent HFMD Vaccine Candidate. Mr. Jinan WU, the general manager of Rong'an Bio, leads the R&D team of Rong'an Bio. He was the former division director of human rabies vaccines in Wuhan Institute of Biological Products where he led the clinical research of DTP-HBV combination vaccine, the production process development of genetic-engineered HBV vaccine and human rabies vaccine.

While each of the three research institutes and R&D teams in the four manufacturing subsidiaries may take the lead in the development of a particular vaccine candidate, there is also a high degree of cooperation amongst them. For example, the research work of our bacterial vaccine candidates is conducted by AIM Explorer, and AIM Weixin is responsible for vaccine supply, production scale-up studies and production process verification. AIM Explorer and AIM Weixin are working together to develop our MCV4 vaccine candidate, with AIM Explorer contributing superior R&D capabilities and AIM Weixin bringing in first-hand meningococcal vaccine production know-how. In addition, for mRNA COVID-19 vaccine development, Liverna has collaborated with AIM Explorer in clinical trials and manufacturing technologies transfer to Rong'an Bio. Dr. Gaofeng LIN, the chief scientist of Rong'an Bio, is responsible for technologies transfer and scale-up production processes of our mRNA COVID-19 vaccine.

As of the Latest Practicable Date, our in-house R&D team consisted of 222 employees, 85.6% of whom hold bachelor's or higher degrees, mainly in biological engineering, biological science, pharmaceutical engineering and clinical medicine majors. In 2019, 2020, 2021 and the four months ended April 30, 2021 and 2022, our total R&D costs amounted to RMB98.9 million, RMB157.8 million, RMB307.4 million, RMB81.9 million and RMB113.6 million, respectively. See "Financial Information" for details. We expect that our research and development expenses to increase generally in line with the advancement of our vaccine development programs in the future.

Vaccine Development Platform Technologies

According to CIC, we are the only China-based vaccine market player that has all five proven human vaccine platform technologies worldwide. Our platform technologies cover innovative technologies, such as mRNA vaccine, genetically engineered vaccine, and combination vaccine technologies, as well as traditional technologies, such as bacterial vaccine and viral vaccine technologies. Leveraging these platforms, we are well positioned to develop a steady and fit-for-purpose stream of vaccines that are efficient to manufacture. We have at least one approved product or one vaccine candidate at CTA or clinical stages under each platform.

Genetically Engineered Vaccine Platform Technologies

While bacteria was the first type of expression system used to produce recombinant protein and is still widely used, it may be laborious or impossible to produce certain types of recombinant protein using bacteria. Therefore, to maximize productivity and efficiency, we use different types of expression systems, including yeast and cell culture to produce our many types of recombinant protein. We carefully control, store and characterize the microbial seed cultures used for recombinant protein production.

The antigens in the adenovirus-based COVID-19 and universal influenza vaccine candidates, which are developing using technologies under this platform, are unique in that they can not only activate neutralizing antibodies, but can also induce T cell response, thereby delivering strong immunogenicity and high DNA delivery efficiency.

Proprietary Hansenula Polymorpha (汉遜酵母) Technology

Using our proprietary Hansenula Polymorpha technology, we insert natural or synthetic DNA and other genetic material into chromosomes of Hansenula Polymorpha in a targeted manner, and use the antigens expressed in such recombinant Hansenula Polymorpha to develop and product vaccines. We have obtained one patent and submitted one patent application in the PRC for Hansenula Polymorpha and the related production process, respectively. Compared with traditional live virus attenuated or inactivated process, the antigens expressed by the genetically engineered technology are of high yield and purity, are easy to produce on a large scale and can avoid the side effects caused by the entry of intact pathogens into the body.

We have developed our recombinant HBV vaccine using our proprietary *Hansenula Polymorpha* technology, the production process of which achieves consistent quality and high antigen yield and purity, featuring favorable safety profile and less side effects. This product is the first domestic HBV vaccine derived from *Hansenula Polymorpha* in the PRC.

Recombinant Nanoparticle Vaccine Technology

By utilizing our recombinant nanoparticle vaccine technology, we can develop vaccines that are capable of self-assembling into nanoparticles to display protein antigens. The nanoparticles are specially designed with only the key components of targeted pathogens, and are highly purified, stable and immunogenic, which are capable of presenting key structures to the immune systems and optimizing the biological responses necessary for active immunity.

mRNA Vaccine Platform Technologies

We acquired a mRNA vaccine platform in May 2021 through the acquisition of Liverna. See “History and Development—Our History—Changes in Shareholding and Corporate Form—Liverna Acquisitions and Capital Increases in May 2021.” Our mRNA vaccine platform technologies primarily consist of the ones related to mRNA biology, chemistry in vitro transcription and purification, bioinformatics and protein engineering. Using mRNA technologies, we are developing a COVID-19 vaccine candidate against the Original Strain, which is currently in the Phase III clinical trial stage, and also a COVID-19 vaccine candidate against the Delta variant, which is currently in the CTA filing process. We are also conducting preclinical studies for mRNA vaccine candidate against the Omicron variant. According to CIC, compared to vaccines produced using other technologies, advantages of mRNA vaccines include higher efficiency against mutant virus, higher cost-effectiveness, and easier to achieve mass production.

mRNA vaccines are technologically the most advanced, which significantly simplify the antigen manufacturing process by engineering mRNA of a specific virus protein in laboratories and injecting such mRNA into human bodies to translate viral protein antigens in human cells based on the mRNA instructions and to induce humoral and cellular immunity in humans. Through experience accumulated in years of R&D, the team at Liverna specializes in DNA selection and sequence optimization and the control of mRNA stability, transcribing efficiency and immunogenicity. Liverna has been developing the advanced “one-step” to process mature mRNA. Conventional methods produce mature mRNA in two to three steps: mRNA is obtained by transcription of DNA, and is then “capped” with the five-prime cap to become mature mRNA. The capping process unstable and success rate is difficult to control. Utilizing the difference in affinity between T7 enzyme and guanine nucleotide, the one-step process combines the transcription of DNA and capping of mRNA into one step. The one step process produces mature mRNA with a capping rate of more than 95% and purity of more than 99%. Liverna has achieved an encapsulation efficiencies of over 95%, nanoparticle dispersion coefficient of less than 0.1, with high batch-to-batch consistency. In addition, we adopt the lipid nanoparticle (LNP) based delivery system in our mRNA based vaccine candidates. Using these technologies, Liverna has been able to develop mRNA vaccines against the Original Strain in a relatively short period of time, while it is also conducting preclinical studies on vaccines against variant COVID-19 strains.

Our mRNA vaccine pilot scale production facility is among the first one to reach GMP standards in the PRC. The quality control system that Liverna has developed has been accepted by the PRC regulatory authorities, as evidenced by the CTA approval granted for our mRNA COVID-19 vaccine candidate against the Original Strain. We are in the process of constructing scale production facilities mRNA vaccines. See “—Manufacturing—Manufacturing Facilities and Production Capacity—New Production Facilities”.

Furthermore, mRNA technologies are next-generation treatment technologies, and their potential reaches far beyond the development of vaccines. We expect to leverage the flexibility afforded by our platform and the fundamental role mRNA plays in protein synthesis to develop mRNA drugs and treatments in a number of areas, such as tumor, replacement for monoclonal antibody and protein drugs, immunodeficiency related conditions, heart failure, rare diseases, assisted reproduction procedure and cosmetic medicine. We are actively conducting preclinical studies for drugs against tumor and Fabry disease.

Combination Vaccine Platform Technologies

We focus on DTP-based combination vaccines, with appropriate selection and utilization of adjuvant to increase the immunogenicity and reduce the number of vaccination shots, in order to lower administration pain and burden on newborns and their parents, as well as to reduce the adverse events after injections.

Bacterial Vaccine Platform Technologies

Bacteria vaccine platform technologies are used to grow bacterial with optimized yields while maintaining antigen integrity. We have successfully developed and commercialized our MPSV4 using bacterial vaccine platform technologies. As of the Latest Practicable Date, two of our vaccine candidates developed using these technologies, PCV13 and PPSV23, are in clinical trial stage. We are also using these technologies to develop our PCV20 and MCV4 vaccine candidates. The technologies below are some examples of bacteria vaccine platform technologies:

Bacterial Polysaccharide Production Technologies

Bacteria is cultivated by first establishing a suitable culture environment according to the characteristics of bacteria, and fermented and cultivated in fermenters. Polysaccharide purification technology is then used to purify the target antigen. AIM Weixin has over 16 years of experience in developing production techniques and industrialization of bacterial polysaccharides. AIM Weixin has large-scale bacterial fermentation, capsular polysaccharide extraction and purification facilities.

Proprietary TT-carrier and CRM197 Protein Production

Bacteria is cultivated by first establishing a suitable culture environment according to the characteristics of bacteria, and then fermented and cultivated in fermenters. Bacterial exotoxins are attained after extraction from bacteria. Thereafter, TT carrier protein is attained by detoxification and purification. CRM197 carrier protein needs not be detoxified because it is a non-toxic mutation of diphtheria toxin.

Polysaccharide Protein Conjugation Technologies

The production of polysaccharide protein conjugate vaccines, such as PCV13, PCV20 and MCV4, includes the separate production of capsular polysaccharide of the bacteria and carrier protein. Vaccine manufacturers commonly use TT, DT and CRM197 carrier proteins for this purpose. Leveraging our know-how in the extraction and purification of polysaccharide antigen, we have developed our TT carrier proteins production technologies based on TT and CRM197 carrier proteins. Our polysaccharide protein conjugation technologies have been granted, in aggregate, nine invention patents.

Viral Vaccine Platform Technologies

Our viral vaccine platform technologies empower our development of inactivated vaccines and live-attenuated vaccines. Core technologies include virus scale-up culture and virus extraction and purification technologies.

We have established a broad suite of cell banks covering mainstream types of matrix cells for vaccine development and scale-up production, including but not limited to, Vero cells, human diploid cells (KMB17 strain) and chicken embryo cells. By leveraging years of hands-on experiences on cell culture of viral cells, we have also mastered different cell culture tools such as transfer flasks, cell factories and bioreactors, and accumulated proprietary know-how on how to control and optimize key process parameters such as cell inoculation density, pH of culture environment and infection complex, thus enables us to improve our manufacturing process and increase virus production yields.

We have developed two commercialized products based on different matrix cells under this platform, namely inactivated HAV vaccine (HDC) and human rabies vaccine (Vero cell). We also have a number of vaccine candidates derived from this platform, such as one EV71-CA16 bivalent HFMD vaccine candidate and two human rabies vaccine candidates (HDC and serum-free Vero cell).

CROs

In line with industry norms, we outsource certain clinical trial-related activities to CROs that are independent from our Group. We select CROs based on various factors, including their quality, reputation and research experience in the vaccine field. The services provided by CROs include helping us select and work with clinical trial institutions, to implement the trial protocols and execute the clinical trials, and to prepare materials for NDA filings. We closely monitor and manage the activities of these CROs to ensure their progress and quality, including (i) requiring CROs to conduct clinical trials in accordance with the agreed-upon protocols and GCP requirements; (ii) conducting periodic review of progress of clinical trials; and (iii) requiring CROs to offer assistance to audit clinical trials. We also outsource certain preclinical studies activities to CROs. Such activities primarily include safety and immunogenicity evaluation. Key terms of these agreements with CROs are summarized as follows:

- *Services.* With respect to preclinical studies, the CROs mainly help us conduct safety and immunogenicity evaluation by conducting tests on animals. With respect to clinical trials, the CROs are responsible for assisting in preparing clinical trial protocols and trial plans, clinical monitoring and inspection, clinical research coordination, data management, and medical monitoring.
- *Term.* For preclinical studies, contract term is typically one year or the duration of the study. The agreements for clinical trials typically do not have a fixed term, and agreements generally expire after the completion of the relevant clinical trials and passing of NMPA inspection.
- *Payments.* We are typically required to make payments to CROs by installments according to milestones of respective services during the trials and clinical studies.
- *Intellectual property rights.* All intellectual property rights arising from the preclinical studies and clinical trials conducted by CROs are owned by us.

Collaboration Agreements

Collaboration with Zhejiang Provincial CDC

On May 18, 2021, Rong'an Bio entered into a technical collaboration agreement with the Zhejiang Provincial CDC for the development of an inactivated COVID-19 vaccine candidate against the Delta variant strain (the “**Zhejiang CDC Agreement**”). Under the Zhejiang CDC Agreement, Zhejiang Provincial CDC is responsible for providing Rong'an Bio with three SARS-CoV-2 variant strains, at least one of which is purified in accordance with the relevant standards under the National Pharmacopoeia and the Registration Measures. Rong'an Bio is responsible for conducting assessment of the three variant strains and selecting one to develop an inactivated COVID-19 vaccine. Rong'an Bio is obliged to pay development milestone payments to Zhejiang Provincial CDC. If the inactivated COVID-19 vaccine is approved, Rong'an Bio is obliged to pay annual fees to Zhejiang Provincial CDC after commercialization. During the first ten years after commercialization, Rong'an Bio is obliged to pay Zhejiang Provincial CDC royalties up to a mid-single digit percentage of annual net sales revenue; after the expiration of the first ten-year period, the amount of royalties will be decided by mutual agreement, but in any event no more than a low-single digit percentage of annual net sales revenue. Zhejiang Provincial CDC and Rong'an Bio jointly own the rights to the intellectual properties developed pursuant to the Zhejiang CDC Agreement, and any patent application will be made under the joint names of Zhejiang Provincial CDC and Rong'an Bio. The Zhejiang CDC Agreement may be terminated by written agreement of both parties, or by either party if a force majeure event preventing such party from carrying out its obligations for more than three consecutive months occurs.

Collaboration with SPHCC

Pursuant to a technology transfer agreement entered into in March 2021 by SPHCC and Chengdu Bole (the “**SPHCC Agreement**”), Chengdu Bole obtained the exclusive right to develop, manufacture and commercialize several adenoviral-based broad-spectrum coronavirus vaccines by using relevant viral vector and antigen design owned by SPHCC on a royalty-free basis. As consented to by SPHCC in writing, Chengdu Bole assigned all its rights and unfulfilled obligations under the SPHCC Agreement to AIM Jianchi pursuant to an assignment agreement entered into between Chengdu Bole and AIM Jianchi in June 2021 (the “**SPHCC Transfer Agreement**”), and the relevant viral vector and antigen design owned by SPHCC are deemed to be licensed to us on a royalty-free basis. Pursuant to the SPHCC Transfer Agreement, AIM Jianchi obtained the exclusive global right to develop, manufacture and sell adenovirus-based broad-spectrum vaccines, as set out under the SPHCC Agreement. SPHCC owns the intellectual property rights to the viral vector and antigen design, and AIM Jianchi owns the rights to all intellectual properties generated during the course of the development of any of the vaccines. AIM Jianchi is obliged to pay SPHCC a total of RMB100 million technology transfer fee, the payment milestones of which are the development and approval stages of the relevant vaccines. After the commercialization of any of the vaccines, AIM Jianchi is obliged to pay annual royalties to SPHCC in the amount of a mid-single digit percentage of the vaccine's annual gross sales revenue, but in any event not higher than RMB500 million per year. The SPHCC Agreement terminates when (i) changes in PRC's governmental policies render it impossible for the parties to continue to carry out obligations under this contract; (ii) any party breaches the contract and fails to remedy the breach within 30 days of written notice from the non-breaching party; or (iii) a force majeure event continues for at least 60 days and the parties fail to reach an agreement.

Collaboration with the Wuhan Institute of Virology, Chinese Academy of Sciences (the “Wuhan Institute of Virology”)

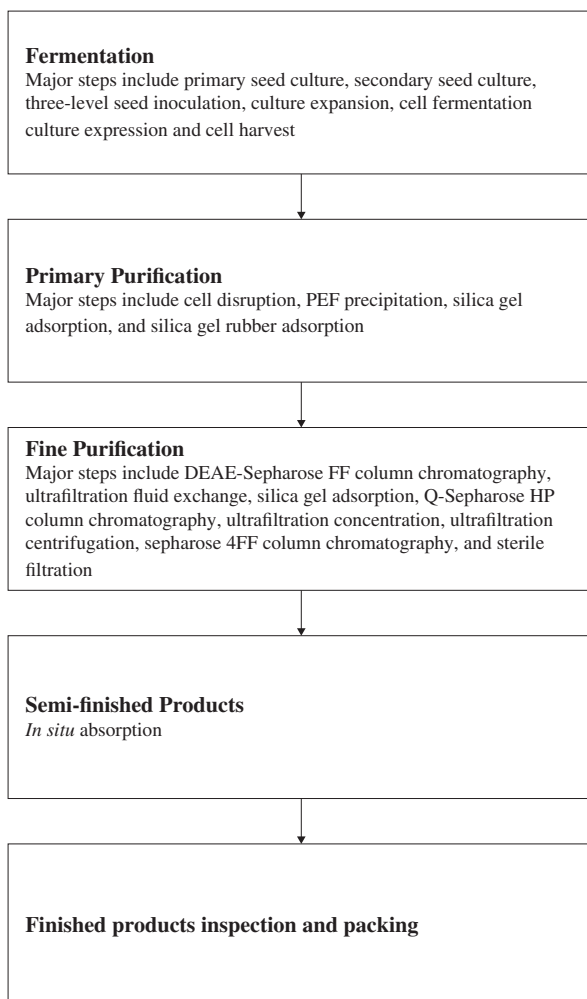
On May 17, 2022, we entered into a co-operation framework agreement with the Wuhan Institute of Virology (the “**Wuhan Institute Agreement**”). The Wuhan Institute of Virology agreed that during the five-year term of the Wuhan Institute Agreement, it will cooperate with us in the development of new vaccine candidates, including mRNA candidates. The Wuhan Institute of Virology will mainly be responsible for preclinical studies and Phase I and II clinical trials. Parties will jointly own the data and other research findings obtained in collaboration projects. Commercial terms for future co-operation projects will be negotiated by the parties in due course.

MANUFACTURING

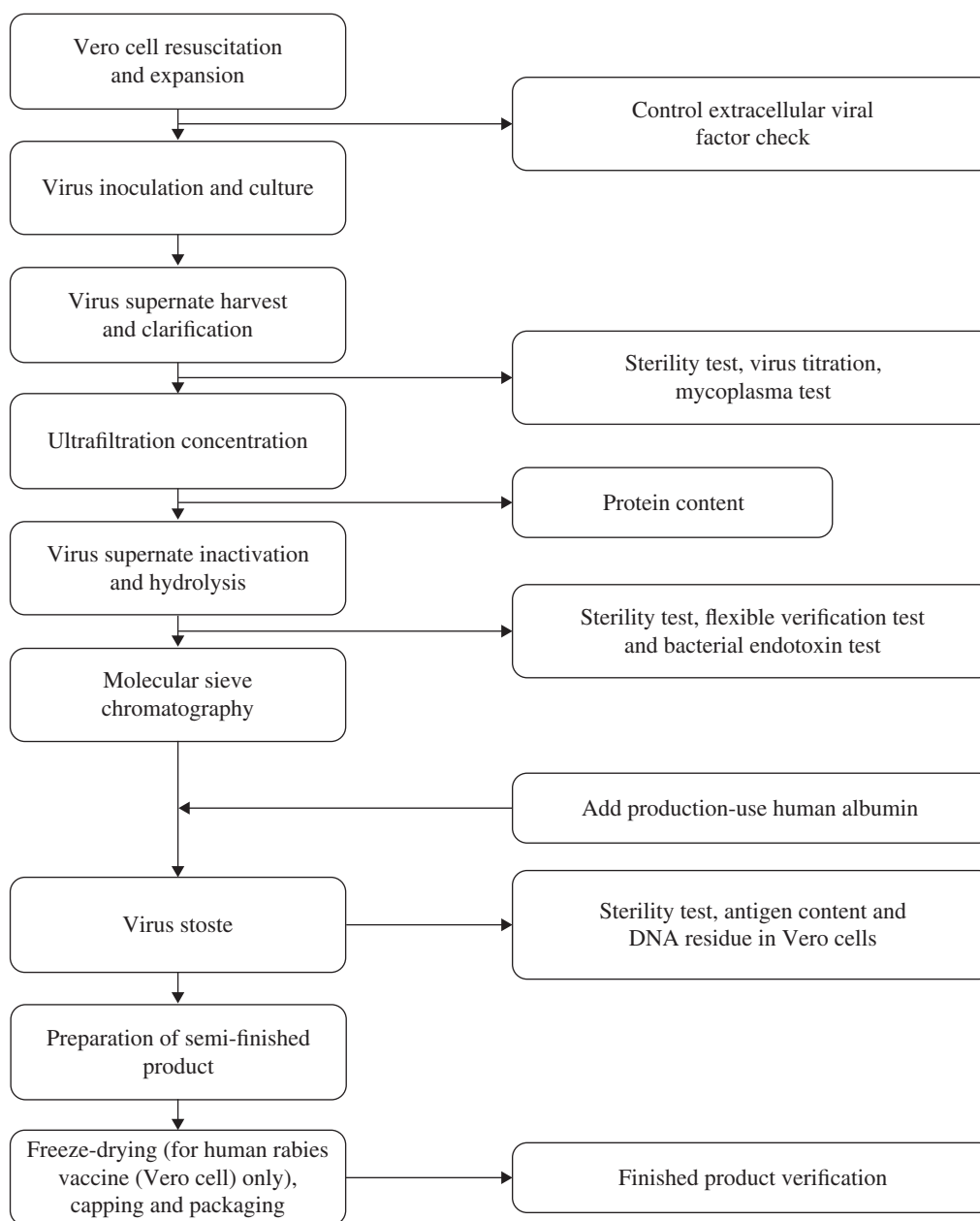
Manufacturing Process

Our ability to manufacture different vaccines in large scale is demonstrated by the unique production processes and techniques used for each of our vaccine products. Below are the manufacturing process charts that highlight the key steps in producing our vaccine products.

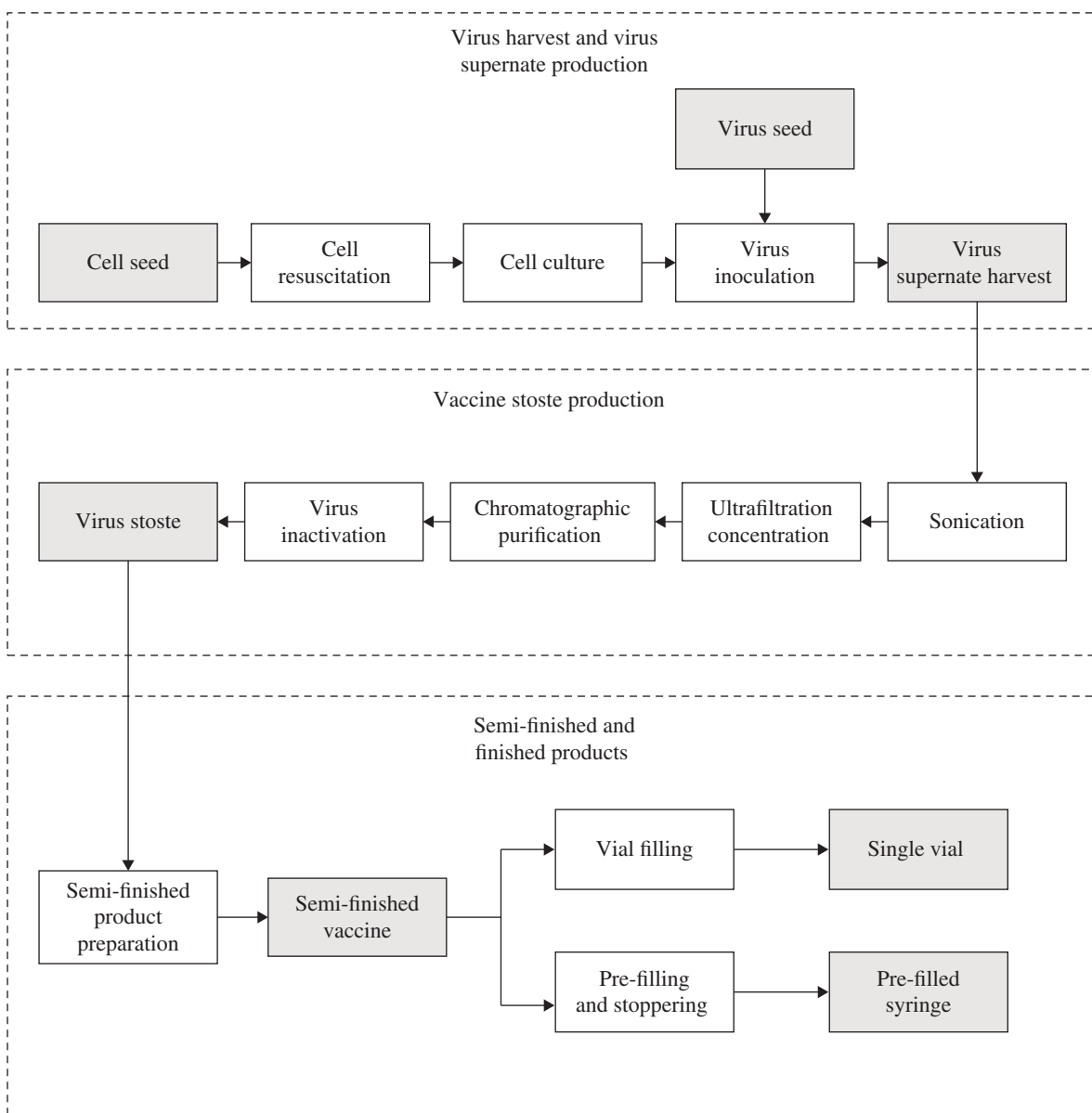
Recombinant HBV Vaccines (Hansenula Polymorpha)

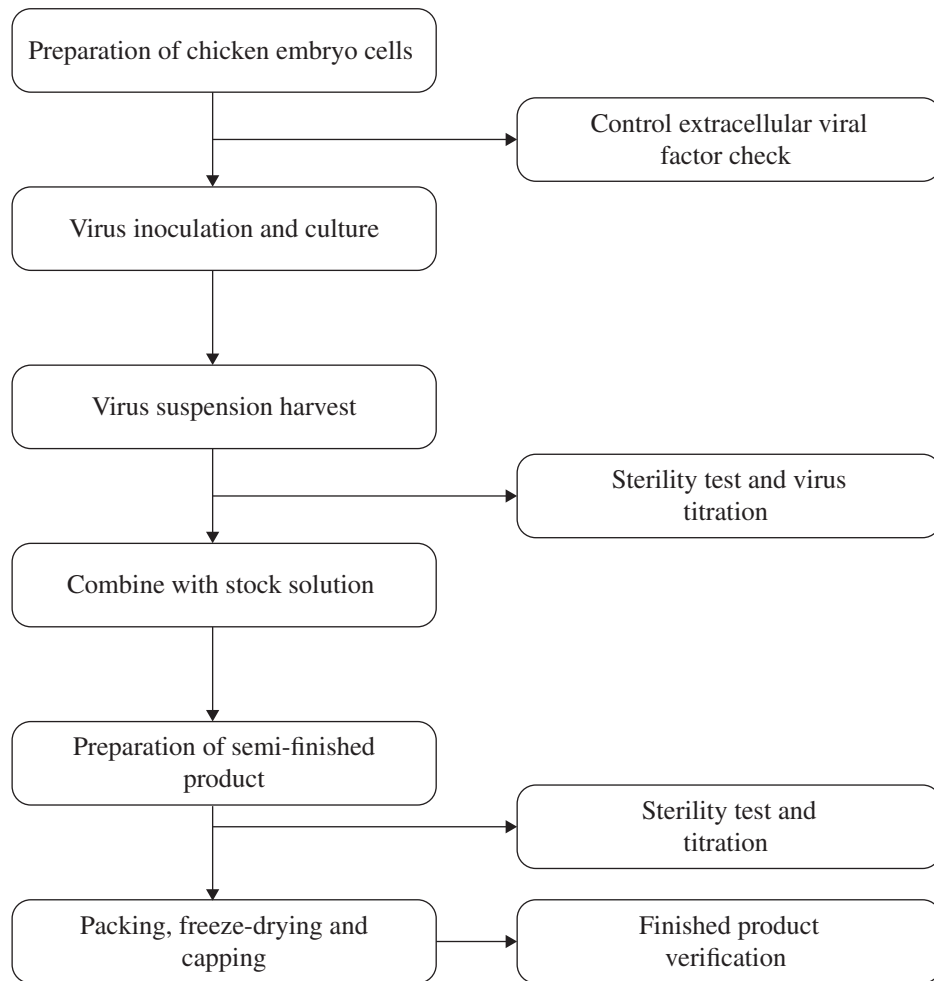


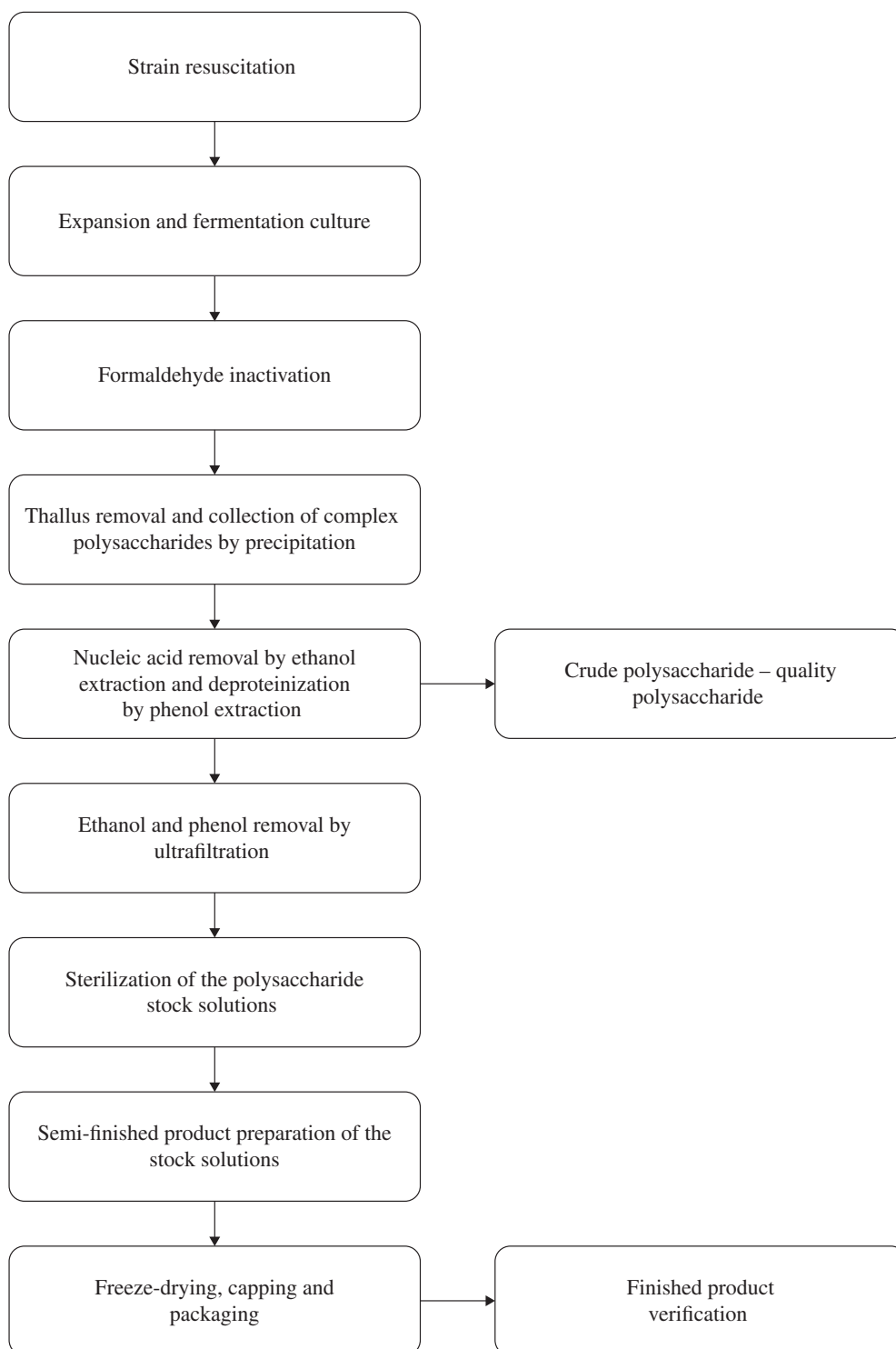
Human Rabies Vaccine (Vero cell) and HFRS Vaccine (Vero cell)



Inactivated HAV Vaccine (HDC)



Mumps Vaccine

MPSV4

Recombinant HBV Vaccines (*Hansenula Polymorpha*). The first production step is fermentation, in which we harvest cells containing hepatitis B antigen through seed culture, seed inoculation, culture expansion, cell fermentation and culture expression. Secondly, the harvested cell culture goes through primary purification, which removes the residuals including cell debris and host cell protein. Thirdly, under the fine purification step, cell culture is further purified, leaving stoste containing high concentration hepatitis B antigen. The stoste then goes through our patented *in situ* absorption process. Unlike traditional adjuvant processes, we directly produce aluminum hydroxide adjuvants during the dilution and mixture of the HBsAg antigen bulk. The benefit is that the adjuvants adsorb antigens during the process of adjuvant formation. This *in situ* absorption process has a high adsorption rate of antigens, which prolongs the action time of antigens in the human body and strengthens the stimulation of immune response. The *in situ* absorption method allows our recombinant HBV vaccine products to be manufactured without the addition of preservatives. The production process of our recombinant HBV vaccines (*Hansenula Polymorpha*), including our internal inspection on the finished products, typically takes approximately two months.

Human Rabies Vaccine (Vero Cell) and HFRS Vaccine (Vero Cell). We adopt similar production processes for our human rabies vaccine (Vero cell) and HFRS vaccine (Vero cell). Firstly, Vero cells are replicated and cultured, and viruses are introduced to the cultured Vero cell to grow. Secondly, we harvest the virus supernate. Thirdly, the virus supernate is ultra-filtered and concentrated. In this step, viruses are inactivated, leaving antigens only. The fourth step, which is molecular sieve chromatography, is to take away residuals including cell debris, host cell protein and DNA. In the fifth step, purified virus stoste is mixed into formulated media to form the vaccine products for further bottling and packaging. For our human rabies vaccine (Vero cell), the formulated media containing purified virus is freeze-dried before packaging. The production process of our human rabies vaccine (Vero cell) and HFRS vaccine (Vero cell), including our internal inspection on the finished products, typically takes approximately 6.5 months and six months, respectively.

Inactivated HAV Vaccine (HDC). The production process of our inactivated HAV vaccine is similar to that of human rabies vaccine (Vero cell) and HFRS vaccine (Vero cell). Firstly, virus harvest fluid is produced by replicating and culturing the host cell, HDC, and introducing Hepatitis A virus to the cultured HDC. Secondly, the virus harvest fluid is concentrated and purified, removing residuals including cell debris, host cell protein and DNA. In this step, the hepatitis A virus is inactivated, leaving antigen only. The concentrated and purified stoste is then mixed into formulated media and packaged into the single vial or prefilled syringe. The production process of our inactivated HAV vaccine (HDC), including our internal inspection on the finished products, typically takes approximately 5.5 months.

Mumps Vaccine. Firstly, mumps virus chicken embryos cells are obtained from fertilized eggs. Secondly, mumps virus is then inoculated onto the cells and cultured, producing the virus suspension. Thirdly, the virus suspension is mixed with stock solution, which becomes the semi-finished product of our mumps vaccine. The last step involves freeze drying the semi-finished product and packaging. The production process of our mumps vaccine, including our internal inspection on the finished products, typically takes approximately 2.5 months.

MPSV4. Firstly, A, C, Y, and W135 *N. meningitides* bacteria strains are resuscitated and fermented to produce bacteria suspension. Secondly, formaldehyde is added to the suspension to inactivate the bacteria. Thirdly, thallus is removed from the suspension by precipitation; nucleic acid is removed by ethanol extraction; and protein is removed by phenol extraction. Ethanol and phenol are then removed by ultrafiltration, producing polysaccharide stock solutions. Fourthly, polysaccharide stock solutions are proportionally mixed, which becomes the semi-finished product. Lastly, the semi-finished product is freeze-dried and packaged. The production process of our MPSV4, including our internal inspection on the finished products, typically takes approximately 2.5 months.

BUSINESS

Manufacturing Facilities and Production Capacity

Manufacturing Facilities and Equipment

All of our vaccine products are produced in house by our four individual Licensed Manufacturing Facilities in our manufacturing subsidiaries. As of the Latest Practicable Date, our manufacturing team consisted of 654 employees. During the Track Record Period and up to the Latest Practicable Date, we passed all GMP inspections conducted by the NMPA or its local counterparts on the four individual Licensed Manufacturing Facilities. The following table sets forth major information of our four individual Licensed Manufacturing Facilities as of the Latest Practicable Date:

Name	Location	GFA (sq.m.)	Annual bulk production capacity (million doses)	Responsible products	Production Line(s)
Rong'an Bio Licensed Manufacturing Facility	Ningbo, Zhejiang Province	25,318	25.0	Human rabies vaccine (Vero cell)	Two
AIM Honesty Licensed Manufacturing Facility	Dalian, Liaoning Province	11,877	45.0	Recombinant HBV vaccine (Hansenula Polymorpha)	One
AIM Kanghuai Licensed Manufacturing Facility	Taizhou, Jiangsu Province	18,711	5.3	Inactivated HAV vaccine	One
AIM Weixin Licensed Manufacturing Facility	Ningbo, Zhejiang Province	72,313	16.0	HFRS vaccine, mumps vaccine and MPSV4	Three

We have equipped all of our Licensed Manufacturing Facilities with advanced equipment and machinery procured from leading international and domestic brands, such as bioreactors, centrifuges, ultra-filtration system and large-scale purification system and product filling and packaging lines. As of the Latest Practicable Date, we owned all the equipment and machinery used in our production process. We regularly inspect and maintain our equipment and machinery to ensure that they remain in good condition for operation. To the Directors' best knowledge, the life span of the manufacturing machinery and equipment in the Licensed Manufacturing Facilities in AIM Honesty, AIM Kanghuai, Rong'an Bio and AIM Weixin is approximately 10 to 20 years, 10 to 20 years, 10 to 15 years and 10 to 15 years, respectively; and as of the Latest Practicable Date, the machinery and equipment in these four individual Licensed Manufacturing Facilities had been in operation for an average of approximately eight years, four years, eight years and seven years, respectively. See note 3 in the Accountants' Report set out in Appendix I to this prospectus for the depreciation method used by the Group for our equipment. During the Track Record Period and up to the Latest Practicable Date, we had not experienced any material or prolonged interruptions to our production process due to equipment or machinery failure.

As the four Licensed Manufacturing Facilities have different product foci, each of them engages in production activities independently. Meanwhile, they collaborate with our internal R&D research institutions from time to time to accelerate our pipeline development. See "—Research and Development—In-House Research and Development." In addition, for sales and marketing of products from these Manufacturing Facilities, we have a centralized system to synchronize our marketing strategy and activities, therefore we consolidate quality sales and marketing resources at the Group level instead of dispersing into four operating subsidiaries, enabling us to build effective sales channels for and strong CDC recognition of our products. See "—Sales and Marketing."

BUSINESS

Our Production Capacity

The following table sets forth our designed production capacity, production volume and utilization rate of our Licensed Manufacturing Facilities by major vaccine product type for the periods indicated.

	Year ended December 31,									Four months ended April 30,		
	2019			2020			2021			2022		
	Production capacity ⁽¹⁾	Production volume	Utilization rate ⁽²⁾	Production capacity ⁽¹⁾	Production volume	Utilization rate ⁽²⁾	Production capacity ⁽¹⁾	Production volume	Utilization rate ⁽²⁾	Production capacity ⁽¹⁾	Production volume	Utilization rate ⁽²⁾
(in thousand doses, except for percentage)												
Human rabies vaccine (Vero cell)	25,000	11,010	44.0%	25,000	17,930	71.7%	25,000	19,080	76.3%	8,300	6,096	73.4%
Recombinant HBV vaccines (Hansenula Polymorpha)	45,000	32,460	72.1%	45,000	41,050	91.2%	45,000	37,120	82.5%	15,000	6,919	46.1%
Inactivated HAV vaccines (HDC)	5,280	1,649	31.2%	5,280	1,712	32.4%	5,280	312	5.9%	1,760	—	—
Mumps vaccine	5,000	1,782	35.6%	5,000	85	1.7%	5,000	—	—	1,667	—	—
HFRS vaccine	6,000	—	—	6,000	—	—	6,000	—	—	2,000	—	—
MPSV4	5,000	685	13.7%	5,000	803	16.1%	5,000	330	6.6%	1,667	230	13.8%

Notes:

- (1) Production capacity represents the designed production capacity for the relevant period.
- (2) Utilization rate was calculated by dividing the actual production volume by the designed production capacity for the relevant period.

In each Licensed Manufacturing Facility, we have been actively taking measures to ensure a stable and quality supply, including designating dedicated personnel to optimize production planning and coordination among different divisions, preventing contaminations, improving automation in our production procedures and strengthening the maintenance of our equipment and facilities to reduce the occurrence of failures. We constantly adjust our production plans based on market demand, inventory level and regulatory requirements on manufacturing-related certification and inspection, which leads to fluctuations in our production volume and production capacity utilization rates of these productions. Our production capacity for all products was stable during the Track Record Period, but processes relating to the renewal of GMP certificates and GMP requirement updates affected the production plans, production volumes and production capacity utilization rate of certain of our vaccine products during the Track Record Period. Specifically:

- *Human rabies vaccine (Vero cell)*. Our prior GMP certificate was due for renewal in July 2018, which was originally expected to be completed in August 2018 based on our past experiences. However, due to Changsheng Incident, the renewal of our GMP certificate was subject to more scrutiny and the whole process lasted for longer than expected. As a result, the renewal of our GMP certificate was only completed in December 2018, and we resumed production by the end of 2018. Since a full-length production cycle was around 6.5 months, we only produced vaccines for lot release approval audits in June 2019. After a three-month lot release audit and approval process, we received the first lot release approval under the new GMP certificate in September 2019 and recovered back to uninterrupted commercial supply afterwards. As a result, although our upgraded production line and workshops boosted designed annual production capacity from 18 million doses per year to 25 million doses per year, we only produced 11,010 thousand doses of human rabies vaccine in 2019, using 44% of total production capacity. In 2020, we experienced strong market demand due to the industry-wide supply shortage after the collapse of Changchun Changsheng. We made timely adjustments to

our production cycles and increased production volume to meet market demand. As such, the production volume of our human rabies vaccine (Vero cell) increased to 17,930 thousand doses in 2020, with production capacity utilization rate increasing to 71.7%. Demand for our human rabies vaccine remained strong in 2021, especially in the first half of the year, thus we produced 19,080 thousand doses and increased production capacity utilization rate to 76.3% in 2021. Despite the impact on sales of the COVID-19 resurgence since July 2021, we believe the overall demand for our human rabies vaccine will remain strong. As a result, in the four months ended April 30, 2022, we produced 6,096 thousand doses of human rabies vaccine and utilized 73.4% of our production capacity.

- *HBV vaccines (Hansenula Polymorpha)*. In 2019, 2020 and 2021, we produced 32,460 thousand, 41,050 thousand and 37,120 thousand doses of HBV vaccines, respectively. We increased the production capacity utilization rate of our recombinant HBV vaccine products from 72.1% in 2019 to 91.2% in 2020, as we gained increasing market recognition and remained the market leader, driving demand for our HBV vaccine products. Production capacity utilization rate for our HBV vaccine products decreased to 82.5% in 2021, and we partially relied on existing inventory for their sale. In the four months ended April 30, 2022, as we had some inventories of HBV vaccines to meet market demand according to our sales plan, we produced 6,919 thousand doses and reduced our production capacity utilization rate to 46.1%.
- *Inactivated HAV vaccines (HDC)*. In 2019, 2020 and 2021, we produced 1,649 thousand, 1,712 thousand and 312 thousand doses of HAV vaccines, respectively. The utilization rate of our production capacity for inactivated HAV vaccines (HDC) remained relatively stable from 31.2% in 2019 to 32.4% in 2020. The drop in production volume in 2021 was because we ceased production of our HAV vaccines between May and September 2021 to perform maintenance and upgrades on our production facilities. We resumed production of vaccine stoste in September 2021 and are currently undergoing necessary inspections. We expect to complete necessary inspections in the third quarter of 2022 and produce new HAV vaccines for commercial sales in the fourth quarter of 2022. Meanwhile, we continued to sell HAV vaccines in smaller quantities based on our inventories.
- *HFRS vaccine*. At the end of 2018, we ceased production of HFRS vaccine products to relocate the relevant production line to new production lines with more advanced equipment and higher production capacity. We sold some HFRS vaccine relying on our inventories in 2019 and 2020, and has not sold any HFRS vaccine since 2021. In order to obtain the necessary approvals for the relocated production line, we had conducted trial production since July 2019 and produced sample vaccines for inspection. We submitted the relocation approval application in April 2020 and sample HFRS vaccines to the relevant authorities in January 2021. After a prolonged inspection and approval process due to the COVID-19 pandemic, we passed GMP inspections in June 2022. We expect to produce new HFRS vaccine for commercial sales in the fourth quarter of 2022.
- *Mumps vaccine*. In 2019, we produced 1,782 thousand doses of mumps vaccine with production capacity utilization rate at 35.6%. From September 2018 to mid-February 2019, we ceased production of our mumps vaccine production for maintenance and testing in preparation for GMP certificate renewal. We then resumed to normal production. Since February 2020, we ceased production of our mumps vaccine products for the GMP inspection and upgrade of our production line. As a result, we only produced 85 thousand doses of mumps vaccine in 2020, using 1.7% of total production capacity. While we passed the on-site GMP inspection in June 2020, we have yet restarted commercial production as we are working to improve certain aspects of our production process. We expect to resume mumps vaccine production in the second half of 2023 and commercial sales in 2024.

- *MPSV4*. The production volume and production capacity utilization rate of our MPSV4 increased from 2019 (685 thousand doses, 13.7% production capacity utilization rate) to 2020 (803 thousand doses, 16.1% production capacity utilization rate) due to our commercial launch of this product in March 2020, and decreased in 2021 (330 thousand doses, 6.6% production capacity utilization rate) as we had sufficient inventory produced in 2020. We produced 230 thousand doses of MPSV4 in the four months ended April 30, 2022 and utilized 13.8% of our production capacity, up from 6.6% in 2021, as we recorded solid sales performance in our MPSV4 and expect further growth as the PRC government has placed more emphasis on mass vaccination against respiratory diseases and transmissible diseases.

We voluntarily undertook the aforementioned production suspension or cessation in production of our human rabies, HAV, mumps and HFRS vaccine products in our ordinary course of business, and none of them was due to or associated with any issues in product quality or product liabilities. In addition, our Directors confirm that we did not incur any liabilities due to such production suspension or cessation, whether medical liabilities, liabilities to our customers or otherwise. Since we typically do not enter into sales contracts with our customers before we had produced the products for sale, the cessation and suspension in production of vaccine products did not result in the failure to fulfill contractual obligations to any of our customers.

New Production Facilities

As a major vaccine company in China, we expect a continuously strong market demand for our existing vaccine products such as human rabies vaccines. More importantly, we expect to launch new vaccine products in each year from 2023 to 2025, and 12 other new products in and after 2026, all of which have addressable market sizes. In order to have sufficient production capacity to address these needs, we plan to establish new production facilities in the next few years. Also, each production line can only be used to produce a specific type of vaccine due to different production processes and product safety standards applicable to different vaccines, according to CIC. As such, we need to build separate production lines for new vaccine products. See “—Our Strategies—Expand our production capabilities to support our future growth.”

Production Lines in AIM Weixin for Bacterial Vaccines

AIM Weixin is responsible for commercial launch of our new bacterial vaccines such as pneumococcal vaccines (including PCV13, PCV20 and PPSV23), MCV4, DTP and DTP-based combination vaccines. According to CIC, the approved lot release volumes of PCV13 and PPSV23 are expected to increase at a CAGR of 16.6% and 5.5% from 2020 to 2030, respectively. MCV4 products are expected to be approved and quickly gain market share. DTP and DTP-based combination vaccines will also achieve approved lot release volume of over 30 million doses by 2030.

In order to prepare for clinical trial supply and commercial-scale manufacturing for these new bacterial vaccine products, AIM Weixin is in the process of expanding its production capacity. The expansion plan consists of two phases. Phase I, which involved the expansion work of certain existing plants and renovated relevant ancillary facilities, completed major on-site renovation and equipment procurement and installation in the first quarter of 2021, through which AIM Weixin set up bacterial vaccine production workshops and carrier protein production workshops for pneumococcal vaccines with a total GFA of approximately 32,087 sq.m. and an annual capacity of 47 million doses. As of the Latest Practicable Date, our PPSV23 candidate completed vaccination procedure for all test subjects in Phase I clinical trial, and we are undergoing a Phase III clinical trial for our PCV13 candidate. We also plan to commence Phase I clinical trial for PCV20 by the end of 2022. AIM Weixin has conducted scaled-up trial production of our PPSV23 and PCV13 candidates and produced the samples needed for Phase III clinical trials. As of the same date, we have submitted samples to the NIFDC for inspection. We had incurred

capital expenditure of approximately RMB609 million for the phase I, and expect to continue to incur additional capital expenditure of approximately RMB44 million in the next one to two years. We expect to commercially launch the operation of AIM Weixin phase I production lines and workshops in 2023, subject to obtaining relevant approvals. Assuming that (i) part of the phase I production lines in AIM Weixin will be ready for commercial launch from 2023; (ii) our pneumococcal vaccine products are successfully launched and gain market acceptance as expected, (iii) the overall markets of these vaccine products grow as expected, and (iv) there are otherwise no unexpected events that have a material adverse effect on AIM Weixin's business, we expect the payback period for the phase I of AIM Weixin new facilities, being the period of time required for the aggregate cash inflows from operating activities to fully cover the aggregate investment cost, to be two to four years from our first pneumococcal vaccine production being commercially launched.

AIM Weixin commenced the phase II expansion plan in the fourth quarter of 2021, which is to construct new production lines and workshops for large-scale manufacturing for other bacterial vaccine assets such as MCV4, DTP and DTP-Hib combination vaccines, including workshops for production scale-up process and packaging, quality assurance and other ancillary facilities. The new production lines and workshops will be located in a parcel of land owned by AIM Weixin within its Manufacturing Facility in Ningbo, Zhejiang Province with a total additional GFA of approximately 18,389 sq.m. The designed annual production capacity is up to 75 million doses for MCV4, DTP and DTP-based combination vaccines, and other types of bacterial vaccines such as Hib and tetanus. Based on the current construction plan, we expect to complete on-site construction work and to commence trial production in 2022. We expect to launch part of the phase II production lines for commercial-scale production from 2024 to 2025.

We had incurred capital expenditure of approximately RMB281 million for the phase II expansion, and expect to continue to incur additional capital expenditure of approximately RMB179 million in next few years. Assuming that (i) part of the phase II new production lines and workshops in AIM Weixin will be ready for commercial launch from 2024 to 2025, (ii) our new bacterial vaccine products are successfully launched and gain market acceptance as expected, (iii) the overall markets of these vaccine products grow as expected, and (iv) there are otherwise no unexpected events that have a material adverse effect on AIM Weixin's business, we expect that the payback period for the phase II of AIM Weixin new facilities, being the period of time required for the aggregate cash inflows from operating activities to fully cover the aggregate investment cost, to be three to five years from the commercial launch of the phase II of AIM Weixin. We plan to finance the related capital expenditure by banking facilities and/or cash inflow from operations.

Production Lines in Rong'an Bio for New Viral-based Vaccines

Rong'an Bio is our subsidiary producing human rabies vaccines (Vero cell), and therefore is experienced in the area of viral based vaccines. As a result, Rong'an Bio is responsible for commercial launch of our new viral-based vaccines.

Since the Changsheng Incident in 2018, there has been an industry-wide supply shortage of human rabies vaccines in the PRC. According to CIC, the approved lot release volume of human rabies vaccines is expected to continue to grow and exceeds 80 million doses per year in the future. As the utilization rate of Rong'an Bio reached 76.3% in 2021, we expect the need to expand its production capacity to address the market demand for our existing human rabies vaccine products. In addition, we are developing a number of new human rabies vaccine candidates, including, among others, serum free Vero cell human rabies vaccine candidate to address the increasing market demand. Due to different production processes and product safety standards from our current human rabies vaccine product, we plan to arrange the manufacturing of this candidate in Rong'an Bio.

BUSINESS

As of the Latest Practicable Date, Rong'an Bio is in the process of constructing production facilities for our serum free Vero cell human rabies vaccines, which have a designed annual production capacity of 50 million doses and a designed GFA of approximately 47,729 sq.m. We expect to commence trial production for clinical supply for serum free Vero cell human rabies vaccines in 2022 and commercially launch the operation in 2025, subject to obtaining relevant approvals.

For the facilities for our serum free Vero cell human rabies vaccine candidate, we had incurred capital expenditure of approximately RMB649 million as of the Latest Practicable Date, primarily for production plant construction, and procurement and installation of certain equipment and machinery for the new production lines. We expect to continue to incur the capital expenditure of approximately RMB300 million in the next few years, primarily for remaining payment for the building construction and utility infrastructure set up in the new workshops for human rabies vaccines, and payment for construction of other ancillary buildings, interior renovation and equipment procurement. Assuming that (i) the production facilities for our serum free Vero cell human rabies vaccine will be ready for commercial launch in 2025, (ii) our serum free Vero cell human rabies vaccine is launched and gains market acceptance as expected, (iii) the human rabies vaccine market in China will grow as expected, and (iv) there are otherwise no unexpected events that have a material adverse effect on our business, we expect that the payback period for the new facilities for the serum free Vero cell human rabies vaccine, being the period of time required for the aggregate cash inflows from operating activities to fully cover the aggregate investment cost, to be two to four years from the commercial launch of the new production facilities.

We plan to finance the related capital expenditure by a combination of net proceeds from the Global Offering, cash and cash equivalents on hand, banking facilities and/or cash inflow from operations. We plan to allocate 9.34% of the net proceeds from the Global Offering, or HK\$6.54 million, to fund the new facilities for serum free Vero cell human rabies vaccine in Rong'an Bio. See "Future Plans and Use of Proceeds."

Moreover, Rong'an Bio is also constructing a P3 Lab. We are one of the first two human vaccine companies in the PRC that have been granted permission under the Fourteenth Five Year Plan of the PRC to build a P3 Lab. As of the Latest Practicable Date, we have completed construction of P3 Production Facilities and related ancillary facilities on a parcel of land owned by Rong'an Bio in Ningbo, Zhejiang province, with a designed GFA of approximately 17,880 sq.m.. We currently plan to strategically prioritize our endeavor to fund other new production facilities for mRNA vaccines, pneumococcal vaccines and new human rabies vaccines. We expect to launch the P3 Production Facilities at a later stage based on the development timelines and commercialization needs of other new viral-based vaccines.

Production Facilities for mRNA Vaccines

We believe mRNA technologies could serve as the foundation for a new category of vaccines. We have been actively moving forward our plan to construct production facilities for our mRNA vaccines in order to quickly meet clinical and commercialization needs. Currently we have new facilities under construction in Ningbo, locating in the same building for serum free Vero cell human rabies vaccine.

BUSINESS

Our mRNA vaccines production facility located in Ningbo has a designed annual production capacity of 200 million doses and a designed GFA of 16,900 sq.m.. We commenced trial production of mRNA COVID-19 vaccine in this facility in June 2022, and expect to complete operational qualification procedures and production qualification procedures by the end of 2022. We aim to commence commercial operation in the first half of 2023, subject to obtaining relevant approvals. We had incurred capital expenditure of approximately RMB225 million and expect to incur further capital expenditure of approximately RMB54 million for this part of mRNA production facilities, primarily for plant decontamination and renovation, equipment procurement and installation and testing, and manufacturing process validation. We plan to finance the related capital expenditure by a combination of 25.66% of the net proceeds from the Global Offering, or HK\$17.96 million, cash and cash equivalents on hand, banking facilities and/or cash inflow from operations. See “Future Plans and Use of Proceeds.”

Assuming that (i) the production facilities for our mRNA vaccine will be ready for commercial launch as scheduled from 2023, (ii) our mRNA vaccine candidates are launched and gain market acceptance as expected, (iii) the mRNA vaccine market in China will grow as expected, and (iv) there are otherwise no unexpected events that have a material adverse effect on our business, we expect that the payback period for the new facilities for mRNA vaccines, being the period of time required for the aggregate cash inflows from operating activities to fully cover the aggregate investment cost, to be two to four years from the commercial launch of new facilities.

Other

In addition to above, we have won the bid for a parcel of land with a total lot size of approximately 49,455 sq.m. in an auction held by Beijing Economic and Technological Development Area (北京經濟技術開發區), and are in the process of applying for the necessary and relevant approvals, permits and licenses in order to commence construction on the parcel. This piece of land will be reserved to further expand our production capacity for current and future vaccines as needed.

In light of the large market demand of and substantial revenue contribution to be expected of our new vaccine products, the necessity to build new production lines to support clinical trials and commercial supply of these vaccines, and based on the estimated payback periods, we believe the aforementioned expansion and construction plans of the new facilities for new bacterial vaccines in AIM Weixin, for new viral-based vaccines in Rong'an Bio and for mRNA vaccines are feasible.

We expect that these investments would have an impact on our profitability and cash flow in the near future, as (1) we will begin recognizing depreciation expenses for these capital expenditures when the relevant facilities commence operations, which will increase our cost and therefore impact our gross profit margin; see “Financial Information—Significant Accounting Policies, Judgements and Estimates—Property, Plant and Equipment and Depreciation” for the depreciation accounting policies; and (2) before the investment payback, we will have cash outflow in connection with these capital expenditures as we make the investments. For other potential risk associating with our expansion, see “Risk Factors—Risks Relating to Our Business and Industry—Risks Relating to the Manufacturing and Supply of Our Vaccine Products—Any disruption of our current manufacturing facilities, any delays or failure in the completion of construction of our new manufacturing facilities or any failure to manage the manufacturing capacity properly due to ongoing regulatory obligations and continued regulatory review, could have a material and adverse effect on our business, financial condition and results of operations.” We also expect that the increase in production capacity and volume with the establishment of these new facilities will have a positive effect on our business growth in the long term.

BUSINESS

SALES AND MARKETING

Overview

As our products are vaccines, we sell substantially all of our products directly to CDCs. According to the Vaccine Administration Law, CDCs purchase vaccine products from vaccine suppliers such as us. We sell Class I vaccines to CDCs at the provincial level, and Class II vaccines to CDCs at the county level, as required by the relevant PRC laws and regulations. According to our PRC Legal Advisor, CDCs are not allowed to on-sell vaccines to other entities under the law. After completion of procurement from us, CDCs supply vaccine products to points of vaccination (i.e., vaccination sites and clinics), which are regulated by CDCs. As advised by our PRC Legal Advisor, this is only a vaccine circulation process without any sales relationship between CDCs and points of vaccination. Such circulation is free for Class I vaccines and do not charge any price mark-up for Class II vaccines. CDCs may entrust qualified logistics service providers to deliver vaccines to the points of vaccination, which provide ancillary delivery services only and do not own any vaccine products delivered by them. At the points of vaccination, vaccinees get Class I vaccines for free, and get Class II vaccines without any price mark-up. See “Regulatory Overview.”

Our sales and marketing function is centralized, and is specialized and market-oriented. We have assembled a dedicated and professional in-house sales and marketing team at the Group level, which is managed by our core commercial leadership team with approximately 12 years of experience on average in leading multinational pharmaceutical companies, and has excellent track records in marketing international blockbuster vaccines. As of December 31, 2019, 2020, 2021, April 30, 2022 and the Latest Practicable Date, our in-house sales and marketing team consisted of 101, 101, 116, 163 and 159 personnel, respectively. We started to hire new sales and marketing team members in 2021 in anticipation for the imminent launch of several new vaccines in the coming few years. We have been training new team members to ensure that they will be effective when promoting new vaccine products in the future. Our sales and marketing team is divided into groups for four regions, namely Northern, Southern, Western and Eastern China. Each group covers different levels of CDCs in that region. The following table sets forth a breakdown of our revenue by geographic area for the periods indicated:

	Year ended December 31,						Four months ended April 30,			
	2019		2020		2021		2021		2022	
	Amount	% of revenue	Amount	% of revenue	Amount	% of revenue	Amount	% of revenue	Amount	% of revenue
(unaudited)										
(in thousands of RMB, except for percentages)										
Sales of vaccine										
Eastern China ⁽¹⁾	180,989	19.0	264,497	16.1	289,830	18.4	54,951	11.8	41,382	15.0
Southern China ⁽²⁾	266,796	28.0	530,464	32.4	488,051	31.1	132,917	28.6	117,052	42.5
Western China ⁽³⁾	203,435	21.4	318,858	19.5	289,799	18.5	101,133	21.8	53,158	19.3
Northern China ⁽⁴⁾	300,428	31.6	524,151	32.0	499,602	31.8	175,926	37.8	63,635	23.2
Sub-total	<u>951,648</u>	<u>100.0</u>	<u>1,637,970</u>	<u>100.0</u>	<u>1,567,282</u>	<u>99.8</u>	<u>464,926</u>	<u>100.0</u>	<u>275,227</u>	<u>100.0</u>
Research and development services	—	—	—	—	2,847	0.2	—	—	28	*
Total	<u>951,648</u>	<u>100.0</u>	<u>1,637,970</u>	<u>100.0</u>	<u>1,570,129</u>	<u>100.0</u>	<u>464,926</u>	<u>100.0</u>	<u>275,255</u>	<u>100.0</u>

Notes:

* Less than 0.1%

- (1) Comprising Shanghai, Anhui, Jiangsu and Zhejiang.
- (2) Comprising Fujian, Guangdong, Guangxi, Hainan, Hubei, Hunan and Jiangxi.
- (3) Comprising Gansu, Guizhou, Ningxia, Qinghai, Shaanxi, Sichuan, Xinjiang, Yunnan, Chongqing and Tibet.
- (4) Comprising Beijing, Tianjin, Hebei, Henan, Heilongjiang, Jilin, Liaoning, Inner Mongolia, Shandong and Shanxi.

Our sales and marketing team is responsible for formulating overall marketing and promotion strategies, management of CSOs, and communications with CDCs on medical and scientific information of our vaccines. In performing relevant marketing and promotion activities, we adopt a two-pronged approach. Our in-house sales and marketing team covers certain areas in a few number of direct-controlled municipalities and large-population provinces for all or part of our products. Representative cities and direct-controlled municipalities currently covered by our in-house sales and marketing team include Beijing, Jinan and Tianjin in Northern China, Wuhan, Fuzhou and Xiamen in Southern China, Chengdu, Chongqing and Xi'an in Western China and Nanjing, Shanghai and Hangzhou in Eastern China. To a larger extent, we engage third-party CSOs to cover areas where our in-house team has not established specific coverage, and we can leverage local resources and the experience of third-party CSOs to assist our marketing and promotion activities, which we believe is the most cost-effective manner to increase our market outreach and penetration. Representative cities currently covered by our CSOs include Zhengzhou and Taiyuan in Northern China, Guangzhou and Changsha in Southern China, Urumqi, Lanzhou and Yinchuan in Western China and Wenzhou and Yangzhou in Eastern China.

We select third-party CSOs based on their industry experience and expertise, local resources such as CDCs and vaccination site coverage, compliance and credit history, financial condition and management capabilities. Third-party CSOs are not required to obtain licenses to sell pharmaceutical products, since they provide marketing services only. We typically enter into one or two-year agreements with them. If we intend to renew the contract with a CSO, we are typically required to commence negotiation on the terms of renewal one month prior to the expiration of the existing contract. CSOs promote our products typically by holding promotional activities and paying visitations to CDCs and vaccination sites. We typically settle accounts cycles with CSOs quarterly and annually. The amount payable for each quarter or year is the result of a base service fee multiplied by a performance-based fee rate. We negotiate the base service fee with each individual CSO, based on the resources the particular CSO has and the market rate standards in the relevant sales region. We decide the performance-based fee rate at the end of the quarter or year based on an assessment of the CSO's performance during the relevant period. For each third-party CSO, we set performance requirements such as number and size of promotion activities they conducted, number of visits paid to CDCs and vaccination sites, and quality and responsiveness of post-vaccination services including reporting adverse events (if any) and other feedback from CDCs and vaccinees. Under our agreements with the third-party CSOs, they are required to comply with applicable regulatory requirements on marketing activities and our sales policies. In addition, they generally have the exclusive right to promote our products to a designated list of CDCs. Typically, the specific team in a CSO that promotes our products in a particular location is prohibited from promoting competing vaccine products to CDCs in that location. Contracts with CSOs may be terminated by mutual consent, and we may unilaterally terminate the contract under a range of circumstances, which usually include (i) if the CSO breaches the contract; (ii) if the CSO breaches any laws and regulations applicable to the provision of CSO services; and (iii) if the CSO breaches any anti-bribery law.

We closely monitor the performance of CSOs with a focus to increase their stickiness and our sales efficiency, and we would stop working with CSOs that we consider ineffective in promoting our vaccine products. During the Track Record Period, we consolidated our CSO team with the aim of decreasing our selling and distribution expenses, increasing the average share of wallet from CSOs and strengthening management over our CSO team. As of December 31, 2019, 2020, 2021 and April 30, 2022, we had approximately 60, 40, 37 and 34 CSOs, respectively. The number of our CSOs decreased each year during the Track Record Period as we terminated subpar CSOs, and reallocated more areas to the more effective and better performing CSOs. As a result, the average share of wallet from CSOs increased from RMB12.0 million in 2019 to RMB35.7 million in 2021. As a result of our CSO management and other centralized sales and marketing efforts and strategies, our selling and distribution expenses as a percentage of our revenue decreased from 34.7% in 2019 to 32.6% in 2020 and further to 29.3% in 2021. See “Financial Information—Consolidated Statements of Profit or Loss—Selling and Distribution Expenses”.

Our sales and marketing efforts put a strong emphasis on academic promotion. We keep frequent communications with CDCs, local vaccination sites and related healthcare professionals through academic events, regular visits, on-site trainings and post-administration follow-ups on the safety and effectiveness of our products. Our CSOs promote our products to CDCs by organizing promotional activities such as academic conferences and regular visits to CDCs. They also help us collect feedback on our vaccine products. After many years of efforts to introduce our products through such interactions, we have gained recognition of CDCs at all levels as well as related healthcare professionals.

Public Tenders

We are required to participate in the public tender process held by different levels of CDCs in order to sell our vaccine products in the PRC. Public tenders for Class I vaccines are held by national or provincial-level CDCs. Public tenders for Class II vaccines are held by provincial-level CDCs. We generally compete with competitors on the bid price, clinical effectiveness and quality of each product, as well as reputation.

Once we win a public tender, we will be eligible for selling vaccine products to CDCs. Our Class I vaccine products are sold to provincial-level CDCs and our Class II vaccine products are predominantly sold to county-level CDCs. For Class I vaccines, the winning bid will also specify the volume to be procured by provincial CDCs. For Class II vaccines, public tenders serve as an admission for entry to market, typically for one year and in certain situations two or three years, without a specified volume, and the relevant CDCs will negotiate with us on the actual supply volume based on each CDC’s demand.

During the Track Record Period, through successful bids at public tenders, we sold our Class I vaccine products to all 31 provincial-level CDCs and our Class II vaccine products to over 2,000 county-level CDCs in all 31 provinces across the PRC. In 2019, 2020, 2021 and the four months ended April 30, 2022, our tender success rate for both Class I and Class II vaccines was 100%.

BUSINESS

Pricing

According to our PRC Legal Advisor, there is no pre-set price ceiling for any vaccine products prior to holding centralized bidding processes under the applicable national laws and regulations in the PRC. Under the Vaccine Administration Law, both Class I and Class II vaccine companies are required to follow two pricing principles: (i) reasonable pricing (合理定價), which is generally understood by the market players as setting prices with reference to market factors and purchase demand of CDCs; and (ii) independent pricing (自主定價), which grants the vaccine companies independent rights to set up bidding price. For Class I vaccines, the NHC and the Ministry of Finance of the PRC, among others, organize annual centralized bidding or unified negotiations, prior to which we set our bidding prices in a reasonable and independent manner after considering a number of factors, including but not limited to competition among different vaccine companies, the product supply, the government strategies on public health and specific disease areas, and funding budget. If we win the bids, our bidding prices become the selling price of the relevant Class I vaccine products nationwide. For Class II vaccines, we participate in provincial-level centralized bidding processes, prior to which we also set bidding prices in a reasonable and independent manner. As Class II vaccines are paid by vaccinees, our pricing for such vaccines is primarily market-driven. We take into consideration factors such as our costs of production, price quotations of competing products in the bidding process, our technological advantages, product quality and market trends, as well as changes in the levels of supply and demand. If we win the bids, our bidding prices become the selling price of the respective Class II vaccine product in the respective province, autonomous region or municipality. See “Industry Overview—Pricing Policies of Vaccines in the PRC.” Therefore, we and our competitors will consider and submit pricing information to the relevant CDCs. The bidding price of our products is one of the factors considered by provincial level CDCs. Accordingly, we carefully take into account many factors when determining the bidding prices of our products, including, among others, the prevailing market price of similar products, our costs and overall profit margin, our market positioning and vaccinees’ purchasing power.

During the Track Record Period, we derived a majority of our revenue from sales of Class II vaccines. The following table sets forth a breakdown of our revenue by vaccine category for the periods indicated:

	Year ended December 31,						Four months ended April 30,			
	2019		2020		2021		2021		2022	
	% of		% of		% of		% of		% of	
	Amount	revenue	Amount	revenue	Amount	revenue	Amount	revenue	Amount	revenue
(unaudited)										
(in thousands of RMB, except for percentages)										
Class I vaccines										
Recombinant HBV vaccines										
(Hansenu Polymorpha) . . .	86,850	9.1	80,019	4.9	183,403	11.7	46,466	10.0	11,425	4.2
Inactivated HAV vaccines										
(HDC)	30,786	3.2	21,914	1.3	5,329	0.3	1,692	0.4	—	—
HFRS vaccine ⁽¹⁾	17,133	1.8	861	0.1	—	—	—	—	—	—
Mumps vaccine ⁽¹⁾	—	—	—	—	—	—	—	—	—	—
Sub-total	134,769	14.1	102,794	6.3	188,732	12.0	48,157	10.4	11,425	4.2

BUSINESS

	Year ended December 31,						Four months ended April 30,			
	2019		2020		2021		2021		2022	
	Amount	% of revenue	Amount	% of revenue	Amount	% of revenue	Amount	% of revenue	Amount	% of revenue
(unaudited)										
(in thousands of RMB, except for percentages)										
Class II vaccines										
Human rabies vaccine										
(Vero cell)	446,114	46.9	1,072,854	65.5	937,414	59.7	301,548	64.9	175,765	63.9
Recombinant HBV vaccines										
(Hansenula Polymorpha)	268,060	28.2	324,762	19.8	339,849	21.6	90,406	19.4	66,000	23.9
Inactivated HAV vaccines										
(HDC)	56,463	5.9	75,307	4.6	80,728	5.1	18,782	4.0	15,819	5.7
MPSV4	—	—	26,739	1.6	18,666	1.3	4,411	1.0	6,218	2.3
Mumps vaccine ⁽¹⁾	39,551	4.2	35,505	2.2	1,893	0.1	1,622	0.3	—	—
HFRS vaccine ⁽¹⁾	6,691	0.7	9	*	—	—	—	—	—	—
Sub-total	<u>816,879</u>	<u>85.9</u>	<u>1,535,176</u>	<u>93.7</u>	<u>1,378,550</u>	<u>87.8</u>	<u>416,769</u>	<u>89.6</u>	<u>263,802</u>	<u>95.8</u>
Research and development services	—	—	—	—	2,847	0.2	—	—	28	*
Total	<u>951,648</u>	<u>100.0</u>	<u>1,637,970</u>	<u>100.0</u>	<u>1,570,129</u>	<u>100.0</u>	<u>464,926</u>	<u>100.0</u>	<u>275,255</u>	<u>100.0</u>

Note:

- (1) Our HFRS vaccine and mumps vaccine are typically classified as Class II vaccines in the PRC. However, they may be procured by certain provincial level CDCs as a Class I vaccine under some special circumstances, such as local outbreaks. See “Industry Overview—HFRS Vaccines in the PRC” and “Industry Overview—Mumps Vaccine in the PRC.”

* Less than 0.1%.

BUSINESS

We expect to continue to generate most of our revenue from Class II vaccines. Compared to Class I vaccines, Class II vaccines generally have higher profit margins and enjoy greater pricing flexibility during the public tender process. The following table sets forth the sales volume and average unit price of our vaccine products by category for the periods indicated:

	Year ended December 31,						Four months ended April 30,			
	2019		2020		2021		2021		2022	
	Sales	Average	Sales	Average	Sales	Average	Sales	Average	Sales	Average
	volume	unit price ⁽³⁾	volume	unit price ⁽³⁾	volume	unit price ⁽³⁾	volume	unit price ⁽³⁾	volume	unit price ⁽³⁾
	('000 units)	(RMB/unit)	('000 units)	(RMB/unit)	('000 units)	(RMB/unit)	('000 units)	(RMB/unit)	('000 units)	(RMB/unit)
Class I vaccines										
Recombinant HBV vaccines (Hansenula Polymorpha) ⁽¹⁾ . .	26,073	3.3	23,764	3.4	30,262	6.1	7,615	6.1	1,578	7.2
Inactivated HAV vaccines (HDC) ⁽¹⁾	1,421	21.7	957	22.9	196	27.2	58	29.1	–	–
HFRS vaccine ⁽¹⁾	2,321	7.4	161	5.3	–	–	–	–	–	–
Mumps vaccine ⁽¹⁾	–	–	–	–	–	–	–	–	–	–
Class II vaccines										
Human rabies vaccine (Vero cell) ⁽²⁾	1,667	267.6	3,569	300.6	2,907	322.5	936	322.0	541	324.7
Recombinant HBV vaccines (Hansenula Polymorpha) ⁽¹⁾ . .	4,257	63.0	4,752	68.3	4,120	82.5	1,125	80.4	781	84.5
Inactivated HAV vaccines (HDC) ⁽¹⁾	627	90.1	788	95.6	655	123.2	170	110.2	130	122.0
MPSV4 ⁽¹⁾	–	–	345	77.6	228	81.9	54	81.1	76	81.9
Mumps vaccine ⁽¹⁾	939	42.1	717	49.5	28	66.6	23	70.5	–	–
HFRS vaccine ⁽¹⁾	157	42.7	*	–	–	–	–	–	–	–

Notes:

* Less than 1,000 units.

(1) Each unit represents one dose.

(2) Each unit represents one set, being five doses.

(3) Average unit price represents revenue from sales of a vaccine product divided by sales volume of that vaccine product, net of value-added taxes.

For a detailed discussion of our sales performance and revenue during the Track Record Period, see “Financial Information—Consolidated Statements of Profit or Loss—Revenue.”

Vaccine Transportation and Storage

Temperature, hygiene and physical containment of vaccine products are among the key aspects of our storage and transportation processes. The Vaccine Administration Law requires cold-chain transportation and storage in the entire delivery process of vaccines in order to ensure constant monitoring and control of temperature, with a tracking system implemented to keep proper records of the temperature of vaccines during transportation and storage. See “Regulatory Overview.” To fully comply with these requirements, we have engaged logistic companies with cold-chain capabilities to transport our products. Our agreements with such logistic companies require them to provide cold-chain transportation services with tracking systems that are suitable for vaccines or medical products. Upon delivery, the logistic companies are required to provide the temperature monitor records for the entire delivery process, and we are entitled to inspect their compliance with all applicable requirements. The logistic companies are also obligated to deliver our products on time and are responsible for losses and damages in transportation. While CDCs would generally require logistics companies to provide relevant licenses to show their eligibility to transport vaccine products, we also audit the logistic companies periodically to ensure the quality of their service. Our payments to the logistic companies are generally settled on a monthly basis.

In addition to engaging cold chain logistic companies, as of the Latest Practicable Date, we used 23 storage centers located in 19 provinces, direct-controlled municipalities and autonomous regions that are qualified for cold-chain storage.

After-sales Services

Our sales and marketing team personnel and CSOs are responsible for maintaining contact with CDCs after sales in order to gather timely feedback. If we receive a complaint about our products, the relevant sales and marketing personnel or CSO would forward it to our relevant departments for following up. For example, our medical team and quality control department handle complaints involving adverse effects. Our quality control department conducts internal investigations and report to the sales and marketing department, who then respond to the complaining customer. They also make investigations as necessary and coordinate with other departments internally, including our medical team, to respond until the complaint is resolved. We also have self-checking and recall protocol in place, which is activated when we consider a recall is necessary. We are obliged to make a report to the NMPA in the event we initiate a product recall. During the Track Record Period and up to the Latest Practicable Date, we have not received any material complaints on the quality of our vaccine products, been involved in any significant litigation or disputes arising from customer complaints, nor have we initiated a product recall.

Return and Exchange of Products

We generally do not accept return of products unless (i) the products are defective or are substandard; (ii) the product packaging is damaged due to transportation or other reasons; or (iii) the products are otherwise unmarketable due to any fault on our part. Vaccinees or CDCs that return products are required to provide a written statement clarifying the reasons of the return while we typically bear the cost of the return. Nonetheless, we may consider to allow return or exchange for products that are about to expire at our sole discretion. In 2019, 2020, 2021 and the four months ended April 30, 2022, the amount of product return was RMB3.3 million, RMB2.2 million, RMB4.4 million and RMB1.6 million, respectively, which represented 0.3%, 0.1%, 0.3% and 0.6%, respectively, of our revenue. Such returns were primarily due to return of unsold products that had expired or were close to expiry. During the Track Record Period and up to the Latest Practicable Date, there were no product returns due to product quality issues or improper handling in transportation.

BUSINESS

OUR CUSTOMERS

During the Track Record Period, substantially all of our customers were provincial-level and county-level CDCs, to which we typically grant a credit period of 60 to 180 days. We usually enter into sales contracts with CDCs from time to time based on their purchase orders, instead of long-term agreements, and such sales contracts are typically not subject to renewal. Typically, pursuant to the relevant sales agreements, we are required to deliver products to CDCs at our cost in the quantity and at the time stipulated under the relevant contracts. CDCs are obliged to inspect the vaccines upon receipt. The purchase price must be the price determined in the public tender process according to the provisions in the public tender agreements and the sales agreements typically require payment of the purchase price by wire. Generally, if there is a force majeure event or if we fail to deliver products in accordance with the quantity or time of delivery as required under a sales contract, and we fail to reach an agreement with the relevant CDC, the contract may be terminated. Also see “—Sales and Marketing—Return and Exchange of Products”. In 2019, 2020, 2021 and the four months ended April 30, 2022, the aggregate sales to our five largest customers were RMB85.2 million, RMB62.0 million, RMB81.7 million and RMB17.0 million, respectively, representing 8.9%, 3.8%, 5.1% and 6.1% of our revenue, respectively. Sales to our largest customer for the same periods were RMB26.4 million, RMB18.3 million, RMB21.3 million and RMB4.2 million, respectively, representing 2.8%, 1.1%, 1.4% and 1.5% of our revenue, respectively. We have stable relationships with our five largest customers with an average of 12 years. Mostly, we receive payment directly from CDCs or relevant finance authorities. In limited cases, we receive payment from local health commissions (地方衛生健康委員會) or other relevant authorities in the administrative area where the respective CDCs are located, depending on the treasury policies in place in that area.

During the Track Record Period, none of our Directors or any Shareholders who, to the knowledge of our Directors, owns more than 5% of our issued share capital immediately following the completion of the Global Offering and the Conversion of Domestic Shares into H Shares (but without taking into account the exercise of the Over-allotment Option) nor any of their respective associates had any interest in any of our five largest customers.

The following tables set forth details of our five largest customers during the Track Record Period, substantially all of which are CDCs.

Customer	Revenue	% of total revenue	Credit terms
	(RMB'000)		
Year ended December 31, 2019			
Customer A	26,392	2.8%	Payment upon product inspection and acceptance, or upon issuance of invoice
Customer B	19,305	2.0%	Six months
Customer C	15,306	1.6%	Payment upon issuance of invoice or payment made quarterly
Customer D	12,385	1.3%	Payment upon product delivery and acceptance
Customer E	11,834	1.2%	60 days
Total	85,222	8.9%	

BUSINESS

Customer	Revenue (RMB'000)	% of total revenue	Credit terms
Year ended December 31, 2020			
Customer A	18,297	1.1%	Payment upon product inspection and acceptance, or upon issuance of invoice
Customer E	12,657	0.8%	90 days
Customer F	11,109	0.7%	30 days
Customer G	9,967	0.6%	120 days or 180 days, depending on product type
Customer C	9,966	0.6%	Payment made quarterly
Total	61,996	3.8%	
Year ended December 31, 2021			
Customer E	21,301	1.4%	90 days
Customer H	21,193	1.3%	Payment within 15 days of executing purchase contract
Customer C	17,612	1.1%	Payment made quarterly
Customer I	11,665	0.7%	Payment upon product inspection and acceptance, or 180 days, depending on product type
Customer J	9,905	0.6%	90 days
Total	81,676	5.1%	
Four months ended April 30, 2022			
Customer K	4,213	1.5%	30 days after quality assurance period
Customer E	4,196	1.5%	90 days
Customer D	3,585	1.3%	Payment upon product delivery and acceptance, or upon issuance of invoice
Customer L	2,565	0.9%	90 days
Customer M	2,437	0.9%	180 days
Total	16,996	6.1%	

RAW MATERIALS AND SERVICES SUPPLIERS

During the Track Record Period, our major suppliers primarily consisted of suppliers of raw materials, manufacturing equipment, construction services, R&D technical services, CSO services, cold-chain storage and transport services. We procured manufacturing equipment for certain of our vaccine candidates during the Track Record Period, such as PCV13, PPSV23, serum-free Vero cell human rabies candidates and inactivated COVID-19 vaccine candidate. Although these candidates are not yet commercialized, certain of them have entered into clinical trials and the others have reached CTA-enabling stages, and we plan to launch these products in the next few years. As a result, we have undertaken construction of new production facilities for these candidates and have started to procure manufacturing equipment for their clinical trials and future commercial sales. See “—Manufacturing Facilities and Production Capacity—New Production Facilities.” In addition, certain of our major suppliers provided construction services for our new manufacturing facilities and renovation services for our existing manufacturing facilities. In 2019, 2020, 2021 and the four months ended April 30, 2022, our purchases from our five largest suppliers in the aggregate accounted for 27.1%, 36.1%, 44.0% and 48.0% of our total

BUSINESS

purchases, respectively. Purchases from our largest supplier during the Track Record Period, alone accounted for 7.2%, 13.9%, 24.5% and 26.4% of our total purchases in 2019, 2020, 2021 and the four months ended April 30, 2022, respectively. We have long-term relationships with our five largest suppliers, and have worked with our five largest suppliers for 6 years on average. For the procurement of raw materials, we are typically required to pay in installments, which involve a down payment, payment after verifying the quality of the raw materials procured, and payment after the expiry of the quality assurance period. Payment to manufacturing equipment suppliers is typically made in accordance to the schedule set out in the relevant contracts, which typically involves prepayment, payment after verifying the quality of the equipment, and payment after the expiry of the quality assurance period. For CSO, we are generally required to pay after the obligations of the service providers are fulfilled under the relevant contracts. For cold chain storage and transport services, we are typically given a credit period of approximately one month. For construction and installation services, payments are made in accordance to payment milestones set out under the relevant construction contracts, which are tied to the progress of the construction and installation project.

Raw materials for our vaccine products mainly include human albumin, fetal bovine serum and chemical reagents. Although most of our raw materials are widely available, we select suppliers carefully, and only work with suppliers that agree to comply with our quality control standards and protocols. Our suppliers are responsible for quality defects in our products that are directly caused by the bad quality of the raw materials supplied. Under our standard supplier contract, we have the right to return or exchange products if quality issues are discovered during inspection of the products. We have not experienced any material disruptions in the supply of our raw materials in the past. In the event that any one of these supply arrangements or agreements is terminated or the ability of any one of these suppliers to perform under our agreements were to be materially adversely affected, we believe that we will be able to locate, qualify and enter into an agreement with a new supplier on a timely basis.

During the Track Record Period, none of our Directors or any Shareholders who, to the knowledge of our Directors, owns more than 5% of our issued share capital immediately following the completion of the Global Offering and the Conversion of Domestic Shares into H Shares (but without taking into account the exercise of the Over-allotment Option) nor any of their respective associates had any interest in any of our five largest suppliers.

The following tables set forth details of our five largest suppliers during the Track Record Period.

Supplier	Purchase amount (RMB'000)	% of total purchases	Goods/Services purchased
Year ended December 31, 2019			
Supplier A	46,433	7.2%	Construction and installation services
Supplier B	44,812	6.9%	Raw materials and manufacturing equipment
Supplier C	32,152	5.0%	CSO services
Supplier D ⁽¹⁾	28,667	4.4%	Sanitizing and fitting out services
Supplier E	23,359	3.6%	Raw materials
Total	175,423	27.1%	
Year ended December 31, 2020			
Supplier A ⁽²⁾	190,047	13.9%	Construction and installation services
Supplier F ⁽³⁾	109,250	8.0%	Construction services
Supplier G	75,741	5.5%	Manufacturing equipment

BUSINESS

<u>Supplier</u>	<u>Purchase amount</u> (RMB'000)	<u>% of total purchases</u>	<u>Goods/Services purchased</u>
Supplier H	60,196	4.4%	Manufacturing equipment
Supplier I	58,837	4.3%	CSO services
Total	494,071	36.1%	
Year ended December 31, 2021			
Supplier A	510,400	24.5%	Construction and installation services
Supplier J	189,410	9.1%	Manufacturing equipment
Supplier K	79,650	3.8%	Manufacturing equipment, design, testing, operation and maintenance services
Supplier L	77,604	3.7%	Manufacturing equipment
Supplier M	60,029	2.9%	Manufacturing equipment
Total	917,093	44.0%	
Four months ended April 30, 2022			
Supplier A	123,329	26.4%	Construction and installation services
Supplier K	53,115	11.4%	Manufacturing equipment, design, testing, operation and maintenance services
Supplier N	18,927	4.1%	Manufacturing equipment
Supplier B	15,290	3.3%	Raw materials
Supplier O	13,099	2.8%	Construction and installation services
Total	223,760	48.0%	

Notes:

- (1) Supplier D provided plant renovation and decontamination services for existing manufacturing facilities of AIM Weixin.
- (2) Supplier A provided construction and installation services for new viral-based vaccines manufacturing facilities of Rong'an Bio.
- (3) Supplier F provided construction services for the Phase I of AIM Weixin's new bacterial vaccines manufacturing facilities.

Inventory Management

We typically maintain an inventory level of at least two months for raw materials to meet our production needs. We generally maintain the inventory level of six to 10 months of finished products according to the estimated market demand. We also maintain regular contact with the CDCs with which we have orders to better gauge the local needs and adjust our production plans and subsequently our inventory levels as needed. In 2019, 2020, 2021 and the four months ended April 30, 2021 and 2022, we had provision for impairment of inventories of RMB5.5 million, RMB6.6 million, RMB21.7 million, RMB7.2 million and RMB8.6 million, respectively. Such provisions for impairment were primarily made for raw materials, work in progress and finished products that (i) were expired, (ii) were close to their expiry date or (iii) did not meet our quality control and assurance requirements. We made relatively significant provision for impairment of inventories of RMB21.7 million in 2021, mainly consisting of (i) finished goods that would expire within six months and (ii) certain work in progress discarded during our own ordinary course quality assurance process.

We have established an inventory management system that monitors each stage of the warehousing process. Except for packaging materials, all of our other inventories have strict storage temperature requirements. Warehouse personnel are responsible for the inspection, storage and distribution of raw materials. Raw materials are separately stored in different areas of the warehouse according to their storage condition requirement, properties, usage and batch number.

QUALITY CONTROL AND ASSURANCE

The quality and safety of our vaccine products are crucial to our continued success. We endeavor to ensure the quality of our operations through a comprehensive quality management system. Our quality management system was formulated in accordance applicable national standards, including the GMP standards, covering substantially every aspect of our operations including product design, raw materials and manufacturing, among others.

Our Quality Control System

We have an experienced quality management team, consisting of 270 personnel as of the Latest Practicable Date with an average of six years' experience in quality assurance, quality control and validation, all of whom have received professional trainings in regulations, GMP standards and quality control analysis methods.

We have implemented quality management systems that conform to international standards, national regulations and industry guidelines and adopted standard operating procedures. All of our manufacturing facilities are designed and maintained, and we implement quality standards, in conformity with GMP standards adopted by NMPA in the PRC, and a set of international GMP standards adopted by the PIC/S. GMP is the basic principles of pharmaceutical manufacturing and quality management for ensuring that products are consistently produced while achieving the required quality, and PIC/S is a co-operative arrangement between regulatory authorities in the field of GMP of medicinal products for human or veterinary use. The production facilities for all of our existing products are GMP certified in the PRC.

Quality Control of Raw Material

We have established detailed internal rules governing the selection of raw material suppliers and raw material quality control. We purchase raw materials only from suppliers of which we have verified business qualifications and product quality. We select suppliers based on a variety of factors including qualifications, business reputation, production scale, technological strengths, quality management capabilities, after-sales services and price. After initial screening by our procurement department, we typically request product samples from a supplier, which is examined by our quality management team. The examination result provides an important basis for our supplier selection decisions. In addition, we would conduct on-site quality audit at the supplier's production facilities, and we require the supplier to execute a quality guarantee agreement with us. Our purchased supplies normally go through two rounds of inspections, first by our storage team and then by our quality assurance department. For supplies that do not pass our inspection, they will be transferred to our warehouse, categorized as unqualified supplies, pursuant to our protocols regarding non-conforming products. We stringently implement and follow our return and exchange policies, based upon which we would return any nonconforming raw material supplies that do not satisfy our quality control standards.

Quality Control of Manufacturing

Our quality management team is responsible for ensuring that our manufacturing processes consistently conform to applicable standards through regular on-site inspections. After completing each step of the production process, we perform cleaning and maintenance procedures to prevent contamination or cross-contamination before we proceed to the next production cycle. Each batch of our products is subject to strict internal inspection before lot release inspections. We conduct sample testing on certain work in progress at particular stages of production. Our quality assurance department also inspects the documentation relating to product quality, including the laboratory control records and production process records. Products that do not meet our quality standards are destroyed or otherwise disposed of in accordance with the relevant disposal requirements. During the Track Record Period and up to the Latest Practicable Date, we passed 11, 9, 11 and 13 GMP inspections conducted by the NMPA or its local agencies on AIM Honesty, AIM Kanghuai, Rong'an Bio and AIM Weixin, respectively, with no material issues identified in any of the inspections. During the Track Record Period and up to the Latest Practicable Date, all of our finished products sold had approved lot releases, the series number of which can be found on the NIFDC websites, and there had not been any material product quality or safety issues.

To better comply with the newly imposed requirements pursuant to the recently enacted Vaccine Administration Law, since 2019, we have been updating our quality control system to become more “information-smart.” Throughout our design, manufacturing and testing process, we have been implementing a high-end information management system, gradually shifting away from our predated manual control of data and information flow. The new information management system will enable us to reduce risks and errors through more advanced and efficient technology and software. We expect that the new information management system will be integrated into our existing quality control framework by July 2022, after we undergo the necessary verification process. After that, we expect our internal quality control system will be run and operated on completely online basis. In addition, we have completed the connection with the national vaccine electronic traceability collaboration platform so as to realize the traceability of vaccines, which further strengthened our production quality management and quality control system.

LICENSES AND PERMITS

As a company based in the PRC engaged in the developing, manufacturing and commercialization of vaccine products, we are required to maintain or renew the necessary permits, licenses and certifications for our business. We are also subject to regular inspections, examinations and audits by relevant authorities. Our PRC Legal Advisor has advised us that, during the Track Record Period and up to the Latest Practicable Date, we had obtained all the licenses, approvals and permits from, and completed registrations with the relevant government authorities that are material for our current business operations in the PRC pursuant to the relevant laws and regulations or the requirements of the competent authority.

INTELLECTUAL PROPERTY

Our continued success depends on our ability to obtain and maintain proprietary or intellectual property protection for our vaccine products, vaccine candidates and our core technologies and other know-how. We also have internal protocols in place to ensure that we operate without infringing, misappropriating or otherwise violating on the proprietary rights of others, and to prevent others from infringing, misappropriating or otherwise violating our proprietary or intellectual property rights. We protect our proprietary and intellectual property position by, among other methods, licensing or filing patent applications related to our proprietary technology, inventions and improvements. We also rely on trade secrets, know-how and continuing technological innovation to develop and maintain our proprietary and intellectual property position, which we generally seek to protect through contractual obligations with third parties.

BUSINESS

As of the Latest Practicable Date, we had registered 104 patents, 36 trademarks and five domain names in the PRC. As of the same date, we had filed 44 patent applications in the PRC. The following table sets forth the material patents and patent applications we owned as of the Latest Practicable Date.

Product or Platform	Patent No.	Patent	Patentee/ Applicant	Jurisdiction	Status	Expiry Date/ Application Date
Human Rabies Vaccine (Vero cell)	ZL201510405542.1	A human use rabies vaccine and preparation method	Rong'an Bio	the PRC	Effective	July 8, 2035
	ZL201510405641.X	A human use rabies vaccine and preparation method	Rong'an Bio	the PRC	Effective	July 8, 2035
	ZL201510696818.6	A chromatography system	Rong'an Bio	the PRC	Effective	October 21, 2035
Recombinant HBV Vaccine (Hansenula Polymorpha)	ZL201110126060.4	A preparation method of aluminum-containing adjuvant hepatitis B vaccine (patent)	AIM Honesty	the PRC	Effective	May 15, 2031
Bacteria-based Vaccine Platform	ZL201210595689.8	A fully enclosed sterile medical liquid ultrafiltration tank device	AIM Weixin	the PRC	Effective	December 21, 2032
Virus-based Vaccine Platform						
MPSV4	ZL201510083222.9	A simple method for detecting phosphorus content in meningitis vaccine	AIM Weixin	the PRC	Effective	February 10, 2035
	ZL201910651534.3	A CRM197 strain culture medium, preparation method and fermentation culture method	AIM Weixin	the PRC	Effective	July 17, 2039
EV71-CA16 Bivalent HFMD Vaccine Candidate	ZL201210328369.6	A CoxA16 virus strain and a human CoxA16 inactivated vaccine	AIM Kanghuai	the PRC	Effective	September 6, 2032
Hib Conjugation Vaccine Candidate	ZL201410817576.7	A method for preparing adjuvant-free type B haemophilus influenzae conjugate vaccine freeze-dried agent	AIM Weixin	the PRC	Effective	December 16, 2034
mRNA Covid-19 Vaccine Candidate	ZL202010125774.2	An mRNA encoding SARS-CoV-2 virus antigen and its vaccine and vaccine preparation method	Liverna	the PRC	Effective	February 26, 2040
mRNA Covid-19 Vaccine Candidate	ZL201911350856.0	A type of lipid nanoparticle for enhancing the immunization effect of nucleic acid vaccines and its preparation method	Liverna	the PRC	Effective	December 23, 2039
mRNA Covid-19 Vaccine Candidate	ZL201910758103.7	A method of monitoring tail length of mRNA Poly(A) and its application	Liverna	the PRC	Effective	August 15, 2039
mRNA Human Rabies Vaccine Candidate	ZL201911042634.2	An mRNA human rabies vaccine	Liverna	the PRC	Effective	October 28, 2039

BUSINESS

Product or Platform	Patent No.	Patent	Patentee/ Applicant	Jurisdiction	Status	Expiry Date/ Application Date
mRNA Covid-19 Vaccine Candidate	CN202011415202.4	Recovery method of anti-reverse cap analog in mRNA in-vitro transcription process, anti-reverse cap analog and application	Liverna	the PRC	Under application	December 3, 2020
mRNA Covid-19 Vaccine Candidate	CN201911041368.1	Preparation used for transfection in vitro and delivery in vivo of mRNA	Liverna	the PRC	Under application	October 29, 2019

In addition, under the SPHCC Transfer Agreement, we are deemed to have been licensed to use certain viral vector and antigen design owned by SPHCC on a royalty-free basis. See “—Research and Development—Collaboration Agreements—Collaboration with SPHCC.” Such viral vector and antigen design is subject to the patent application below.

Product	Patent Application Number	Patent Application	Applicant	Jurisdiction	Status	Application Date
Broad-spectrum COVID-19 vaccine candidate	2019107779372	Adenoviral vector AdC68XY, the virus it carries, and its application	Suzhou Xiangyi Biotechnologies Co., Ltd.	the PRC	Under application	August 22, 2019

As of the Latest Practicable Date, we were not involved in any proceedings in respect of, and we had not received written notice of any material claims of infringement of any intellectual property rights, in which we may be a claimant or a respondent.

AWARDS AND RECOGNITIONS

The following table sets out a summary of the major awards and recognition we have received as of the Latest Practicable Date.

Year	Grantee	Name of award or recognition	Issuing authority
2019	AIM Weixin	Ningbo Municipal Science and Technology Progress Award	People’s Government of Ningbo Municipal
2018	AIM Weixin	Ninghai County Science and Technology Progress Award	People’s Government of Ninghai County
2017	AIM Honesty	Liaoning Province Science and Technology Progress Award	People’s Government of Liaoning Province
2016	AIM Honesty	Dalian Municipal Science and Technology Invention Award	People’s Government of Dalian Municipal
2015	Rong’an Bio	Ningbo Municipal Enterprise Engineering and Technology Centre	Science and Technology Department of Ningbo Municipal
2019	Rong’an Bio	Pharmaceutical Industry Top Five Enterprise	Pharmaceutical Industry Association of Ningbo Municipal

BUSINESS

Year	Grantee	Name of award or recognition	Issuing authority
2020	AIM Kanghuai	New Vaccine Engineering Technologies Research Center	Science and Technologies Bureau of Taizhou Municipal
2021	AIM Kanghuai	Gazelle Enterprise in Jiangsu High-tech Industrial Development Zone	Jiangsu Development and Reform Commission

INSURANCE

We maintain insurance policies that are required under PRC laws and regulations as well as based on our assessment of our properties, Licensed Manufacturing Facilities, material machinery and inventories. Each of AIM Honest, AIM Kanghuai, Rong'an Bio and AIM Weixin maintains product liability insurance policies for their respective vaccine products, in compliance with relevant PRC laws and regulations. In line with industry practice in the PRC, we have elected not to maintain certain types of insurances, such as business interruption insurance or key man insurance. Our Directors consider that our existing insurance coverage is sufficient for our present operations and in line with the industry practice in the PRC.

EMPLOYEES

As of the Latest Practicable Date, we had a total of 1,578 employees, all of whom are located in the PRC. Approximately 51.3% of our employees held a bachelor's degree or higher. The table below sets forth our employees by function as of the Latest Practicable Date.

	Number of employees	% of total
Management and administrative	218	13.81%
Finance and accounting	55	3.49%
Sales and marketing	159	10.08%
Manufacturing	654	41.44%
Research and development	222	14.07%
Quality assurance	270	17.11%
Total	1,578	100.00%

Training and Development

We recruit our employees mainly through recruitment websites, recruiters, internal referral and job fairs. We conduct new employee training, as well as regular professional and safety training programs for all employees. Training programs cover key areas of our operations, such as quality control requirements, production safety, quality assurance and vaccine industry laws and regulations.

Employee Benefits

In compliance with the relevant PRC laws and regulations, we enter into employment contracts with our employees to cover matters such as wages, benefits and grounds for termination. We also enter into confidentiality agreements with our key employees. Our confidentiality agreements with senior management members and other key personnel, such as employees of R&D, manufacturing and quality assurance departments include non-compete terms. Such non-compete terms prohibit the employees from competing with us, directly or indirectly, during his or her employment and from disclosing confidential information or trade secrets to any third party. Relevant employees will remain subject to the obligation under the non-compete terms for up to two years after the termination of his or her employment. Our PRC Legal Advisor is of the view that the non-compete terms in the relevant confidentiality agreements are valid and legally binding under the PRC laws.

The remuneration package of our employees includes salary and bonus, which are generally based on their qualifications, industry experience, position and performance. During the Track Record Period and as of the Latest Practicable Date, we did not experience any material labor disputes or strikes that may have a material and adverse effect on our business, financial condition or results of operations. As required by applicable PRC laws and regulations, we make contributions to the social insurance and housing provident fund for our employees. During the Track Record Period and up to the Latest Practicable Date, we did not make in full the housing provident fund contributions for our employees. In 2019, the total outstanding amount of our housing provident fund contributions was RMB1.15 million. According to the interviews our PRC Legal Advisor conducted in June 2021 with competent officials of local housing provident fund authorities in the view of the PRC Legal Advisor (namely the local housing fund management centers), the risk that the relevant regulatory authorities would require us to pay shortfalls with respect to housing provident fund contributions and the associated fine or penalties is remote.

Our Controlling Shareholder has provided an indemnity to indemnify our Group against any claims, fines and other liabilities arising from such incidents. See “Risk Factors—Risks Relating to Doing Business in China—We may be subject to additional housing provident fund contributions and penalties or fines imposed by relevant regulatory authorities.”

PROPERTIES**Owned Properties**

As of the Latest Practicable Date, we owned nine parcels of land in the PRC with a total site area of 333,755.64 sq.m. We have obtained the land use right certificates for all of these parcels of land.

As of the Latest Practicable Date, we had obtained the building ownership right certificates for 27 properties in the PRC, with a total GFA of approximately 227,421.41 sq.m. We use these buildings primarily for the R&D, manufacturing as well as commercialization of our products.

<u>Use of Property</u>	<u>Approximate GFA</u>
	(sq.m.)
Office (including R&D)	9,004.57
Manufacturing and other industrial purposes	214,186.59
Others	4,230.25
Total	227,421.41

BUSINESS

As of the Latest Practicable Date, we have not obtained the building ownership certificates for certain ancillary buildings and facilities with a total GFA of 4,990.12 sq.m., including: (i) one property with a GFA of 4,055 sq.m. owned by AIM Honesty and existed before our acquisition. As advised by our PRC Legal Advisor, due to lack of construction planning approvals and construction permits for historical reasons before our acquisition, difficulties and impediments for the application for an ownership certificate shall be expected. This property is currently vacant and not used for any purpose, and we do not forecast any future usage in light of its poor conditions; (ii) one property with a GFA of 435.12 sq.m. owned by AIM Weixin, which was used for warehouses, sewage treatment and fire water pool placement as of the Latest Practicable Date. As advised by our PRC Legal Advisor, AIM Weixin has obtained the construction planning approval in January 2019 and the construction permit in February 2019, and is currently in the process of obtaining completion and acceptance inspection certificate for such property, which is expected to be obtained in late 2022. After obtaining such certificate, AIM Weixin will apply for the building ownership certificate. As advised by our PRC Legal Advisor, AIM Weixin will not be subject to any material legal impediment in obtaining such certificate; (iii) one property with a GFA of 400 sq.m. owned by Rong'an Bio, which was used as a temporary animal testing room. Rong'an Bio plans to dismantle this property when we complete new production facilities (which include new animal testing rooms) in Rong'an Bio. See “—Manufacturing Facilities and Production Capacity—New Production Facilities—Production Lines in Rong'an Bio for New Viral-based Vaccines.” We estimate the relevant costs to be incurred would be no more than RMB100,000; and (iv) one property with a GFA of 100 sq.m. owned by AIM Kanghuai, which was a temporary construction used for doormen and trash storage as of the Latest Practicable Date. AIM Kanghuai plans to dismantle this property in 2022, for which we estimate the costs to be incurred would be no more than RMB50,000. To the best knowledge of our Directors, they are not aware any safety issues for such properties.

As advised by our PRC Legal Advisor, failure to obtain the requisite building ownership certificates and failure to rectify in the stipulated time periods by the relevant authorities may be required by the authorities to dismantle the related properties and be subject to potential fines amounting to 5% to 10% of the construction costs. As a result, our Directors estimate the maximum potential penalties due to our failure to obtain the requisite building ownership certificates amounted to approximately RMB2.4 million.

Our Directors believe that the title defects of these properties will not individually or collectively have a material adverse effect on our business, financial condition or results of operations for the following reasons: (i) with respect to the above-mentioned matters, in June 2021, our PRC Legal Advisor interviewed the officials competent to represent the PRC government authorities in charge of enforcing laws and regulations relating to building registrations and certificates in Taizhou, Ningbo, Ninghai and Dalian. Based on such interviews, our PRC Legal Advisor is of the view that the risk of the relevant government authorities requiring us to dismantle the relevant ancillary buildings and facilities or impose any other administrative penalties for failing to obtain the requisite building ownership certificates is low; (ii) as of the Latest Practicable Date, we had not received any notification from the relevant PRC authorities requiring us to dismantle relevant properties or pay related penalty fines; (iii) these properties are not material to our principal business operations. The property of AIM Honesty is vacant without under usage, and the other three properties are only used for ancillary purposes for which we do not believe their unavailability has any material adverse impact on our operations. In addition, the aggregate GFA of these properties accounted for approximately 2.7% of the total GFA of our owned properties. Our Directors are of the view that even if we are ordered to demolish all of the relevant buildings and facilities, our business operations would not suffer any material disruption. For the vacant property in AIM Honesty, as this property is not used or planned for any purpose, the demolition does not require any replacement. For the property in AIM Kanghuai, as it is only used for ancillary purposes and the GFA required is relatively small, we believe we have no difficulties in getting space from current licensed facilities in the event of demolition. For the property in Rong'an Bio, if we are required to demolish the animal testing room before we set up the new one, we plan to engage laboratories of third parties; (iv) as advised by our PRC Legal Advisor, AIM Weixin will not be subject to any material legal impediment in obtaining the building

BUSINESS

ownership certificate for its property; and (v) we have obtained an indemnity from Mr. Zhou to indemnify our Group against any claims, fines and other liabilities arising from such property title defects. See “Risk Factors—Risks Relating to Doing Business in China—Failure to comply with PRC property-related laws and regulations regarding certain of our owned and leased properties may adversely affect our business, financial condition and results of operations.”

We will continue to strengthen our internal control systems to prevent future occurrence of title defects of owned properties. We conduct trainings for our administrative and legal staff on the relevant license and permit requirements on building construction and operation. In addition, we have tightened up requirements for our subsidiaries to obtain all required licenses, permits and certificates for our owned properties with relevant housing and other administrative authorities. We have designated personnel in each subsidiary to manage its building ownership certificates, and monitor if any deficiency exist before the relevant property is put into use. The status of building ownership certificate obtainment is also submitted to the administrative department of the relevant subsidiary for review, to ensure that we obtain the building ownership certificate on time and in compliance with the relevant laws and regulations. We have also required that all of the building ownership certificates are centrally filed at the Group level once obtained.

Leased Properties

As of the Latest Practicable Date, we leased 11 properties for operation with an aggregate gross floor area of 72,374.22 sq.m. in the PRC. The following table sets forth the details of our leased properties as of the Latest Practicable Date.

Use of Property	Approximate GFA (sq.m.)
Office (including R&D)	11,855.01
Manufacturing and other industrial purposes	60,519.21
Total	72,374.22

As of the Latest Practicable Date, leasing agreements of our 11 leased properties for operation had not been registered and filed with the competent PRC government authorities as required by applicable PRC laws and regulations. As advised by our PRC Legal Advisor, according to the PRC Civil Code, failure to complete the registration and filing of lease agreements will not affect the validity of such lease agreements. However, the relevant PRC authorities may impose a maximum fine of RMB10,000 for each unregistered lease, if we fail to rectify the non-compliance within the time frame prescribed by the relevant authorities. The aggregate amount of the maximum fine would be approximately RMB110,000, which our Directors believe will not have any material adverse impact on our business operations. See “Risk Factors—Risks Relating to Doing Business in China—Failure to comply with PRC property-related laws and regulations regarding certain of our owned and leased properties may adversely affect our business, financial condition and results of operations.”

ENVIRONMENTAL, SOCIAL AND GOVERNANCE

We have been, and will continue to be, highly committed to corporate social responsibility. We consider environmental, social and governance (“ESG”) essential to our continuous development. We focus on areas such as environment responsibilities and social responsibilities. We plan to set up metrics and targets for these ESG issues and to review our key ESG performance on a regular basis in accordance with the applicable Listing Rules. Our Directors will continue to actively participate in designing our ESG strategies and targets, and will also continue to evaluate, determine and address our ESG-related risk. Our subsidiaries, with oversight provided by the Board, develop their own ESG related policies including assessing and managing environmental protection and climate-related risks, and report material ESG issues to our Board. Our Board, through the Strategy Committee, is responsible for evaluating and managing material ESG issues.

In order to comply with relevant laws and regulations in the PRC, we have established a set of internal policies with respect to ESG issues, which are also in line with industry norm. For environmental matters, we have adopted policies related to (i) the recycle and reuse of natural resources, (ii) the use of energy-efficient production equipment, (iii) treatment of exhaust gas, sewage and solid waste and (iv) conservation of energy, among other aspects. For social matters, we have adopted policies related to (i) production safety, (ii) product quality, (iii) employee health, benefits and training and (iv) employee complaint handling, among other aspects.

We are subject to various environmental protection laws and regulations of the PRC. Please see “Regulatory Overview” for details. Our operations involve the use of hazardous and flammable chemical materials. Our operations also produce such hazardous waste. We strive to fully comply with all relevant environment protection laws and regulations, including offering our full cooperation when relevant authorities conduct onsite inspections of our facilities.

With respect to social responsibilities, we have entered into employment contracts with our employees in accordance with the applicable PRC laws and regulations. See “—Employees—Employee Benefits.” We hire employees based on their qualifications and evaluate their performances on merits. It is our corporate policy to offer equal opportunities to our employees regardless of gender, age, race, religion or any other social or personal characteristics.

Environmental Matters

We are subject to various PRC environmental laws and regulations, the enforcement of which involves regular inspections by local environmental protection authorities. Our production processes generate noise, solid waste, exhaust gas, waste water, and greenhouse gas that may lead to climate-related risks. Some of our waste is poisonous or hazardous. To address the health concerns and potential harmful impact arising from our usage of hazardous materials and disposal of wastes, we restrict the usage and amount of hazardous and flammable chemical materials in our operations. We also contract qualified third-party companies for special treatment of our hazardous waste.

We strive to operate our facilities in a manner that protects the environment and the health and safety of our employees and communities. We have adopted specific environmental protection policies to make our operations more energy efficient and environmentally friendly and to ensure effective compliance with applicable PRC environmental laws and regulations. For instance, we have implemented Group-wide environmental, health and safety (EHS) policies and operating procedures that include management systems and procedures relating to emissions of air, water and other waste, handling, use, storage, treatment and disposal of hazardous substances, third party safety management, product stewardship, waste treatment, process safety management, worker health and safety requirements and emergency planning and response. Such management systems and procedures involve reporting on the emission level of gas pollutants, waste water and solid waste to our management and evaluation of such emission levels on a regular basis. If there is any deviation from the applicable emission standard, we will investigate the cause and take rectification measures accordingly. We also prepare annual plan and report on the management of pollutants and waste and file such report with the relevant environmental authority for review.

We uphold “green” principles in production. We have formulated energy conservation and environmental protection policies for our production process, and strive to optimize our production by eliminating equipment with low production capacity and adopting energy-efficient devices. For example, our Licensed Manufacturing Facility at AIM Honesty uses new, energy-efficient models of distilled water devices, purification devices and high pressure sterilization cabinets for energy conservation and emission reduction, and has built a sewage treatment system to ensure the effluent discharged meets the prescribed standard under the relevant environmental laws and regulations in the PRC. In addition, this facility also has a designated area of approximately 50 sq.m. for the temporary storage of hazardous waste, which ensures the safe storage of corporate hazardous waste.

BUSINESS

In addition to the above, other key aspects of our comprehensive measures to manage the impact of pollutant discharge and greenhouse gas emissions are summarized below:

Risk areas	Mitigating measures
Noise and exhaust gas management	<ul style="list-style-type: none"> Engage professional service providers to conduct regular assessment of noise emission and exhaust gas pollutant levels and issue reports
Waste water management	<ul style="list-style-type: none"> Set up stations to treat waste water before discharging into public sewage
Solid waste management	<ul style="list-style-type: none"> Establish waste disposal standard operating procedures in compliance with relevant laws and regulations
Greenhouse gas emission and energy consumption	<ul style="list-style-type: none"> Use cleaner energy source, such as natural gas Establish policies to conserve electricity and reuse paper Where efficient and applicable, recycle steam produced in certain production steps for other production steps

Furthermore, at our four vaccine manufacturing subsidiaries, we closely monitor the below metrics in order to formulate and implement energy conservation and pollutant management policies as appropriate:

Resource consumption

- Electricity consumption.* In 2019, 2020, 2021 and the four months ended April 30, 2022, electricity consumption levels were 22.8 million kWh, 27.7 million kWh, 50.4 million kWh and 15.4 million kWh in aggregate, respectively.
- Water consumption.* In 2019, 2020, 2021 and the four months ended April 30, 2022, water consumption levels were 355.8 thousand tons, 400.4 thousand tons, 653.4 thousand tons and 197.2 thousand tons in aggregate, respectively.

Pollutant management

- Exhaust gas discharge.* In 2019, 2020, 2021 and the four months ended April 30, 2022, based on our best estimates, levels of pollutant in exhaust gas discharge were 0.9 ton, 0.9 ton, 0.8 ton and 0.3 tons in aggregate, respectively.
- Sewage discharge.* In 2019, 2020, 2021 and the four months ended April 30, 2022, based on our best estimates, sewage discharge levels were 142.8 thousand tons, 122.5 thousand tons, 179.1 thousand tons and 49.7 thousand tons in aggregate, respectively.
- Hazardous solid waste discharge.* In 2019, 2020, 2021 and the four months ended April 30, 2022, based on our best estimates, hazardous solid waste discharge levels were 81.7 tons, 72.5 tons, 153.5 tons and 62.1 tons in aggregate, respectively.

We will continue to monitor our resource consumption and pollutant emission levels, and will strive to operate in an environmentally friendly way. We will also closely monitor the impact of climate change on our operations. Climate change is believed to be closely correlated to the increasing occurrence of natural disasters. For risks associated with natural disasters, see “Risk Factors—Risks Relating to Our Business and Industry—Other Risks Relating to Our Business—The COVID-19 outbreak in China and worldwide has adversely affected, and may continue to adversely affect, our business, results of operations and financial condition. Natural disasters, epidemics, acts of war or terrorism or other factors beyond our control in the future may have a material adverse effect on our business operations, financial condition and results of operations.”

In 2019, 2020, 2021 and the four months ended April 30, 2022, our expenses in relation to environmental compliance matters were RMB9.6 million, RMB5.6 million, RMB11.5 million and RMB0.8 million, respectively. The higher levels of environmental compliance expenses in 2019 and 2020 were primarily due to purchases of environmental protection related infrastructure and equipment. We expect our cost of compliance with applicable PRC environmental laws, regulation and policies for 2022 will not significantly change from 2021.

We have complied with the applicable environmental laws and regulations in all material aspects. In addition, our PRC Legal Advisor is of the view that, during the Track Record Period, there was no claim, administrative penalty or other kinds of legal proceedings in respect of environmental protection and safety against us.

Occupational Health and Work Safety

We strive to provide a safe working environment that guards the health and safety of our employees and communities. We are subject to occupational health and safety laws and regulations in the PRC. We have implemented work safety guidelines setting out safety practices, accident prevention and accident reporting. In particular, we have established and implemented guidelines in accordance with relevant PRC laws and regulations on the storage, management, handling and use of viruses and bacteria. These guidelines include those related to the recording and inspection of batches of viruses and bacteria, a multi-department approval process to obtain viruses and bacteria from our inventory, as well as the safe disposal of viruses and bacteria. Our employees with specified responsibilities, including handling certain equipment and conducting animal research, are required to hold relevant qualifications, as well as wearing proper safety gear when working. We regularly conduct safety inspections of our Licensed Manufacturing Facilities and hold work safety training sessions for our employees.

In light of the COVID-19 outbreak, we have endeavored to provide a safe work environment by implementing Group-wide self-protection measures for employees, including monitoring body temperature of employees, implementing office rotation policies, adopting enhanced sanitization measures in our Licensed Manufacturing Facilities, offering free face masks to employees and educating employees on good personal hygiene habits.

During the Track Record Period and as of the Latest Practicable Date, we complied with the relevant occupational health and safety laws and regulations in the PRC and we did not have any incidents or complaints which had a material and adverse effect on our business, financial condition or results of operations during the same period.

RISK MANAGEMENT AND INTERNAL CONTROL

Key operational risks faced by us include changes in the general market conditions and the regulatory environment of the PRC vaccine market, and factors that may harm our ability to develop, manufacture and commercialize our vaccine products and vaccine candidates and to compete with other vaccine companies. For details of the various risks and uncertainties we face, see “Risk Factors.” Risk management is therefore critical to the continued success of our business. We have adopted or plan to adopt upon Listing, among other things, the following risk management measures:

- We have adopted various measures and procedures regarding each aspect of our operations, such as quality control requirements, production technical standards and occupational health and safety. We provide periodic training on these measures and procedures for our employees as part of our employee training program. We also regularly monitor the implementation of those measures and procedures through our on-site internal control team for each stage of the produce development process.
- Our Directors (who are responsible for monitoring the corporate governance of our Group), with assistance from our legal advisors, will periodically review our compliance status with all relevant laws and regulations upon Listing.
- Our Directors believe that compliance creates value for us. We are dedicated to cultivating a compliance culture among all of our employees. To ensure such compliance culture is embedded into everyday workflow and set the expectations for individual behavior across our Group, we conduct regular internal compliance checks and inspections, adopt strict accountability internally and conduct compliance training.
- Upon Listing, we will establish an Audit Committee, which will be responsible to (i) make recommendations to our Directors on the appointment and removal of external auditors; and (ii) review the financial statements and render advice in respect of financial reporting as well as oversee the risk management and internal control procedures of our Group. See “Directors, Supervisors and Senior Management—Corporate Governance—Audit Committee.”
- Except for Mr. Yan ZHOU holding the positions of both the chairman of the Board and CEO, we will comply with the Corporate Governance Code. We have established three board committees, namely, the Audit Committee, the Remuneration Committee, and the Nomination Committee, with respective terms of reference in compliance with the Corporate Governance Code. Additionally, to cater for our internal governance needs, we have established the Strategy Committee and the Compliance and Risk Control Committee. For details, see the section headed “Directors, Supervisors and Senior Management.”

Anti-Bribery

We maintain strict anti-corruption policies among our sales team personnel in our sales and marketing and procurement activities, including the procurement of raw materials, equipment, construction services and R&D collaboration. We have issued anti-fraud and anti-bribery management measures, and have set up internal protocols for reporting, investigation and remedy procedures, reporting channels and whistle-blower protection mechanisms. We may terminate an employee for breaches of our anti-corruption policies, and would report the bribery/corruption incident to the relevant authorities for further handling. Our employees at key sales and procurement positions are required to give an anti-corruption and anti-bribery undertaking, which requires our employees to comply with all applicable anti-bribery and anti-kickback laws and regulations.

BUSINESS

We closely monitor our employees' compliance with anti-bribery and anti-corruption policies. Compliance with the anti-corruption and anti-kickback undertaking is a component for the relevant key employees' performance review. To the best knowledge of our Directors, there were no bribery incidents involving the Group during the Track Record Period and up to the Latest Practicable Date.

LEGAL PROCEEDINGS AND REGULATORY COMPLIANCE

We have been and may from time to time be involved in legal proceedings. For details, see “Risk Factors—Risks Relating to Our Business and Industry—Other Risks Relating to Our Business—We may be involved in litigation, arbitration, administrative or other legal proceedings from time to time that require extensive management attention and resources and may be costly, time-consuming and disruptive.”

We were subject to a civil lawsuit in the PRC brought by a former CSO, which arose from disputes over certain service contracts with the CSO that were entered into in 2019 in our ordinary course of business. We terminated the service contracts on the basis of breaches by the CSO. The CSO then brought legal action against us, alleging wrongful termination of the service contracts and claiming outstanding service fees plus damages totalling RMB12.5 million. We had recorded liabilities of RMB4.5 million as of April 30, 2022 to the CSO based on the advice of our legal counsel for this lawsuit. The first instance judgment for this lawsuit was made in July 2022, under which we were ordered to pay outstanding service fees plus interest, totalling RMB4.5 million, to the CSO whereas other claims of the CSO were dismissed. Our Directors are of the view that this lawsuit did not and would not have any material adverse impact on our business, financial condition or results of operations.

On December 3, 2021, we received a notice from Kunming Intermediate People's Court in Yunnan province (雲南省昆明市中級人民法院), under which the plaintiff (“Plaintiff A”) alleged that AIM Honesty owes its subsidiary a sum of approximately RMB80.2 million, representing the principal amount such subsidiary paid to a bank in April 2018 as the guarantor for loans of AIM Honesty due from the bank together with accrued interest. As of the Latest Practicable Date, this case was still pending trial. We have engaged S&P Law Firm (the “Litigation Counsel”) to represent us in this lawsuit. The Litigation Counsel advised us that based on the evidence currently available, the likelihood of the court finding against AIM Honesty is remote, because, among others, Plaintiff A's subsidiary validly and effectively assigned the right to claim indemnification from AIM Honesty, if any, to an independent third party (the “Assignee”), in 2020. As a result of such assignment, the Litigation Counsel is of the view that neither Plaintiff A nor its subsidiary is entitled to make any claim against AIM Honesty. Furthermore, we acquired AIM Honesty in 2015 from an independent third party seller. The seller, the Company, AIM Honesty and the Assignee entered into an agreement in October 2020, pursuant to which the seller shall assume the relevant claims and the Assignee will only make claims against the seller. As such, AIM Honesty is not liable to the Assignee either. Based on the above grounds and considering that the claim amount represents only 1.4% of our net assets as of April 30, 2022, our Directors are of the view that this lawsuit would not have any material adverse effect on our business, financial condition or results of operations or the Global Offering.

On January 13, 2022, we received a notice from the People's Court of Dalian Economic and Technological Development Zone (大連經濟技術開發區人民法院) against AIM Honesty. In this case, the plaintiff (Plaintiff B) is a creditor of Plaintiff A in the above lawsuit, and Plaintiff A is listed as a third party of interest. Plaintiff A owed debt to Plaintiff B but did not have repayment capabilities. However, Plaintiff B knew that Plaintiff A is alleging that AIM Honesty owed money to its subsidiary and claiming indemnity against AIM Honesty, as disclosed in the above lawsuit. As a result, Plaintiff B alleged that, as Plaintiff A's creditor, it has right to directly claim repayment from AIM Honesty for Plaintiff A's debt, totaling approximately RMB11.3 million. As of the Latest Practicable Date, this case was still pending trial. The Litigation Counsel also represents us in this lawsuit and it advised us that the likelihood of the court finding against AIM Honesty is remote, because as disclosed in the above paragraph, (i) neither Plaintiff A nor its subsidiary is entitled to make any claim against AIM Honesty after Plaintiff A's

BUSINESS

subsidiary validly and effectively assigned the right to claim indemnification from AIM Honesty to the Assignee (as defined above); and (ii) the Assignee agreed not to make any claims against AIM Honesty either. As a result, Plaintiff B did not have any legal basis to claim any indemnity from AIM Honesty. Based on the above grounds and considering that the claim amount of this lawsuit represents only approximately 0.2% of our net assets as of April 30, 2022, our Directors are of the view that this lawsuit would not have any material adverse effect on our business, financial condition or results of operations or the Global Offering.

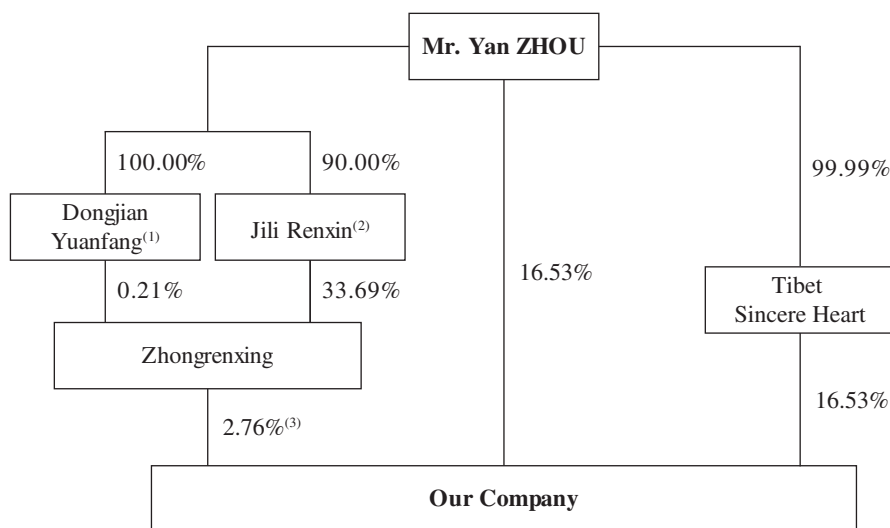
During the Track Record Period and up to the Latest Practicable Date, we did not have any non-compliance incidents which our Directors believe would, individually or in the aggregate, have a material operational or financial impact on our business as a whole. In addition, as advised by our PRC Legal Advisor, except as disclosed, during the Track Record Period and as of the date of this prospectus, we had complied in all material respects with the relevant PRC laws and administrative regulations material to our business operations. See “—Employees—Employee Benefits” for incidences where the Group did not fully pay housing provident fund contributions. See “—Properties—Owned Properties” for details of certain ancillary buildings for which we did not obtain the building ownership certificates. See “—Properties—Leased Properties” for details of certain leasing agreements that had not been registered and filed with the competent PRC government authorities.

During the Track Record Period and as of the Latest Practicable Date, none of us or our Directors were involved in any litigation, arbitration or administrative proceedings which, if determine adversely against us or any of our Directors, could have a material adverse impact on our business, financial condition or results of operations. In addition, as of the Latest Practicable Date, save as disclosed above, we were not aware of any pending or threatened litigation, arbitration or administrative proceedings against us or our Directors which may have a material and adverse impact on our business, financial condition or results of operations.

RELATIONSHIP WITH CONTROLLING SHAREHOLDER

OUR CONTROLLING SHAREHOLDER

Mr. Yan ZHOU, our executive Director and chairman of the Board and chief executive officer, is entitled to exercise voting rights of 36.12% of our total issued share capital immediately prior to the Global Offering, and will be entitled to exercise voting rights of 35.83% of our issued share capital immediately following the completion of the Global Offering and the Conversion of Domestic Shares into H Shares (assuming the Over-allotment Option and the options under the Pre-IPO ESOP are not exercised). Therefore, Mr. Yan ZHOU will be our Controlling Shareholder. The following diagram illustrates Mr. Yan ZHOU's shareholding of our Company upon the Listing.



Notes:

- (1) Dongjian Yuanfang means Shenyang Dongjian Yuanfang Enterprise Management Co., Ltd. (瀋陽洞見遠方企業管理有限公司), the general partner of Zhongrenxing.
- (2) Jili Renxin means Shenyang Jili Renxin Enterprise Management Co., Ltd. (瀋陽激勵人心企業管理有限公司), a limited partner of Zhongrenxing. All the other limited partners of Zhongrenxing are employees of the Company who are Independent Third Parties.
- (3) Mr. Yan ZHOU is able to control Zhongrenxing's 0.21% voting rights by virtue of his sole ownership of Dongjian Yuanfang, the general partner of Zhongrenxing.

COMPETITION

Our Controlling Shareholder confirms that as of the Latest Practicable Date, he did not have any interest in a business, apart from the business of our Group, which competes or is likely to compete, directly or indirectly, with our business that would require disclosure under Rule 8.10 of the Listing Rules.

Green Immunoscience

Green Immunoscience Co., Ltd. (格林免疫科學有限公司) ("Green Immunoscience") was incorporated in the PRC on June 11, 2012. As of the Latest Practicable Date, Green Immunoscience was indirectly controlled by Mr. Yan ZHOU through Tibet Sincere Heart. As of the Latest Practicable Date, Green Immunoscience is a holding company that holds 100% equity interest in Green Biopharmaceutical Technology (Tianjin) Co., Ltd. (格林生物醫藥科技(天津)有限公司) ("Green Biopharmaceutical"). Other than its investment in Green Biopharmaceutical, Green Immunoscience has no other investments or any other business operations. Green Biopharmaceutical is a company mainly engaged in the research and development of the diagnosis and treatment of allergic diseases and respiratory infectious diseases. Neither Green Immunoscience nor Green Biopharmaceutical is engaged in any research and development, manufacturing or commercialization of vaccines and thus, Green Immunoscience and Green Biopharmaceutical do not compete with the business of our Company. For these reasons, Mr. Yan ZHOU does not intend to inject Green Immunoscience into the Group.

RELATIONSHIP WITH CONTROLLING SHAREHOLDER

Shenyang Bain

Shenyang Bain Biomedical Co., Ltd. (瀋陽貝恩生物醫藥有限公司) (“**Shenyang Bain**”) was incorporated in the PRC on July 2, 2012. As of the Latest Practicable Date, it had no business operation. It intends to be principally engaged in research and development, manufacturing or commercialization of drugs. As of the Latest Practicable Date, Shenyang Bain was indirectly controlled by Mr. Yan ZHOU through Liaoning Green Biological Pharmaceutical Group Co., Ltd. (遼寧格林生物藥業集團股份有限公司). As of the Latest Practicable Date, Shenyang Bain was not engaged in any research and development, manufacturing and commercialization of vaccines. For this reason, Mr. Yan ZHOU does not intend to inject Shenyang Bain into the Group.

INDEPENDENCE FROM CONTROLLING SHAREHOLDER

Having considered the following factors, our Directors are of the view that we are able to carry out our business independently from our Controlling Shareholder and his close associates after the Listing.

Management Independence

Our business is managed and conducted by our Board and senior management. Upon Listing, our Board will consist of eleven Directors, comprising three executive Directors, four non-executive Directors and four independent non-executive Directors. For more information, see “Directors, Supervisors and Senior Management” of this prospectus for details.

Our Directors are of the view that our Board as a whole and together with our senior management team are able to manage our business independently from the Controlling Shareholder and his close associates for the following reasons:

- (i) each Director is aware of his/her fiduciary duties as a Director which require, among other things, that he/she acts for the benefit and in the interest of our Company and does not allow any conflict between his/her duties as a Director and his/her personal interests;
- (ii) our daily management and operations are carried out by a senior management team, all of whom have substantial experience in the industry in which our Company is engaged, and will therefore be able to make business decisions that are in the best interests of our Group;
- (iii) according to the Articles of Association, with respect to any matters of conflict or potential conflict of interest which involve a transaction between our Company and another company or entity to which a Director holds office, such Director shall abstain from voting and shall not be counted towards the quorum for the voting;
- (iv) we have appointed four independent non-executive Directors to provide a balance of the number of potentially interested and independent Directors with a view to promote the interests of our Company and the Shareholders as a whole. The independent non-executive Directors will be entitled to engage professional advisers at our cost for advice on matters relating to any potential conflict of interest arising out of any transaction to be entered into between our Company and our Directors or their respective associates;
- (v) where a Shareholders’ meeting is held to consider a proposed transaction in which the Controlling Shareholder has a material interest, the Controlling Shareholder shall abstain from voting on the resolutions and shall not be counted towards the quorum for the voting; and
- (vi) our Company has appointed Somerley Capital Limited as our compliance adviser, which will provide advice and guidance to our Company in respect of compliance with the applicable laws and Listing Rules including various requirements relating to Directors’ duties and corporate governance.

RELATIONSHIP WITH CONTROLLING SHAREHOLDER

Financial Independence

We have an independent financial system. We make financial decisions according to our own business needs and neither our Controlling Shareholder nor his close associates intervene with our use of funds. We have opened accounts with banks independently and do not share any bank account with our Controlling Shareholder or his close associates. We have made tax filings and paid tax independently from our Controlling Shareholder or his close associates pursuant to applicable laws and regulations. We have established an independent finance department as well as implemented sound and independent audit, accounting and financial management systems. We have adequate internal resources and credit profile to support our daily operations.

Based on the above, our Company considers there is no financial dependence on our Controlling Shareholder and his close associates.

Operational Independence

We engage in our operations independently, making and implementing operational decisions independently. We have obtained all material licenses and permits necessary for our business operations and are not dependent upon our Controlling Shareholder or his close associates for any such licenses and permits. In addition, we have established our internal organizational and management structure which includes shareholders' meetings, our Board and other committees and formulated the terms of reference of these bodies in accordance with the requirements of the applicable laws and regulations, the Listing Rules and the Articles of Association, so as to establish a regulated and effective corporate governance structure with independent departments, each with specific areas of responsibilities.

CORPORATE GOVERNANCE MEASURES

Our Directors recognize the importance of good corporate governance to protect the interest of our Shareholders. We would adopt the following corporate governance measures to manage potential conflict of interests between our Group and our Controlling Shareholder:

- (i) where a Shareholders' meeting is held for considering proposed transactions in which our Controlling Shareholder has a material interest, our Controlling Shareholder shall abstain from voting on the relevant resolutions and shall not be counted in the quorum for the voting;
- (ii) where a Board meeting is held for the matters in which a Director has a material interest, such Director shall abstain from voting on the relevant resolutions and shall not be counted in the quorum for the voting;
- (iii) in the event that our independent non-executive Directors are requested to review any conflict of interest between our Group and our Controlling Shareholder, our Controlling Shareholder shall provide the independent non-executive Directors with all necessary information and our Company shall disclose the decisions of the independent non-executive Directors either in its annual reports or by way of announcements;
- (iv) our Directors (including the independent non-executive Directors) will seek independent and professional opinions from external advisors at our Company's cost as and when appropriate in accordance with the Corporate Governance Code and Corporate Governance Report as set out in Appendix 14 to the Listing Rules;
- (v) any transactions between our Company and its connected persons shall be in compliance with the relevant requirements of Chapter 14A of the Listing Rules, including the announcement, annual reporting and independent shareholders' approval requirements (if applicable) under the Listing Rules;

RELATIONSHIP WITH CONTROLLING SHAREHOLDER

- (vi) we have appointed Somerley Capital Limited as our compliance adviser to provide advice and guidance to us in respect of compliance with the applicable laws and regulations, as well as the Listing Rules, including various requirements relating to corporate governance.

Based on the above, our Directors are satisfied that sufficient corporate governance measures have been put in place to manage conflicts of interest that may arise between our Company and our Controlling Shareholder, and to protect our minority Shareholders' interests after the Listing.

CONNECTED TRANSACTION

OVERVIEW

Prior to the Listing, our Group has entered into certain continuing agreements and arrangements in our ordinary and usual course of business with parties who will, upon the Listing, become our connected persons (as defined under Chapter 14A of the Listing Rules). Upon the Listing, such transactions will constitute continuing connected transactions or one-off connected transactions under Chapter 14A of the Listing Rules.

RELEVANT CONNECTED PERSON

Connected Person	Connected Relationship
Mr. Yan ZHOU	our executive Director, chief executive officer and Controlling Shareholder
Shanghai Tianxia Asset Management Co., Ltd. (上海天下資產管理有限公司) (“ Shanghai Tianxia ”)	an associate of Mr. Yan ZHOU (as defined in Rule 14A.12(1)(c) of the Listing Rules)
Shenyang Green Sino Pharmaceutical Co., Ltd. (瀋陽格林賽諾藥業有限公司) (“ Shenyang Green ”)	an associate of Mr. Yan ZHOU (as defined in Rule 14A.12(1)(c) of the Listing Rules)

ONE-OFF CONNECTED TRANSACTION

Property Lease Agreements

On January 1, 2020, our Company as lessee and Mr. Yan ZHOU as lessor entered into certain property lease agreements (the “**Property Lease Agreements**”), pursuant to which our Company agreed to lease from Mr. Yan ZHOU certain premises with a total gross area of approximately 1,979 sq.m. in Shanghai, PRC primarily for use as offices for a term from January 1, 2020 to December 31, 2024 at an annual rental of RMB9,540,000 for the first year and with a RMB0.5 per square meter increase from the second year and third year, respectively.

Our Directors are of the view that the Property Lease Agreements are conducted on normal commercial terms or better, were entered into in the ordinary and usual course of business of our Group, the terms of the leases are fair and reasonable and are in the best interest of our Group and the Shareholders as a whole.

Implication under the Listing Rules

In accordance with HKFRS 16 “Leases” (which became effective from January 1, 2019), the Property Lease Agreements are recognized as right-of-use assets on our balance sheet. Therefore, the entering into of the Property Lease Agreements will be regarded as a one-off connected transaction, rather than continuing connected transactions. Accordingly, the reporting, announcement, annual review and independent shareholders’ approval requirements in Chapter 14A of the Listing Rules will not be applicable.

CONNECTED TRANSACTION

FULLY EXEMPT CONTINUING CONNECTED TRANSACTIONS

As the highest of the applicable percentage ratios (other than the profits ratio) calculated pursuant to Rules 14A.77 and 14A.78 of the Listing Rules (the “**Percentage Ratios**”) in respect of each of the following transactions is expected to be less than 0.1%, each of the following transactions is exempt from the reporting, announcement, annual review, circular and independent shareholders’ approval requirements under Chapter 14A of the Listing Rules.

Car Rental Agreement

As of the date of this prospectus, AIM Explorer has entered into a car rental agreement with Shanghai Tianxia to lease two vehicles. AIM Explorer shall pay Shanghai Tianxia a total annual rent of RMB336,000. The term of the car rental agreement commenced on January 1, 2022 and will expire on December 31, 2022. Accordingly, the remaining term of this car rental agreement is less than three years. The car rental agreement is on normal commercial terms and was entered into in the ordinary and usual course of our business.

Office Lease Agreement

As of the date of this prospectus, we have entered into an office lease agreement with Shenyang Green to lease certain office space in Shenyang, Liaoning, PRC for our office purpose. We shall pay Shenyang Green annual rent of RMB270,100. The term of the office lease agreement commenced on April 1, 2022 and will expire on March 31, 2023. Accordingly, the remaining term of this office lease agreement is less than three years. The office lease agreement is on normal commercial terms and was entered into in the ordinary and usual course of our business.

DIRECTORS, SUPERVISORS AND SENIOR MANAGEMENT

BOARD OF DIRECTORS

Upon Listing, the Board will consist of eleven Directors, including three executive Directors, four non-executive Directors and four independent non-executive Directors. The following table sets out information in respect of our Directors:

Name	Age	Date of joining our Group	Date of appointment as a Director	Position	Key responsibilities	Relationship with other Directors, Supervisors and senior management
Yan ZHOU (周延)	56	May 2015	May 2015	Executive Director, chairman of the Board and chief executive officer	Presiding over the overall work of the Company, directly in charge of the R&D management center	Brother of Mr. Jie ZHOU and Mr. Xin ZHOU
Wen GUAN (關文)	55	October 2016	December 2016, February 2021	Executive Director, vice chairman of the Board and executive president	Assisting the chief executive officer to preside over the internal management work of the Company	None
Shaojun JIA (賈紹君)	59	August 2017	August 2017	Executive Director and executive president	In charge of the investment and construction department and equipment procurement department	None
Jie ZHOU (周杰)	58	May 2015	May 2015	Non-executive Director	Participating in the formulation of our Company's corporate and business strategies	Brother of Mr. Yan ZHOU and Mr. Xin ZHOU
Xin ZHOU (周欣)	53	May 2013	May 2013	Non-executive Director	Participating in the formulation of our Company's corporate and business strategies	Brother of Mr. Yan ZHOU and Mr. Jie ZHOU
Jichen ZHAO (趙繼臣)	58	June 2020	June 2020	Non-executive Director	Participating in the formulation of our Company's corporate and business strategies	None
Aijun WANG (王愛軍)	49	September 2017	September 2017	Non-executive Director	Participating in the formulation of our Company's corporate and business strategies	None

DIRECTORS, SUPERVISORS AND SENIOR MANAGEMENT

Name	Age	Date of joining our Group	Date of appointment as a Director	Position	Key responsibilities	Relationship with other Directors, Supervisors and senior management
Ker Wei PEI	65	September 2020	September 2020	Independent non-executive Director	Supervising and providing independent judgment to the Board	None
Xiaoguang GUO (郭曉光)	49	February 2021	February 2021	Independent non-executive Director	Supervising and providing independent judgment to the Board	None
Hui OUYANG (歐陽輝)	59	May 2021	May 2021	Independent non-executive Director	Supervising and providing independent judgment to the Board	None
Jie WEN (文潔)	58	May 2021	May 2021	Independent non-executive Director	Supervising and providing independent judgment to the Board	None

Executive Directors

Mr. Yan ZHOU (周延), aged 56, is an executive Director, chairman of the Board and the chief executive officer of our Company. He has served as a Director of our Company since May 2015 and was re-designated as an executive Director on June 9, 2021. Mr. Zhou has served as the chairman of the board of AIM Explorer since February 2021, the executive director of AIM Jianchi since May 2021 and the chairman of the board of Liverna since May 2021.

Mr. Zhou has around 10 years of experience in the biopharmaceutical industry, including experience in investment and management. Since May 2012, he has been the chairman of the board of Tibet Tianxia Holdings Group Co., Ltd. (西藏天下控股集團股份有限公司), a company engaged in venture capital investment and management with an aggregate investment of over RMB630 million between 2012 and 2021 in a number of pharmaceutical, consulting, management, investment, financial information and financing companies, where Mr. Zhou is primarily responsible for the overall work of the company. Mr. Zhou was a director of Liaoning Green Biological Pharmaceutical Group Co., Ltd. (遼寧格林生物藥業集團股份有限公司) (“**Liaoning Green Biological**”), a company engaged in the development and production of drugs such as small volume injections, freeze-dried powder injections, active pharmaceutical ingredients, tablets, hard capsules and drug mixtures with a registered capital of RMB115 million and net assets of approximately RMB130 million, from May 2013 to August 2018 and the chairman of its board from October 2011 to May 2013.

DIRECTORS, SUPERVISORS AND SENIOR MANAGEMENT

Mr. Zhou has invested in a number of pharmaceutical and healthcare companies. He indirectly owns Green Biological Group Co., Ltd. (格林生物集團有限公司) (“**Green Biological**”), a company engaged in the development of rehabilitation and gene immunotherapy technologies with a registered capital of RMB999.99 million, as to approximately 66.44%, which in turns directly owns (i) Liaoning Green Biological as to 73.02%, (ii) Green Immunoscience Co., Ltd. (格林免疫科學有限公司), a holding company which is a sole shareholder of Green Biopharmaceutical Technology (Tianjin) Co., Ltd. (格林生物醫藥科技(天津)有限公司), as to 76%, (iii) Aier Health Medicine (Liaoning) Co. Ltd. (艾爾健康醫藥(遼寧)有限公司), an innovative ophthalmological medicine research and development and manufacturing company, as to 75%, (iv) Aier Aesthetic Medicine (Shenyang) Co., Ltd. (瀋陽艾爾醫療美容有限公司), a company engaged in the research and development of aesthetic medicine, as to 70%, and (v) Liaoyang Jiade Blood Products Co., Ltd. (遼陽嘉德血液製品有限公司), a company engaged in the production of blood products, as to 51%, and indirectly owns Green Biopharmaceutical Technology (Tianjin) Co., Ltd. (格林生物醫藥科技(天津)有限公司), a company engaged in the research and development of the diagnosis of allergic diseases and respiratory infectious diseases and related immunotherapies for allergic diseases, as to 76%. Additionally, Mr. Zhou directly owns Huamei Genome Editing (Liaoning) Co., Ltd. (華美基因編輯技術(遼寧)有限公司), a company which has not yet commenced business operation, as to 99.99%.

Mr. Zhou obtained his master of business administration from Tsinghua University (清華大學) in the PRC in December 2014, and his doctor’s degree of business administration from the W. P. Carey School of Business of Arizona State University in the U.S. (“**W. P. Carey**”) in May 2015, and his master of business administration from Peking University (北京大學) in the PRC in January 2022. Mr. Zhou is also an honorary member of Westlake University Board of Trustees (西湖大學榮譽董事).

Mr. Wen GUAN (關文), aged 55, is an executive Director, vice chairman of the Board and an executive president of our Company and is responsible for assisting the chief executive officer to preside over the internal management of the Company. He has served as a Director of our Company since February 2021 and was re-designated as an executive Director on June 9, 2021. Prior to that, Mr. Guan served as a Director of our Company since December 2016 and served as the chairman of the supervisory committee of the Company from June 2020 to February 2021. He has been the chairman of the board of AIM Kanghuai since March 2021.

From November 2015 to August 2016, Mr. Guan was a director of TD Capital (Hong Kong) Management Company Limited, a company primarily engaged in equity investment, where Mr. Guan was primarily responsible for investment management. From October 2014 to November 2015, Mr. Guan served as the director of TD Capital Management Company Limited, a company primarily engaged in project investment, where Mr. Guan was primarily responsible for investment management.

Mr. Guan received his executive master of business administration degree from Shanghai Jiao Tong University (上海交通大學) in the PRC in March 2014 and his master’s degree in business administration from Cheung Kong Graduate School of Business (長江商學院) in the PRC (“**CKGSB**”) in September 2008.

DIRECTORS, SUPERVISORS AND SENIOR MANAGEMENT

Mr. Shaojun JIA (賈紹君), aged 59, has served as a Director of our Company since August 2017 and was re-designated as an executive Director on June 9, 2021. Mr. Jia also has served as an executive president of our Company since February 18, 2021. Mr. Jia is a director of AIM Explorer since December 2020, the chairman of AIM Weixin since March 2021, and the chairman of the board of Rong'an Bio since June 2021.

Mr. Jia has been a senior partner, member of the decision-making committee, executive president and general manager of Tibet Tongxin Capital Investment Management Co., Ltd. (西藏同信資本投資管理有限公司) from April 2017 to February 2021, a company primarily engaged in investment and asset management. From January 2007 to March 2017, he served as the chairman and general manager of Tibet Tongxin Securities Co., Ltd. (西藏同信證券股份有限公司), a company primarily engaged in securities trading and financial consulting. From August 1998 to September 2007, he held various positions at Guotai Junan Securities Co., Ltd. (國泰君安證券股份有限公司) (SSE: 601211; SEHK: 2611), such as executive vice president, assistant to chief executive officer and director of the marketing and sales of department. From September 1992 to August 1999, Mr. Jia was a branch general manager of Guotai Securities Co., Ltd. (國泰證券有限公司).

Mr. Jia received his bachelor's degree in business enterprise management from Henan Radio & Television University (河南廣播電視大學) (currently known as the Open University of Henan (河南開放大學)) in the PRC in July 1986 and obtained his executive master of business administration degree from W. P. Carey in May 2006.

Non-executive Directors

Mr. Jie ZHOU (周杰), aged 58, has served as a Director of our Company since May 2015 and was re-designated as a non-executive Director on June 9, 2021. Mr. Jie ZHOU served as the manager of our Company from December 2015 to December 2016 and the chairman of the Board from December 2016 to September 2020.

Mr. Jie ZHOU has served as a director of Tibet Tianxia Holdings Group Co., Ltd. (西藏天下控股集團股份有限公司) since May 2012. From May 2013 to May 2017, he has held various management positions at Liaoning Green Biological Pharmaceutical Group Co., Ltd. (遼寧格林生物藥業集團股份有限公司), including chairman, director and manager. In terms of his investment experiences, Mr. Jie ZHOU directly owns Jiuding Cellular Therapy Industry (Liaoning) Co., Ltd. (九鼎細胞治療產業(遼寧)有限公司), a company which has not commenced business operation, as to 99.99%, which in turn invests in Green Biological.

Mr. Jie ZHOU received his master's degree in business administration from CKGSB in September 2013.

Mr. Xin ZHOU (周欣), aged 53, has served as a Director of our Company since May 2013 and was re-designated as a non-executive Director on June 9, 2021.

Prior to joining our Company, Mr. Xin ZHOU was an executive director and manager at Tibet Silicon Valley Angel Venture Capital Co., Ltd. (西藏硅谷天使創業投資有限公司) from June 2010 to December 2020. In terms of his investment experiences, Mr. Xin ZHOU directly owns Woye Biotechnology (Liaoning) Co., Ltd. (沃野生物技術(遼寧)有限公司), a company which has not commenced business operation, as to 99.99%, which in turn invests in Green Biological.

Mr. Xin ZHOU studied for a executive master of business administration from CKGSB in 2012 and received an executive master of business administration from Tsinghua University (清華大學) in June 2022.

DIRECTORS, SUPERVISORS AND SENIOR MANAGEMENT

Mr. Jichen ZHAO (趙繼臣), aged 58, has served as a Director of our Company since June 2020 and was re-designated as a non-executive Director on June 9, 2021.

Mr. Zhao has been the chairman of China UniCredit International Group Company Limited (中聯信國際集團有限公司) since February 2017, a company primarily engaged in international trade, where he is primarily responsible for the overall leadership of the company's operations, development and daily business affairs. From January 2013 to January 2017, Mr. Zhao served as an executive director and vice president at the head office of Ping An Bank (平安銀行), where he was primarily responsible for risk management. From March 2002 to January 2013, Mr. Zhao held various senior management positions at China Minsheng Bank (中國民生銀行), including general manager of the risk management department, executive vice president, and risk management director. He also worked as a manager at the Industrial and Commercial Bank of China (中國工商銀行) from February 1984 to January 2002 and as a manager of the second-level branch of the People's Bank of China (中國人民銀行) from September 1982 to January 1984.

Mr. Zhao received his master's degree in business administration from Dalian University of Technology (大連理工大學) in the PRC in July 2006, and his doctor of business administration (global financial management) from W. P. Carey in 2015. He is a qualified senior economist recognized by the Industrial & Commercial Bank of China Senior Economist Appraisal Committee (中國工商銀行高級經濟師評審委員會) since August 1997.

Ms. Aijun WANG (王愛軍), aged 49, has served a Director of our Company since September 2017 and was re-designated as a non-executive Director on June 9, 2021.

Since February 2017, Ms. Wang has been the group chairwoman of the board of directors of MeiHua Holdings Group Co., Ltd. (梅花生物科技集團股份有限公司) (SSE: 600873) and served as its group general manager from April 2009 to February 2017. From March 2008 to April 2009, Ms. Wang served as the group general manager at Hebei MeiHua MSG Co., Ltd. (河北梅花味精有限公司). From January 1998 to March 2008, Ms. Wang worked as a sales manager assistant at Langfang MeiHua MSG Co., Ltd. (廊坊梅花味精有限公司).

Ms. Wang completed the executive master of business administration course in CKGSB in October 2009. She received her bachelor's degree in business management from Harbin Institute of Technology (哈爾濱工業大學) in the PRC in January 2017 and completed her financial chief executive officer course in CKGSB in October 2016. She has been studying for a program in global technology and finance development at the PBC School of Finance of Tsinghua University (清華大學五道口金融學院) in the PRC since October 2016.

Independent Non-executive Directors

Professor Ker Wei PEI, aged 65, was appointed as our independent non-executive Director on September 19, 2020.

Professor Pei has been a tenured professor of accountancy at W. P. Carey since July 1998. He was the assistant lecturer of W. P. Carey from January 1986 to June 1992, associate professor from July 1992 to July 1998, high-tech master of business administration from July 1998 to June 2003, associate dean from July 2003 to June 2013, and dean of the China Program from July 2013 to June 2017. Professor Pei was the chairman of the American Accounting Association's Globalization Initiatives Committee from 1997, and the president of the Chinese Accounting Professors' Association of North America (北美華人會計教授協會) from 1993 to 1994.

DIRECTORS, SUPERVISORS AND SENIOR MANAGEMENT

Professor Pei has served as an external director of China Merchants Group Limited (招商局集團有限公司) since June 2015, an independent non-executive director of Zhejiang Expressway Co., Ltd. (SEHK: 0576) (“**Zhejiang Expressway**”) since June 2013, an independent non-executive director of Want Want China Holdings Limited (SEHK: 0151) since June 2007, and an independent non-executive director of Zhong An Real Estate Limited (SEHK: 0672) since June 2008. Professor Pei served as an independent non-executive director of MMG Limited (SEHK: 1208) from July 2015 to December 2019 and Baoshan Iron & Steel Co., Ltd. (SSE: 600019) from May 2006 to May 2012, and as an external director of China Baowu Steel Group Corporation Limited (中國寶武鋼鐵集團), the holding company of Baoshan Iron & Steel Co., Ltd., from February 2012 to September 2019. In particular, Professor Pei has served as the chairman of the audit committee of Zhejiang Expressway since April 2018, where he reviewed financial statements for the quarterly, interim and annual results, discussed the internal audit, the effectiveness of internal control system and total risk management, and made recommendation on the re-appointment of external auditors.

Professor Pei received his bachelor’s degree in accounting in June 1979, his master’s degree in accountancy from Southern Illinois University in the U.S. in May 1981, and his PhD degree from the University of North Texas in the U.S. in May 1986. He is a member of American Accounting Association.

Mr. Xiaoguang GUO (郭曉光), aged 49, was appointed as our independent non-executive Director on February 18, 2021.

From September 2017 to February 2021, Mr. Guo was the general manager of Huaxi Jinzhi Investment Co., Ltd. (華西金智投資有限責任公司), a company primarily engaged in investment. From March 2011, he served as an assistant to the president and a general manager of the investment banking head office of Huaxi Securities Co., Ltd. (華西證券股份有限公司). From February 1998, he served as a senior manager, deputy general manager and general manager successively of the business department of the investment banking division of Guosen Securities Company Limited (國信證券股份有限公司).

Mr. Guo received his bachelor’s degree in economics from Beijing Business College (北京商學院) (currently known as the Beijing Technology and Business University (北京工商大學)) in the PRC in June 1993 and his master’s degree in business administration from CKGSB in October 2009. He obtained the qualification certificate of independent directors from the Shanghai Stock Exchange in April 2021.

Mr. Hui OUYANG (歐陽輝), aged 59, was appointed as our independent non-executive Director on May 28, 2021.

Mr. Ouyang is the dean’s distinguished chair professor of finance of CKGSB and is the academic director of the executive master of business administration program since July 2019. He was also an associate professor of finance in CKGSB from December 2010 to February 2013 and its associate dean of the master of business administration program from January 2018 to June 2019. Before joining CKGSB, Mr. Ouyang worked at a number of investment banks including UBS AG, Nomura Securities Co., Ltd. and Lehman Brothers Holdings Inc.

Mr. Ouyang has been the independent non-executive director of Ping An Insurance (Group) Company of China, Ltd. (SEHK: 2318) since August 2017 and Duiba Group Limited (HKEX: 1753) since April 2019.

Mr. Ouyang received his bachelor’s degree in chemistry from Hunan Normal University (湖南師範大學) in the PRC in July 1982 and his master’s degree in chemistry from Peking University (北京大學) in the PRC in July 1985. Mr. Ouyang also received his PhD degree from Tulane University in the U.S. in December 1990, his post-doctorate degree in chemical physics from California Institute of Technology in the U.S. in October 1993 and his PhD degree in business administration from the University of California, Berkeley in the U.S. in May 1998.

DIRECTORS, SUPERVISORS AND SENIOR MANAGEMENT

Ms. Jie WEN (文潔), aged 58, was appointed as our independent non-executive Director on May 28, 2021.

From March 2011 to March 2014, Ms. Wen worked as the strategy and planning officer of the Sinopharm CNBG (China National Pharmaceutical Group, China National Biotech Group) (中國國藥集團中國生物技術股份有限公司). From August 2001 to February 2011, she served as the vice president of Shenzhen BGI Technology Co., Ltd. (深圳華大基因科技有限公司) (SZSE: 300676), a company primarily engaged in genomics research and development. From March 1985 to July 2001, she worked as the officer of diagnostic supplies at Lanzhou Institute of Biological Products Co., Ltd. (蘭州生物製品研究所有限責任公司). In 2004, she was engaged as an adjunct professor by HeXi University (河西學院).

Ms. Wen received her college degree in chemistry from HeXi University in the PRC in 1981. She has been studying remotely for a doctorate of health administration at Warnborough College in Ireland since July 2018. Ms. Wen is recognized by the Ministry of Health of the PRC as a senior engineer in medical biologics engineering in 1997.

In November 2015, Ms. Wen was granted the National Science and Technology Progress Award (國家科學技術進步獎) by the State Council of China for her series of studies on Etiology and prevention of SARS.

SUPERVISORS

As of the date of this prospectus, the board of Supervisors (the “**Supervisory Committee**”) comprises three Supervisors. The following table sets out certain information of our Supervisors:

Name	Age	Date of joining our Group	Date of appointment as a Supervisor	Position	Key responsibilities	Relationship with Directors, Supervisors and senior management
Tingfeng SONG (宋廷鋒)	53	February 2021	February 2021	Supervisor, chairman of the Supervisory Committee	Overseeing our Company’s operations, financial situation, and the performance of duties of our Company by our Directors and senior executives	None
Lun MA (馬倫)	60	December 2015	December 2015	Supervisor	Overseeing our Company’s operations, financial situation, and the performance of duties of our Company by our Directors and senior executives	None
Jiashuai SONG (宋嘉帥)	26	September 2018	June 2020	Employee Supervisor	Overseeing our Company’s operations, financial situation, and the performance of duties of our Company by our Directors and senior executives	None

DIRECTORS, SUPERVISORS AND SENIOR MANAGEMENT

Mr. Tingfeng SONG (宋廷鋒), aged 53, has served as the chairman of the Supervisory Committee since February 2021.

From May 2012 to December 2019, Mr. Song served as a senior vice president, chief financial officer and secretary to the board of directors of Trendy (China) Group Co., Ltd. (赫基(中國)集團股份有限公司), a company primarily engaged in clothing wholesale and retail, and goods wholesale. He was the chief financial officer of China National Pharmaceutical Group Co., Ltd. (中國生物技術集團公司) from June 2010 to December 2011, CNBG from December 2006 to June 2010, and China National Medicines Corporation Ltd. (國藥集團藥業股份有限公司) (SSE: 600511) from July 2003 to December 2006. From June 2010 to December 2011, Mr. Song has served as an independent non-executive director of Bringspring Science and Technology Co., Ltd. (榮科科技股份有限公司) (SZSE: 300290), a company primarily engaged in the technologies relating to smart medicine and smart cities. He has also served as an independent non-executive director of SIASUN Robot & Automation Co., Ltd. (瀋陽新松機器人自動化股份有限公司) (SZSE: 300024) since May 2014, a company primarily engaged in robotics and automation equipment.

Mr. Song received his master's degree in accounting from Liaoning University (遼寧大學) in the PRC in June 1999. He was awarded his PhD degree in management and his PhD degree in accounting from Renmin University of China (中國人民大學) in June 2002 and July 2002 respectively. He received the title of senior accountant in 2005.

Mr. Lun MA (馬倫), aged 60, has served as a Supervisor of our Company since December 2015.

Mr. Ma has over 25 years of experience in financial accounting, treasury, corporate finance and taxation matters. He has served as the finance director of Tibet Silicon Valley Angel Venture Capital Co., Ltd. (西藏硅谷天使創業投資有限公司), a company primarily engaged in project investment, investment management and investment consulting, since September 2008 and was the finance manager of Shen Yang Fang Tian Co., Ltd. (瀋陽房天股份有限公司), a company primarily engaged in real estate, from August 1992 to August 2008.

Mr. Ma graduated from the department of economics of Shenyang Radio and Television University (瀋陽市廣播電視大學) with a major in industrial statistics in the PRC in July 1986, and has been an accountant since June 1992.

Mr. Jiashuai SONG (宋嘉帥), aged 26, graduated from Hubei Qichun No. 4 High School (湖北蕪春第四高級中學) in the PRC in June 2013 and has served as the employee Supervisor of our Company since June 2020.

Mr. Song joined our Company on September 19, 2018 as a specialist.

DIRECTORS, SUPERVISORS AND SENIOR MANAGEMENT

SENIOR MANAGEMENT

Our senior management is responsible for the day-to-day management of our business. The table below shows certain information in respect of the senior management of our Company:

Name	Age	Date of joining our Group	Date of appointment as senior management	Position	Key responsibilities	Relationship with Directors, Supervisors and senior management
Yan ZHOU (周延)	56	May 2015	September 2020	Executive Director, chairman of the Board and chief executive officer	Presiding over the overall work of the Company, directly in charge of the R&D management center	Brother of Mr. Jie ZHOU and Mr. Xin ZHOU
Wen GUAN (關文)	55	October 2016	February 2021	Executive Director, vice chairman of the Board and executive president	Assisting the chief executive officer to preside over the internal management work of the Company	None
Shaojun JIA (賈紹君)	59	August 2017	February 2021	Executive Director, executive president	In charge of the investment and construction department and equipment procurement department	None
Lixin NIU (牛立新)	50	October 2015	October 2015	Chief financial officer	Fully responsible for the financing management of the Company	None
Ling LIU (劉靈)	39	November 2011	November 2015	Secretary to the Board and chief investment officer	Serving as secretary to the Board, responsible for the office of the Board and investment management of the Company	None
Fan ZHANG (張凡)	36	May 2019	March 2022	Chief research officer	In charge of products and technology research and development; management of clinical trial registration	None
Zhenyu LIN (林振宇)	47	December 2018	March 2022	Chief marketing officer	In charge of marketing management	None
Wenjuan ZHOU (周文娟)	44	October 2018	March 2022	Chief public affairs officer	In charge of management of external affairs of our Company	None
Li MENG (孟麗)	58	April 2020	April 2022	Chief quality officer	In charge of the overall quality management of the Company	None

DIRECTORS, SUPERVISORS AND SENIOR MANAGEMENT

Mr. Yan ZHOU (周延), aged 56, is our executive Director, chairman of the Board and chief executive officer. For the biography of Mr. Zhou, see “—Board of Directors—Executive Directors” of this section.

Mr. Wen GUAN (關文), aged 55, is our executive Director, vice chairman of the Board, and general executive president. For the biography of Mr. Guan, see “—Board of Directors—Executive Directors” of this section.

Mr. Shaojun JIA (賈紹君), aged 59, is our executive Director and executive president. For the biography of Mr. Jia, see “—Board of Directors—Executive Directors” of this section.

Ms. Lixin NIU (牛立新), aged 50, has been serving as our chief financial officer since she joined our Company in October 2015. She is in charge of our Company’s financial management.

Ms. Niu has many years of experience in financial management. Prior to joining our Company, she served as the vice president (finance) of Liaoning Nuokang Bio-Pharmaceutical Co., Ltd. (諾康生物製藥有限公司) from December 2006 to December 2011.

She received her bachelor’s degree in accounting from Shenyang University of Technology in June 1993 and her executive master of business administration degree from W.P. Carey in May 2020. She was recognized by the Liaoning Provincial Department of Human Resources and Social Security as a senior accountant in December 2006 and recognized by the Liaoning Institute of Certified Public Accountants as a PRC certified public accountant in June 2009.

Ms. Ling LIU (劉靈), aged 39, has served various management positions since she joined our Company in November 2011 and has served as the secretary to the Board since November 2015 and chief investment officer since March 2022. She is in charge of the general office of the Board and investment management of the Company. Her main responsibilities include such matters as information disclosure, investor relations, equity management and corporate governance of the Company. She was appointed as a director of Liverna since May 2021.

Ms. Liu has been the chairwoman of the board of Rong’an Bio from December 2019 to June 2021. From February 2014 to January 2019, she was a director of AIM Weixin. From August 2007 to May 2011, Ms. Liu served as the manager of the research and development department and vice president at Tibet Bohai Investment Holding Co., Ltd. (西藏渤海投資集團有限公司), a company primarily engaged in industrial investment and investment management.

Ms. Liu received her executive master of business administration degree from W.P. Carey in May 2018.

Mr. Fan ZHANG (張凡), aged 36, has served as the chief research officer of our Company since March 2021. He is in charge of products and technology research and development and management of clinical trial registration.

Mr. Zhang joined our Group in May 2019 and has served as the general manager of AIM Explorer since March 2021. He was the deputy general manager of AIM Explorer from August 2019 to March 2021 and the research and development director of AIM Explorer from May 2019 to August 2019. From September 2013 to April 2018, he served various positions at Wuhan Bravovax Co., Ltd. (武漢博沃生物科技有限公司), a company primarily engaged in the research and development of vaccines, with the last position being the senior director of the fermentation engineering laboratory. From May 2010 to February 2013, he served various positions at Yuxi Walvax Biotechnology Co., Ltd. (玉溪沃森生物技術有限公司), a company primarily engaged in the research and development, production and sales of vaccine, with the last position being the head of pertussis fermentation of diphtheria tetanus pertussis vaccine department.

DIRECTORS, SUPERVISORS AND SENIOR MANAGEMENT

Mr. Zhang obtained his bachelor's degree in biological engineering from Wuhan Institute of Technology (武漢工程大學) in June 2009 and a master's degree in biopharmaceutical engineering from Huazhong University of Science and Technology (華科技大學) in December 2017.

Mr. Zhenyu LIN (林振宇), aged 47, has served as the chief marketing officer of our Company since March 2022. He is in charge of the marketing management of our Company.

Mr. Lin served as a vice president of our Company since he joined our Company in December 2018 to March 2022. From June 2015 to December 2018, he was the regional director in vaccine sales at Shenzhen Sanofi Pasteur Biological Products Co., Ltd. (深圳賽諾菲巴斯德生物製品有限公司), a company primarily engaged in research, development and sales of vaccine. From November 1997 to May 2015, he worked in various positions at Xian Janssen Pharmaceutical Ltd. (西安楊森製藥有限公司), a company primarily engaged in the research and development and sales of medicine, with the last position as the sales director of South China region. From August 1996 to October 1997, he worked as a teaching assistant in the anatomy teaching and research division of the department of basic medicine of Fujian Medical University (福建醫科大學).

Mr. Lin obtained his bachelor's degree in medicine from Fujian Medical College (福建醫學院) (currently known as the Fujian Medical University (福建醫科大學)) in July 1996, and his master's degree in business administration from Xiamen University (廈門大學) in September 2012.

Ms. Wenjuan ZHOU (周文娟), aged 44, joined our Company in October 2018 and has served as the chief public affairs officer of our Company since March 2022. She is in charge of the management of external affairs of our Company and is responsible for establishing good public relations and creating a good market environment for the development of the whole industrial chain of the Group.

From February 2011 to October 2018, Ms. Zhou served various positions at Shenzhen Sanofi Pasteur Biological Products Co., Ltd. (深圳賽諾菲巴斯德生物製品有限公司), including national regulatory exemption project development director, national key account management director, senior government affairs manager, and regional government affairs manager. From December 2008 to February 2011, she worked at Pfizer Pharmaceuticals Ltd. (輝瑞製藥有限公司) (formerly known as Wyeth Pharmaceutical Co., Ltd. (惠氏製藥有限公司)), a research and development-based multinational pharmaceutical company.

Ms. Zhou received a postgraduate diploma in managerial psychology from the Institute for China Business, HKU SPACE (香港大學SPACE中國商業學院) in May 2021.

Ms. Li MENG (孟麗), aged 58, has served as the chief quality officer of our Company since April 2022. She is in charge of the overall quality management of the Company.

Ms. Meng served as the vice president of quality management department of our Company since she joined our Company in April 2020. From August 2013 to April 2020, she served as the director of the quality management department of China Biotechnology Technology Co., Ltd. (中國生物技術股份有限公司), a company primarily engaged in the research and development, production and sale of biological medicine and the holding company of Beijing Tiantan Biological Products Corp. Ltd. (北京天壇生物製品股份有限公司) (SSE: 600161). From July 1985 to August 2013, Ms. Meng served various positions at Chengdu Institute of Biological Products Co., Ltd. (成都生物製品研究所(有限責任公司)), a company primarily engaged in the research and production of biological products, with her last position being the manager of the quality assurance department.

DIRECTORS, SUPERVISORS AND SENIOR MANAGEMENT

Ms. Meng received her bachelor's degree in health inspection from West China University of Medical Sciences (華西醫科大學) (currently known as West China Center of Medical Sciences of Sichuan University (四川大學華西醫學中心)) in the PRC in July 1985. From 1992 to 1994, she attended the post-university biologics course at the Post-University Biologics Continuing Education Committee of the Ministry of Health (衛生部大學後生物製品進修教學委員會) in the PRC, and received the completion certificate (equivalent to graduate level) in December 1994.

JOINT COMPANY SECRETARIES

Ms. Ling LIU, our joint company secretary, is also our secretary to the Board and chief investment officer. For the biography of Ms. Liu, see “—Senior Management” of this section.

Ms. Wing Chi LAM (林穎芝), aged 32, was appointed as one of the joint company secretaries of our Company on June 17, 2021. She has over eight years of experience in the corporate secretarial field. She is now a senior manager of the corporate services department of Tricor Services Limited and has been providing corporate secretarial and compliance services to Hong Kong listed companies as well as multinational, private and offshore companies. Ms. Lam currently serves as the company secretary and joint company secretary in Raffles Interior Limited (SEHK: 1376), China Fortune Financial Group Limited (SEHK: 290) and Canggang Railway Limited (SEHK: 2169), respectively.

Ms. Lam received her bachelor's degree in accounting from Hong Kong Shue Yan University. She is a chartered secretary, a chartered governance professional, an associate member of The Hong Kong Chartered Governance Institute (HKCGI) (formerly The Hong Kong Institute of Chartered Secretaries (HKICS)), and an associate member of The Chartered Governance Institute in the United Kingdom.

INTERESTS OF DIRECTORS, SUPERVISORS AND SENIOR MANAGEMENT

Save as disclosed above, to the best of the knowledge, information and belief of our Directors having made all reasonable enquiries, as of the Latest Practicable Date, there were no other matters with respect to the appointment of our Directors and Supervisors that need to be brought to the attention of the Shareholders and there was no information relating to our Directors and Supervisors that is required to be disclosed pursuant to Rules 13.51(2)(h) to (v) of the Listing Rules.

Save as disclosed above, as of the Latest Practicable Date, none of our Directors, Supervisors or senior management are related to other Directors, Supervisors or senior management of our Company.

Save as disclosed in the sections headed “Relationship with Controlling Shareholder”, “Substantial Shareholders” and “Appendix VI—D. Disclosure of Interests”, as of the Latest Practicable Date, none of our Directors and Supervisors held any interest in the securities within the meaning of Part XV of the SFO.

COMPETITION

Each of our Directors confirmed that as of the Latest Practicable Date, he/she did not have any interest in a business which competes or is likely to compete, directly or indirectly, with our business and requires disclosure under Rule 8.10 of the Listing Rules.

From time to time our non-executive Directors may serve on the boards of both private and public companies within the broader healthcare and medical industries. However, as these non-executive Directors are neither our substantial shareholders nor members of our executive management team, we believe that their interests in such companies as directors would not render us incapable of carrying on our business independently from other companies in which they may hold directorships from time to time.

DIRECTORS, SUPERVISORS AND SENIOR MANAGEMENT

REMUNERATION OF DIRECTORS, SUPERVISORS AND SENIOR MANAGEMENT

The remuneration (including fees, salaries, allowances, benefits in kind, performance-related bonuses, equity-settled share-based compensation expense and pension scheme contributions) paid to our Directors in 2019, 2020, 2021 and the four months ended April 30, 2022 were RMB4,716,000, RMB4,710,000, RMB901,456,000 and RMB2,011,000, respectively.

The remuneration (including fees, salaries, allowances, benefits in kind, performance-related bonuses, equity-settled share-based compensation expense and pension scheme contributions) paid to our Supervisors in 2019, 2020, 2021 and the four months ended April 30, 2022 were RMB1,698,000, RMB656,000, RMB560,000 and RMB205,000, respectively.

In 2019, 2020, 2021 and the four months ended April 30, 2022, the aggregate amount of remuneration paid to the five highest paid individuals of our Group (among which there was one, nil, one and nil Director respectively) were RMB13,077,872, RMB18,436,866, RMB920,813,000 and RMB10,697,456, respectively. During the Track Record Period, no remuneration was paid by us to, or receivable by, our Directors, Supervisors or the five highest paid individuals as an inducement to join or upon joining our Company as a compensation for loss of office in respect of the years ended December 31, 2019, 2020 and 2021 and the four months ended April 30, 2022.

Our Board will review and determine the remuneration and compensation packages of our Directors, Supervisors and senior management and will, following the Listing, receive recommendation from the Remuneration Committee which will take into account salaries paid by comparable companies, time commitment and responsibilities of our Directors and Supervisors and the performance of our Group.

Save as disclosed above, no other payments had been made, or are payable, by any member of our Group to our Directors and Supervisors during the Track Record Period. For additional information on our Directors and Supervisors during the Track Record Period as well as information on the five highest paid individuals, see Notes 9 and 10 in the Accountants' Report set out in Appendix I to this prospectus.

CORPORATE GOVERNANCE

In accordance with relevant PRC laws and regulations, the Articles and the Corporate Governance Code in Appendix 14 to the Listing Rules, we have established three board committees, namely, the audit committee (the “**Audit Committee**”), the remuneration and appraisal committee (the “**Remuneration Committee**”) and the nomination committee (the “**Nomination Committee**”). Additionally, to cater for our internal governance needs, we have established a strategy committee (the “**Strategy Committee**”) and a compliance and risk control committee (the “**Compliance and Risk Control Committee**”).

Audit Committee

We have established the Audit Committee with terms of reference in compliance with the relevant PRC laws and regulations and Rule 3.21 of the Listing Rules and paragraph C.3 of the Corporate Governance Code as set out in Appendix 14 to the Listing Rules. The Audit Committee consists of Professor Ker Wei PEI, Mr. Hui OUYANG, Mr. Xiaoguang GUO, Mr. Jie ZHOU and Mr. Xin ZHOU. The primary duties of the Audit Committee are to review and supervise the financial reporting process, risk management and internal control system of our Group. Professor Ker Wei PEI, being the chairman of the Audit Committee, is appropriately qualified as required under Rules 3.10(2) and 3.21 of the Listing Rules.

DIRECTORS, SUPERVISORS AND SENIOR MANAGEMENT

Remuneration Committee

We have established the Remuneration Committee with terms of reference in compliance with the relevant PRC laws and regulations and paragraph B.1 of the Corporate Governance Code as set out in Appendix 14 to the Listing Rules. The Remuneration Committee consists of Mr. Xiaoguang GUO, Professor Ker Wei PEI, Ms. Jie WEN, Mr. Yan ZHOU and Mr. Wen GUAN with Mr. Xiaoguang GUO being the chairman of the committee. The primary duties of the Remuneration Committee are to review and make recommendation to the Board regarding the terms of remuneration packages, bonuses and other compensation payable to our Directors and senior management.

Nomination Committee

We have established the Nomination Committee with terms of reference in compliance with the relevant PRC laws and regulations and paragraph A.5 of the Corporate Governance Code as set out in Appendix 14 to the Listing Rules. The Nomination Committee consists of Mr. Hui OUYANG, Mr. Xiaoguang GUO and Mr. Yan ZHOU with Mr. Hui OUYANG being the chairman of the committee. The primary duties of the Nomination Committee are to make recommendation to the Board regarding the appointment of Director and senior management.

Strategy Committee

We have established the Strategy Committee. The Strategy Committee consists of Mr. Yan ZHOU, Mr. Jichen ZHAO, Ms. Jie WEN, Mr. Hui OUYANG and Mr. Ker Wei PEI, with Ms. Jie WEN being the chairwoman of the committee. The primary duties of the Strategy Committee are to conduct research on and provide advice in relation to our long term development strategies and major investment decisions.

Compliance and Risk Control Committee

We have established the Compliance and Risk Control Committee. The Compliance and Risk Control Committee consists of Mr. Yan ZHOU, Mr. Wen GUAN, Mr. Shaojun JIA, Mr. Jie ZHOU and Ms. Aijun WANG, with Mr. Yan ZHOU being the chairman of the committee. The primary duties of the Compliance and Risk Control Committee are to conduct research on and assess the operational compliance and risk control of the Company, and to provide advice in relation to improvement of corporate governance and risk control of the Company.

Board Diversity Policy

The Board has adopted a board diversity policy (the “**Board Diversity Policy**”) in order to enhance the effectiveness of the Board and to maintain a high standard of corporate governance. Pursuant to the Board Diversity Policy, the Company seeks to achieve diversity of the Board through the consideration of a wide range of factors, including but not limited to gender, age, cultural and educational background, industry experience, technical capabilities, professional qualifications and skills, knowledge and length of service. The ultimate decision will be based on merit and contribution that the selected candidates will bring to the Board.

We have taken, and will continue to take, steps to promote gender diversity at all levels of our Company, including but not limited to our Board and the senior management levels. In particular, Ms. Aijun WANG, one of our non-executive Directors, Ms. Jie WEN, one of our independent non-executive Directors, Ms. Lixin NIU, our chief financial officer fully responsible for the financing management of the Company, Ms. Ling LIU, secretary to the Board and our chief investment officer who is in charge of the office of the Board and Ms. Wenjuan Zhou, our chief public affairs officer who is responsible for management of external affairs of our Company, are all female and an integral part of our Board and senior

DIRECTORS, SUPERVISORS AND SENIOR MANAGEMENT

management team. Going forward, we will continue to work to enhance gender diversity of our Board. Our Board will use its best endeavors to appoint female Directors to our Board after the Listing and our Nomination Committee will use its best endeavors to identify and recommend suitable female candidates to our Board for its consideration of appointment of Directors after the Listing. We will also continue to ensure that there is gender diversity when recruiting staff from mid to senior level, such that we will have a pipeline of female management and potential successors to our Board in due time to ensure gender diversity of our Board. Our Group will continue to emphasize training of female talents and provide long-term development opportunities for our female staff.

Our Directors have a balanced mixed of knowledge and skills, including overall management and strategic development, finance, accounting and risk management in addition to industry experience in healthcare and pharmaceuticals. They obtained degrees in various majors including business administration, finance, accounting, economics and chemistry. We have four independent non-executive Directors with different industry background, representing more than one-third of the members of our Board. Taking into account our existing business model and specific needs as well as the different background of our Directors, the composition of our Board satisfies our Board Diversity Policy.

Our Nomination Committee is responsible for compliance with relevant codes governing board diversity under the Corporate Governance Code. After the Listing, the Nomination Committee will review the Board Diversity Policy from time to time to ensure its continued effectiveness and we will disclose in our corporate governance report the implementation results of the Board Diversity Policy annually.

CORPORATE GOVERNANCE CODE

Pursuant to code provision A.2.1 of the Corporate Governance Code, companies listed on the Stock Exchange are expected to comply with, but may choose to deviate from, the requirement that the roles of chairman and chief executive should be separate and should not be performed by the same individual. We do not have a separate chairman of the Board and chief executive officer and Mr. Yan ZHOU, the chairman of the Board and chief executive officer of our Company, currently performs both of these roles.

The Board believes that, in view of his experience, personal profile and his roles in our Company as mentioned above, Mr. Yan ZHOU has extensive understanding of our business as our chief executive officer and is therefore the Director best suited to identify strategic opportunities and the focus of the Board. The combined role of chairman of the Board and chief executive officer of our Company by the same individual can promote the effective execution of strategic initiatives and facilitate the flow of information between management and the Board. The Board will continue to review and consider splitting the roles of chairman of the Board and the chief executive officer at an appropriate time by taking into account the circumstances of our Group as a whole. Save for the aforementioned matter, we expect to comply with the Corporate Governance Code after the Listing.

COMPLIANCE ADVISOR

We have appointed Somerley Capital Limited as our compliance advisor (the “**Compliance Advisor**”) pursuant to Rule 3A.19 of the Listing Rules. Our Compliance Advisor will provide us with guidance and advice as to compliance with the Listing Rules and applicable Hong Kong laws. Pursuant to Rule 3A.23 of the Listing Rules, our Compliance Advisor will advise our Company in certain circumstances including: (a) before the publication of any regulatory announcement, circular, or financial report; (b) where a transaction, which might be a notifiable or connected transaction, is contemplated, including share issues and share repurchases; (c) where we propose to use the proceeds of the Global Offering in a manner different from that detailed in this prospectus or where the business activities, development or results of our Group deviate from any forecast, estimate or other information in this prospectus; and (d) where the Stock Exchange makes an inquiry to our Company under Rule 13.10 of the Listing Rules.

DIRECTORS, SUPERVISORS AND SENIOR MANAGEMENT

Meanwhile, pursuant to Rule 19A.06(3) of the Listing Rules, the Compliance Advisor shall inform us on a timely basis of any amendment or supplement to the Listing Rules issued by the Stock Exchange from time to time and any new or amended law, regulation or code in Hong Kong applicable to our Company. The Compliance Advisor shall also provide advice to us on the continuing requirements under the Listing Rules and applicable laws and regulations.

The term of appointment of our Compliance Advisor shall commence on the Listing Date and is expected to end on the date on which we comply with Rule 13.46 of the Listing Rules in respect of our financial results for the first full financial year commencing after the Listing Date.

SHARE CAPITAL

BEFORE THE GLOBAL OFFERING

As of the Latest Practicable Date, the registered capital of our Company was RMB1,199,999,999, divided into 1,199,999,999 Domestic Shares with a nominal value of RMB1.00 each.

UPON COMPLETION OF THE GLOBAL OFFERING

The issued share capital of our Company upon completion of the Global Offering will be as follows:

Description of Shares	Enlarged issued share capital after the Global Offering and the Conversion of Domestic Shares into H Shares (assuming the Over-allotment Option and the options under the Pre-IPO ESOP are not exercised)		Enlarged issued share capital after the Global Offering and the Conversion of Domestic Shares into H Shares (assuming the Over-allotment Option is exercised in full and the options under the Pre-IPO ESOP are not exercised)	
	Number of Shares	Approximate percentage of the total enlarged share capital	Number of Shares	Approximate percentage of the total enlarged share capital
Domestic Shares	718,888,888	59.43%	718,888,888	59.35%
H Shares to be converted from Domestic Shares	481,111,111	39.77%	481,111,111	39.72%
H Shares issued pursuant to the Global Offering	9,714,000	0.80%	11,171,000	0.92%
Total	1,209,713,999	100%	1,211,170,999	100%

The Conversion of Domestic Shares into H Shares will involve an aggregate of 481,111,111 Domestic Shares held by 60 out of 67 existing Shareholders (the “**Full Circulation Participating Shareholders**”), representing 39.77% of total issued Shares of the Company upon completion of the Conversion of Domestic Shares into H Shares and the Global Offering (assuming the Over-allotment Option is not exercised). Set out below are the shareholding of the Full Circulation Participating Shareholders immediately before the Conversion of Domestic Shares into H Shares and the Global Offering and their respective interest in H Shares immediately after the Conversion of Domestic Shares into H Shares and the Global Offering (assuming the Over-allotment Option is not exercised).

No.	Name of Shareholders	Domestic Shares subscribed	Approximate percentage of interest in our Company as of the Latest Practicable Date and immediately prior to the Global Offering and the Conversion of Domestic Shares into H Shares (%)	Number of converted H Shares	Approximate percentage of H Shares in total issued shares of our Company immediately after the Global Offering and the Conversion of Domestic Shares into H Shares (assuming the Over-allotment Option is not exercised) (%)
1.	Tibet Yingfeng	100,000,000	8.3333%	55,700,000	4.6044%
2.	Ningbo Free Trade Zone	54,051,428	4.5043%	54,051,428	4.4681%

SHARE CAPITAL

No.	Name of Shareholders	Domestic Shares subscribed	Approximate percentage of interest in our Company as of the Latest Practicable Date and immediately prior to the Global Offering and the Conversion of Domestic Shares into H Shares (%)	Number of converted H Shares	Approximate percentage of H Shares in total issued shares of our Company immediately after the Global Offering and the Conversion of Domestic Shares into H Shares (assuming the Over-allotment Option is not exercised) (%)
3.	Lhasa Meihua	50,000,000	4.1667%	25,000,000	2.0666%
4.	Shenyang Xixi	40,000,000	3.3333%	40,000,000	3.3066%
5.	Zongheng Tianxia	40,000,000	3.3333%	14,000,000	1.1573%
6.	Yongzhou Qingteng	40,000,000	3.3333%	40,000,000	3.3066%
7.	Zhongrenxing	33,390,000	2.7825%	23,254,765	1.9223%
8.	Mr. Tingdong YANG	30,000,000	2.5000%	22,500,000	1.8599%
9.	Ruishang Venture Capital	28,300,000	2.3583%	18,000,000	1.4880%
10.	Everest Investment	25,150,000	2.0958%	5,150,000	0.4257%
11.	CMB Langyao	19,240,000	1.6033%	19,240,000	1.5905%
12.	Jiaxing Hekang	18,150,000	1.5125%	10,150,000	0.8390%
13.	CMB Growth II	17,990,000	1.4992%	17,990,000	1.4871%
14.	Linshi Desheng	15,000,000	1.2500%	7,500,000	0.6200%
15.	Mr. Guanqun SUN	14,000,000	1.1667%	14,000,000	1.1573%
16.	Hengqin Ruifan	12,418,150	1.0348%	2,418,150	0.1999%
17.	Ms. Jing HUANG	11,876,940	0.9897%	1,876,940	0.1552%
18.	Lancheng Tongliang	8,615,385	0.7179%	615,385	0.0509%
19.	Mr. Zhen LIN	8,538,400	0.7115%	8,538,400	0.7058%
20.	Tongchuang Jiaxing	8,480,000	0.7067%	8,480,000	0.7010%
21.	Qingdao Penglong	8,065,755	0.6721%	2,392,102	0.1977%
22.	Shanghai Jiexuan	8,000,000	0.6667%	1,600,000	0.1323%
23.	Beijing Yizhuang	7,500,000	0.6250%	7,500,000	0.6200%
24.	Chenxi No. 1	7,200,000	0.6000%	5,400,000	0.4464%
25.	Tianjin Jingeng	6,000,000	0.5000%	6,000,000	0.4960%
26.	Gao Ling Xiheng	5,653,514	0.4711%	2,803,514	0.2318%
27.	Yunnan Ziyongchen	5,500,000	0.4583%	1,200,000	0.0992%
28.	Chenxi No. 3	5,400,000	0.4500%	4,050,000	0.3348%
29.	Everest No. 2 Investment	5,160,000	0.4300%	5,160,000	0.4265%
30.	Beijing Huakong	5,058,571	0.4215%	1,008,571	0.0834%
31.	Pude Zhengyuan	5,000,000	0.4167%	2,500,000	0.2067%
32.	Shenzhen Hebang	5,000,000	0.4167%	5,000,000	0.4133%
33.	Puhua Yuchen	5,000,000	0.4167%	5,000,000	0.4133%
34.	Hengqin Qijing	4,458,562	0.3715%	3,458,562	0.2859%
35.	Mr. Xiaojun HUANG	3,000,000	0.2500%	900,000	0.0744%
36.	Beijing Key Industry	3,000,000	0.2500%	3,000,000	0.2480%

SHARE CAPITAL

				Approximate percentage of H Shares in total issued shares of our Company immediately after the Global Offering and the Conversion of Domestic Shares into H Shares (assuming the Over-allotment Option is not exercised) (%)
			Approximate percentage of interest in our Company as of the Latest Practicable Date and immediately prior to the Global Offering and the Conversion of Domestic Shares into H Shares (%)	
No.	Name of Shareholders	Domestic Shares subscribed	Domestic Shares into H Shares (%)	Number of converted H Shares
37.	Shanghai Kangcheng	2,988,452	0.2490%	2,988,452
38.	Hengqin Yuanyan	2,988,452	0.2490%	2,988,452
39.	Jiequan Tianhui Sumintou	2,988,452	0.2490%	2,988,452
40.	Hongtao Kexuan	2,800,000	0.2333%	2,800,000
41.	Shanghai Hutong	2,690,000	0.2242%	2,690,000
42.	Mr. Bole MA	2,400,000	0.2000%	1,200,000
43.	Zhuhai Ruijin	2,236,523	0.1864%	2,236,523
44.	Qingdao Huakong	2,136,000	0.1780%	426,000
45.	Shenzhen Fenghong	2,000,000	0.1667%	2,000,000
46.	Zhiming Yuanyang	1,880,000	0.1567%	1,580,000
47.	Langma No. 25	1,800,000	0.1500%	1,800,000
48.	Langma No. 23	1,600,000	0.1333%	1,600,000
49.	Langma No. 24	1,600,000	0.1333%	1,600,000
50.	Mr. Wenkai CHEN	1,500,000	0.1250%	750,000
51.	Lancheng Chengchun	1,384,615	0.1154%	214,615
52.	Tongchuang Wenjian	1,280,800	0.1067%	1,280,800
53.	Shenzhen Gongying	1,250,000	0.1042%	1,250,000
54.	Tongchuang Jiazhi	1,160,000	0.0967%	1,160,000
55.	Laobaixing	1,150,000	0.0958%	1,150,000
56.	Hainan Jiashui	1,050,000	0.0875%	1,050,000
57.	Mr. Hua WU	850,000	0.0708%	850,000
58.	Suqian Lingdao	810,000	0.0675%	810,000
59.	Shenzhen Chongshi	210,000	0.0175%	210,000
60.	Tibet Jiaze	50,000	0.0042%	50,000
Total		704,999,999	58.7500%	481,111,111

SHARE CLASSES

Upon completion of the Global Offering and Conversion of Domestic Shares into H Shares, we will have two classes of Shares: H Shares as one class and Domestic Shares as another class. Domestic Shares and H Shares are all ordinary Shares in the share capital of our Company. However, apart from certain qualified domestic institutional investors in the PRC and the qualified PRC investors under the Shanghai—Hong Kong Stock Connect or the Shenzhen—Hong Kong Stock Connect and other persons who are entitled to hold our H Shares pursuant to relevant PRC laws and regulations or upon approvals of any competent authorities (such as certain of our existing Shareholders whose Domestic Shares will be converted to H Shares pursuant to approval by the CSRC), H Shares generally cannot be subscribed for by or traded between legal or natural persons of the PRC.

SHARE CAPITAL

The differences between the two classes of Shares and provisions on class rights, the dispatch of notices and financial reports to Shareholders, registration of Shares on different registers of Shareholders, the method of share transfer and appointment of dividend receiving agents are set out in the Articles of Association and summarized in “Appendix V—Summary of Articles of Association” in this prospectus. The rights conferred on any class of Shareholders may not be varied or abrogated unless approved by a special resolution of the general meeting of Shareholders and by the holders of Shares of that class at a separate meeting. The circumstances which shall be deemed to be a variation or abrogation of the rights of a class are listed in “Appendix V—Summary of Articles of Association” in this prospectus.

Except for the differences above, Domestic Shares and H Shares will however rank *pari passu* with each other in all other respects and, in particular, will rank equally for all dividends or distributions declared, paid or made after the date of this prospectus. All dividends in respect of H Shares are to be paid by us in Hong Kong dollars or in the form of H Shares.

CONVERSION OF DOMESTIC SHARES INTO H SHARES

Our Domestic Shares are not listed or traded on any stock exchange. Based on procedures disclosed in this section, holders of Domestic Shares may convert their Domestic Shares into H Shares. Such conversion is subject to the Listing Rules, including the satisfaction of public float requirements. In addition, the conversion of Domestic Shares and listing and trading of the converted H Shares shall have gone through any requisite internal approval process of our Company and complied with the regulations prescribed by the relevant regulatory authorities, including the CSRC and the Stock Exchange.

Listing Review and Approval by the CSRC

In accordance with the Guidelines for the “Full Circulation” Program for Domestic Unlisted Shares of H-share Listed Companies (《H股公司境内未上市股份申请「全流通」业务指引》) announced by the CSRC, H-share listed companies that apply for the conversion of domestic shares into H shares for listing and circulation on the Stock Exchange shall file the application with the CSRC according to the administrative licensing procedures necessary for the “examination and approval of public issuance and listing (including additional issuance) of overseas shares by a joint stock company”. An H-share listed company may apply for a “Full Circulation” separately or when applying for refinancing overseas. An unlisted domestic joint stock company may apply for “full circulation” when applying for an overseas initial public offering.

We applied for a “full circulation” in relation to 481,111,111 Domestic Shares held by the Full Circulation Participating Shareholders and have received the reply from the CSRC dated September 2, 2022 approving these Domestic Shares to be converted into H Shares. The H Shares may be listed on the Stock Exchange upon completion of the conversion. This reply shall remain effective within 12 months from the date of approval.

Listing Approval by the Stock Exchange

We have applied to the Listing Committee of the Stock Exchange for the granting of listing of, and permission to deal in, our H Shares to be issued pursuant to the Global Offering (including any H Shares which may be issued pursuant to the exercise of the Over-allotment Option) and the H Shares to be converted from 481,111,111 Domestic Shares, which is subject to the approval by the Stock Exchange.

We will perform the following procedures for the Conversion of Domestic Shares into H Shares after receiving the approval of the Stock Exchange: (1) giving instructions to our H Share Registrar regarding the relevant share certificates of the converted H Shares; and (2) enabling the converted H Shares to be accepted as eligible securities by HKSCC for deposit, clearance and settlement in the CCASS. The Full Circulation Participating Shareholders may only deal in the H Shares upon completion of the domestic procedures as disclosed in this section.

SHARE CAPITAL

Domestic Procedures

The Full Circulation Participating Shareholders may only deal in the H Shares upon completion of the below procedures for the registration, deposit and transaction settlement in relation to the conversion and listing:

- i. We will appoint CSDC as the nominal holder to deposit the relevant securities at CSDC (Hong Kong), which will then deposit the securities at HKSCC in its own name. CSDC, as the nominal holder of the Full Circulation Participating Shareholders, shall handle all custody, maintenance of detailed records, cross-border settlement and corporate actions, etc. relating to the converted H Shares for the Full Circulation Participating Shareholders;
- ii. We will engage a domestic securities company (the “**Domestic Securities Company**”) to provide services such as the transmission of sale orders and trading messages in respect of the converted H Shares. The Domestic Securities Company will engage a Hong Kong securities company (the “**Hong Kong Securities Company**”) for the settlement of transactions. We will make an application to CSDC, Shenzhen Branch for the maintenance of a detailed record of initial holding of the converted H Shares. Meanwhile, we will submit applications for a domestic transaction commission code and abbreviation, which shall be provided by CSDC, Shenzhen Branch as authorized by SZSE;
- iii. The SZSE shall authorize Shenzhen Securities Communication Co., Ltd. to provide services relating to transmission of trading orders and trading messages in respect of the converted H Shares between the Domestic Securities Company and the Hong Kong Securities Company, and the real-time market forwarding services of the converted H Shares;
- iv. According to the Notice of the SAFE on Issues Concerning the Foreign Exchange Administration of Overseas Listing (《國家外匯管理局關於境外上市外匯管理有關問題的通知》), the Full Circulation Participating Shareholders shall complete the overseas shareholding registration with the local foreign exchange administration bureau before they sell any converted H Shares. After completing such overseas shareholding registration, the Full Circulation Participating Shareholders shall open a specified bank account for the holding of overseas shares by domestic investors at a domestic bank with relevant qualifications and open a fund account for the H Share “Full Circulation” at the Domestic Securities Company. The Domestic Securities Company shall open a securities trading account for the H Share “Full Circulation” at the Hong Kong Securities Company; and
- v. The Full Circulation Participating Shareholders shall submit trading orders with respect to the converted H Shares through the Domestic Securities Company. Such trading orders of the Full Circulation Participating Shareholders will be submitted to the Stock Exchange through the securities trading account opened by the Domestic Securities Company at the Hong Kong Securities Company. Upon completion of the transaction, settlements between each of the Hong Kong Securities Company and CSDC (Hong Kong), CSDC (Hong Kong) and CSDC, CSDC and the Domestic Securities Company, and the Domestic Securities Company and the Full Circulation Participating Shareholders, will all be conducted separately.

As a result of the Conversion of Domestic Shares into H Shares, shareholding of the Full Circulation Participating Shareholders in our Domestic Share capital shall be reduced by the number of Domestic Shares converted, and the number of H Shares shall be increased by the number of converted H Shares.

SHARE CAPITAL

TRANSFER OF SHARES ISSUED PRIOR TO THE LISTING DATE

The PRC Company Law provides that, in relation to the public share offering of a company, the shares of the company which have been issued prior to the offering shall not be transferred within one year from the date of the listing. Accordingly, Shares issued by our Company prior to the Listing Date shall be subject to this statutory restriction and shall not be transferred for a period of one year from the Listing Date.

REGISTRATION OF SHARES NOT LISTED ON AN OVERSEAS STOCK EXCHANGE

According to the Notice of Centralized Registration and Deposit of Non-overseas Listed Shares of Companies Listed on an Overseas Stock Exchange (《關於境外上市公司非境外上市股份集中登記存管有關事宜的通知》) issued by the CSRC on March 28, 2007, our Company is required to register and deposit our Shares that are not listed on the overseas stock exchange with the CSDC within 15 Business Days upon the Listing Date and provide a written report to the CSRC regarding the centralized registration and deposit of our Shares that are not listed on the overseas stock exchange as well as the current offering and listing of our H Shares.

GENERAL MANDATE TO REPURCHASE SHARES

Subject to the Global Offering becoming unconditional, our Directors have been granted a general mandate (the “**Repurchase Mandate**”) to exercise all the powers of our Company to repurchase H Shares not more than 10% of the total number of H Shares in issue immediately following the completion of the Global Offering (without taking into account any H Shares that may be issued upon the exercise of the Over-allotment Option) and the Conversion of Domestic Shares into H Shares.

The Repurchase Mandate only relates to repurchases made on the Stock Exchange, and which are made in accordance with the Listing Rules and all applicable laws. A summary of the relevant Listing Rules is set out in “Appendix VI—Statutory and General Information—A. Further Information About Our Company—5. Restrictions on Share Repurchase”.

The Repurchase Mandate will expire upon the earliest occurrence of any of the following:

- at the conclusion of our next annual general meeting;
- on the date by which our next annual general meeting is required by the Articles or the Companies Ordinance to be held; or
- when the authority given to our Directors is revoked or varied by an ordinary resolution passed by our Shareholders in general meeting.

Further details of the Repurchase Mandate are set out in “Appendix VI—Statutory and General Information—A. Further Information About Our Company—4. Resolutions Passed by Our Shareholders in Relation to the Global Offering and the Conversion of Domestic Shares into H Shares”.

SUBSTANTIAL SHAREHOLDERS

So far as is known to our Directors, as of the Latest Practicable Date and immediately prior to and following the completion of the Global Offering and the Conversion of Domestic Shares into H Shares (assuming the Over-allotment Option and the options under the Pre-IPO ESOP are not exercised), the following persons have interests and/or short positions in the Shares or underlying Shares which fall to be disclosed pursuant to the provisions of Divisions 2 and 3 of Part XV of the SFO:

Name of Shareholder	Nature of Interest	Class of Shares	Shares held as of the Latest Practicable Date and immediately prior to the Global Offering		Shares held as of the Latest Practicable Date and immediately upon the completion of the Global Offering and the Conversion of Domestic Shares into H Shares (assuming the Over-allotment Option and the options under the Pre-IPO ESOP are not exercised)		Approximate percentage of interest in the relevant class of Shares of our Company	
			Number	Approximate percentage of interest in our Company	Class of Shares	Number	Approximate percentage of interest in our Company	Approximate percentage of interest in the relevant class of Shares of our Company
Mr. Yan ZHOU ⁽¹⁾	Beneficial interest	Domestic Shares	200,000,000	16.6667%	Domestic Shares	200,000,000	16.53%	27.82%
	Interest in controlled corporation	Domestic Shares	200,000,000	16.6667%	Domestic Shares	200,000,000	16.53%	27.82%
	Interest in controlled corporation	Domestic Shares	10,135,235 ⁽²⁾	0.8446%	Domestic Shares	10,135,235	0.84%	1.41%
	Interest in controlled corporation	Domestic Shares	23,254,765 ⁽²⁾	1.9379%	H Shares	23,254,765	1.92%	4.74%
Tibet Sincere Heart	Beneficial interest	Domestic Shares	200,000,000	16.6667%	Domestic Shares	200,000,000	16.53%	27.82%
Tibet Yingfeng	Beneficial interest	Domestic Shares	44,300,000 ⁽³⁾	3.6917%	Domestic Shares	44,300,000	3.66%	6.16%
		Domestic Shares	55,700,000 ⁽³⁾	4.6417%	H Shares	55,700,000	4.60%	11.35%

Notes:

- (1) Mr. Yan ZHOU directly owns 200,000,000 Domestic Shares. In addition to his direct shareholding in the Company, Mr. Yan ZHOU holds 99.99% of the registered capital of Tibet Sincere Heart. He is also the sole shareholder of Shenyang Dongjian Yuanfang Enterprise Management Co., Ltd. (瀋陽洞見遠方企業管理有限公司), the general partner of Zhongrenxing. As such, Mr. Yan ZHOU is deemed to be interested in the Domestic Shares held by Tibet Sincere Heart and Zhongrenxing under the SFO.
- (2) Immediately upon the completion of the Global Offering and the Conversion of Domestic Shares into H Shares, Zhongrenxing will hold 10,135,235 Domestic Shares and will hold 23,254,765 H Shares that will have been converted from Domestic Shares under the Conversion of Domestic Shares into H Shares.
- (3) Immediately upon the completion of the Global Offering and the Conversion of Domestic Shares into H Shares, Tibet Yingfeng will hold 44,300,000 Domestic Shares and will hold 55,700,000 H Shares that will have been converted from Domestic Shares under the Conversion of Domestic Shares into H Shares.

Save as disclosed above, our Directors are not aware of any person who will, immediately prior to and following the completion of the Global Offering and the Conversion of Domestic Shares into H Shares (assuming the Over-allotment Option and the options under the Pre-IPO ESOP are not exercised), have interests or short positions in any Shares or underlying Shares, which would fall to be disclosed to us under the provisions of Divisions 2 and 3 of Part XV of the SFO.

FINANCIAL INFORMATION

You should read the following discussion and analysis of our financial condition and results of operations in conjunction with our consolidated financial statements included in the Accountants' Report in Appendix I to this prospectus, which has been prepared in accordance with IFRS. The following discussion and analysis contain forward-looking statements that involve risks and uncertainties. Our actual results could differ materially from those anticipated in these forward-looking statements due to various factors, including those set forth in "Forward-Looking Statements", "Risk Factors" and elsewhere in this prospectus.

OVERVIEW

We are the second largest vaccine company in China in terms of 2021 approved lot release volume (excluding COVID-19 vaccines), accounting for a 7.4% market share following state-owned CNBG. In terms of 2021 sales revenue (excluding COVID-19 vaccines), we accounted for a 2.1% market share in the PRC, whereas CNBG is the largest market player in China. Among all privately-owned vaccine companies, we are the largest one in terms of 2021 approved lot release volume. As a major vaccine company in China, we cover the full value chain from research and development to manufacturing and to commercialization. According to CIC, we are the only China-based vaccine player that has all five proven human vaccine platform technologies worldwide, namely bacterial vaccine technologies, viral vaccine technologies, genetically engineered vaccine technologies, combination vaccine technologies and mRNA vaccine technologies, with at least one approved product or one vaccine candidate at CTA or clinical stages under each platform. Our total revenue was RMB951.6 million, RMB1,638.0 million and RMB1,570.1 million in 2019, 2020 and 2021, respectively. Our gross profit was RMB732.8 million, RMB1,354.1 million and RMB1,294.7 million in 2019, 2020 and 2021, respectively. Our revenue and gross profit grew rapidly by 72.1% and 84.8% respectively from 2019 to 2020; then slightly decreased by 4.1% and 4.4% respectively in 2021 mainly due to the impact of the recurrence of COVID-19 in certain cities in China since late July 2021 on our sales volume in the second half of 2021. Our profit significantly increased by 234.2% from RMB119.8 million in 2019 to RMB400.4 million in 2020. We incurred a substantial loss of RMB675.9 million in 2021, which was resulted primarily from (i) our share-based compensation expenses totaling RMB952.1 million, including a one-off share-based compensation expense of RMB896.9 million and other share-based compensation expenses of RMB55.2 million for other share awards and options granted to our employees, and (ii) an increase in research and development costs from RMB157.8 million to RMB307.4 million to develop our rich pipeline of 22 vaccine candidates. Due to a slowdown in sales amid COVID-19 outbreaks in China, from the four months ended April 30, 2021 to the same period in 2022, our revenue decreased from RMB464.9 million to RMB275.3 million and our gross profit decreased from RMB384.1 million to RMB220.0 million. We had a profit of RMB57.7 million in the four months ended April 30, 2021 but recorded a loss of RMB95.8 million in the same period in 2022, mainly driven by the drop in revenue and as we rapidly advanced clinical trials of our vaccine candidates, which drove up our research and development costs.

FINANCIAL INFORMATION

SIGNIFICANT FACTORS AFFECTING OUR FINANCIAL CONDITION AND RESULTS OF OPERATIONS

Our results of operations have been, and are expected to continue to be, affected by a number of factors, many of which may be beyond our control. We operate in the vaccine industry and our financial condition and results of operations are influenced by the macroeconomic factors affecting the industry, such as the COVID-19 pandemic, policy and regulatory changes, and global economic condition. Additionally, we believe our financial condition and results of operations are affected by a number of company-specific factors, including the key factors as discussed below:

The Growth of the Overall PRC Vaccine Market and Its Sub-markets

Our business expansion and revenue growth depend on the growth of the overall vaccine market in the PRC. Favorable government policies, technological advancement and increasing awareness and affordability of vaccination have driven the growth of the PRC vaccine industry. According to CIC, the PRC was the second largest vaccine market in the world in 2021 with sales revenue accounting for 17.0% of the total global market share. The PRC vaccine market in terms of sales revenue grew from RMB25.1 billion in 2015 to RMB76.1 billion in 2021, and is expected to continue to grow to RMB215.7 billion in 2030 (excluding COVID-19 vaccines), which is significantly more rapid than the global market. Our revenue generated from the sales of our commercialized vaccine products, including our market-leading human rabies vaccine (Vero cell) and recombinant HBV vaccines (Hansenula Polymorpha), has and is expected to be driven by the demand of the respective vaccine sub-markets. See “Industry Overview” for the market size of the PRC vaccine market in general and for the markets of our vaccine products.

In addition to the overall growth of the PRC vaccine market, we have benefited from and expect to continue to benefit from favorable industry trends such as continuing increases in demand for more and better vaccines, public awareness of immunization necessity especially after the COVID-19 pandemic outbreak, purchasing power of vaccinees, and government expenditure for and policy support of preventive healthcare. Furthermore, the on-going COVID-19 pandemic as well as the aging population growth have also contributed to and are expected to continue to contribute to the overall increase in the demand for vaccines. We believe we are well positioned to benefit from market opportunities in the fast-growing PRC vaccine industry and expect our results of operations to continue to improve in the future.

Governmental Regulations and Policies on Vaccine Industry in the PRC

Our business is subject to extensive government regulations and supervision. Government policies, regulations and their implementation and enforcement have historically had, and are expected to continue to have, a significant impact on the vaccine industry, the supply and demand of vaccine products and market competitive landscape of different sub-markets in the PRC. Currently, the vaccine products in the PRC market are categorized into Class I vaccines and Class II vaccines, which have different pricing policies and we are required to participate in the public tender process held by the national or province-level CDCs so as to sell our vaccine products into relevant provinces. See “Regulatory Overview—PRC Regulation—Regulatory Provisions—Regulations Relating to Drugs.” During the Track Record Period, we sold substantially all of our vaccine products to CDCs in the PRC and a majority of our revenue was derived from our Class II vaccines, which generally have higher profit margins and enjoy greater pricing flexibility during the public tender process as compared to Class I vaccine products. Therefore, whether to win bids, changes in governmental policies or any uncertainties associated with the public tender process will influence our pricing, sales volume and profits.

FINANCIAL INFORMATION

In recent years, the PRC government implemented a number of policies that are favorable to the development and sales of high-quality and innovative vaccines. For example, the Fourteenth Five Year Plan of the PRC sets out the goals of developing a strong public health system, especially innovative medicine such as vaccines, which will help raise awareness of the importance and necessity of high-quality vaccines, stimulate the overall demand for vaccines and further contribute to our business growth. Meanwhile, the vaccine industry has and will continue to be subject to increasingly tightened regulatory requirements, especially after the Changsheng Incident, the PRC authorities further strengthened administration and supervision policies for all vaccine manufacturers, including more scrutiny on the GMP certification process, due to which our GMP certificate renewal process for human rabies vaccine (Vero cell) took five more months in 2018, which significantly affected our manufacturing schedule and revenue in 2019. See “—Consolidated Statements of Profit or Loss—Revenue.” Furthermore, the Vaccine Administration Law was passed by the SCNPC in June 2019 and has been implemented since December 2019, which was intended to strengthen the existing regulatory regime over vaccines. See “Regulatory Overview—PRC Regulation—Regulatory Provisions—Regulations Relating to Drugs.” The more stringent standards and governmental regulations are expected to set up high barriers for industry entry and weed out subpar market players, and also result in higher compliance costs during our day-to-day operations in order to meet the enhanced regulatory requirements.

Our Product Mix

We have a comprehensive product portfolio including eight commercialized vaccine products against six vaccine-preventable infectious diseases. We also have 22 vaccine candidates in our pipeline against 13 disease areas, of which five candidates are at clinical stages, and we plan to file over 10 CTAs by the end of 2023 to advance multiple CTA-enabling and preclinical candidates to clinical trial stages. Out of this robust pipeline, we expect to obtain NDA approvals for and/or launch new vaccine products every year from 2023 to 2025 and 12 other new products in and after 2026, to bring sustainable new growth drivers to our business with a continuously diversifying product portfolio. See “Business—Our Vaccine Products and Vaccine Candidates.” The selling prices and gross margins of our vaccine products varied depending on the vaccine categories, packaging and vaccination procedures applicable to each product. As a result, changes in our product mix and pricing have in the past affected, and are expected to continue to affect, our revenue and gross margin.

During the Track Record Period, our market-leading human rabies vaccine (Vero cell) and recombinant HBV vaccines (Hansenula Polymorpha) were our primary revenue contributors with relatively higher gross profit and gross margins, and therefore were major factors affecting our total revenue and overall gross profit and gross margin. See “—Consolidated Statements of Profit or Loss—Gross Profit and Gross Margin.” Our product mix may gradually change in the future as we launch new vaccine products that have different margin profiles, and this will continue to affect our financial performance and results of operations.

Our Production Capacity and Efficient Utilization

Given the long production cycle and time required for internal and government inspection of each batch of finished products, our production capacity directly determines the maximum amount of vaccine products that we could produce in a given period and the volume of finished products that will be available for sale in subsequent periods. Ensuring stable and sufficient production capacity is essential for us to meet the continuing growth and business expansion. We currently operate four individual Licensed Manufacturing Facilities in Rong'an Bio, AIM Honesty, AIM Kanghuai and AIM Weixin with a designed annual production capacity of 25.0 million doses, 45.0 million doses, 5.3 million doses and 16.0 million doses, respectively, or 91.3 million doses in aggregate. The mass-scale manufacturing capacity created a highly competitive edge for us by enabling us to achieve scalable and quality supply of multiple vaccines. We are also upgrading certain existing facilities and are currently constructing new manufacturing facilities, which would result in large amount of capital expenditure in the future, and may affect our cash position and liquidity conditions. See “Business—Manufacturing—Manufacturing Facilities and Production Capacity.”

FINANCIAL INFORMATION

The efficient utilization of production capacity determines the stability and scalability of our product supply. Processes relating to the renewal of GMP certificates and GMP requirement updates affected the production plans, production volumes and production capacity utilization rate of certain of our vaccine products during the Track Record Period. See “Business—Manufacturing—Manufacturing Facilities and Production Capacity.” To further improve the utilization efficiency of our production capacity, we have been actively taking measures, including designating dedicated personnel to optimize production planning and coordination among different parts of production facilities, monitoring and preventing contaminations, improving automation in our production procedures, and strengthening maintenance of our equipment and facilities to reduce the occurrence of failures.

Our Ability to Control Operating Costs and Expenses

Our profitability has benefited from effective control of our costs and expenses and the ability to improve operational and manufacturing efficiency. Our cost of sales mainly includes manufacturing cost and raw materials cost. We have devoted significant efforts to continuously improve our production efficiency through upgrading our manufacturing facilities as well as dynamically adjust the production capacity allocation. We also established long-term and amicable business relationships with our high-quality suppliers during the Track Record Period, which enabled us to maintain stable supply and prices of our raw materials. As a result, we were able to increase our production volumes to meet growing demand without significantly increasing our cost of sales, and our cost of sales as a percentage of revenue decreased from 2019 to 2020 and remained relatively stable from 2020 to 2021. However, on the other hand, in the event of a downturn in sales, we may continue to incur overhead manufacturing cost, which may lead to an increase in our cost of sales as a percentage of revenue, as in the four months ended April 30, 2022 as compared to the same period in 2021. Moreover, we are also exposed to the possibility of increased costs, which we may not be able to fully pass onto our customers in a timely manner. For example, the price of fetal bovine serum, one of our main raw materials, increased by 30.2% between 2019 to 2021. See “Industry Overview—Major Raw Materials for Vaccine Production”. The following table sets forth the sensitivity analysis for our raw materials costs for the periods indicated:

	Year ended December 31,			Four months ended April 30,	
	2019	2020	2021	2021	2022
	(unaudited)				
	(in thousands of RMB, except for percentages)				
Cost of sales	218,803	283,882	275,429	80,858	55,280
Gross profit	732,845	1,354,088	1,294,700	384,068	219,975

	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%
Raw materials cost										
(5% increase)*										
Cost of sales	2,608	1.2%	4,074	1.4%	3,872	1.4%	1,119	1.4%	693	1.3%
Gross profit	(2,608)	(0.4%)	(4,074)	(0.3%)	(3,872)	(0.3%)	(1,119)	(0.3%)	(693)	(0.3%)

* A 5% decrease would result in changes in the same absolute amounts but in the opposite direction.

Our operating expenses mainly include selling and distribution expenses, administrative expenses, and research and development costs. To optimize our selling and distribution expenses management, we have centralized our sales and marketing function to synchronize our marketing strategy and activities, which enables us to consolidate and integrate quality resources at headquarters. In addition, we have improved and would continue to improve the management of our CSOs to increase our sales efficiency, and thereby achieving a high cost-efficiency in our sales and marketing activities. See “Business—Sales and Marketing.” Our administrative expenses increased by 26.4% from 2019 to 2020, primarily attributable to increases in headcount of and compensation for our administrative staff. Our administrative

FINANCIAL INFORMATION

expenses increased significantly from 2020 to 2021, primarily reflecting a one-off share-based compensation expense of RMB896.9 million, as well as increases in remuneration and recurring share-based compensation to our administrative staff. Our research and development costs also increased significantly from 2020 to 2021 and from the four months ended April 30, 2021 to the same period in 2022 to develop our rich pipeline of 22 vaccine candidates. See “—Consolidated Statements of Profit or Loss” for a detailed discussion on our cost structure.

New Vaccine Product Development and Commercialization

Our further growth depends largely on our ability to further market our existing and commercialized vaccine products, develop new vaccines and enrich our product pipeline with additional candidates. In addition to our eight commercialized vaccine products, we are also actively developing new vaccine products to support a more extensive range of product portfolio, which we believe will diversify our revenue source and enable us to maintain sustainable growth. As of the Latest Practicable Date, we had 22 vaccine candidates at different stages of development, to which we have devoted significant R&D efforts and financial resources during the Track Record Period. See “Business—Our Vaccine Products and Vaccine Candidates—Our Vaccine Candidates” and “Business—Research and Development.” However, our ability to successfully develop and commercialize new products is subject to a number of risks and uncertainties, many of which are beyond our control. If we fail to develop and commercialize new products, our profitability and business prospects could be adversely affected.

BASIS OF PREPARATION

The Company was incorporated as a limited liability company in the PRC in November 2011 and was converted into a joint stock company with limited liability in September 2020. Our consolidated financial statements have been prepared in accordance with IFRSs, which comprise all standards and interpretations approved by the International Accounting Standards Board. All IFRSs effective for the accounting period commencing from January 1, 2021, together with the relevant transitional provisions, have been consistently applied by us in the preparation of the consolidated financial statements throughout the Track Record Period. We also adopted the amendment to IFRS 16 *Covid-19-Related Rent Concessions and Covid-19-Related Rent Concessions beyond 30 June 2021* for rent concessions occurring as a direct consequence of the COVID-19 pandemic during the Track Record Period.

SIGNIFICANT ACCOUNTING POLICIES, JUDGEMENTS AND ESTIMATES

Our significant accounting policies and estimates are set forth in notes 3 and 4 to our consolidated financial statements set forth in the Accountants’ Report included in Appendix I to this prospectus. The preparation of our financial statements requires management to make judgements, estimates and assumptions that affect the reported amounts of revenues, expenses, assets and liabilities, and their accompanying disclosures, and the disclosure of contingent liabilities. Uncertainty about these assumptions and estimates could result in outcomes that could require a material adjustment to the carrying amounts of the assets or liabilities affected in the future. We have identified the following accounting policies as critical to an understanding of our financial condition and results of operations, because the application of these policies requires significant management judgments, estimates and assumptions, and the reporting of materially different amounts could result if different judgments were made or different estimates or assumptions were used.

FINANCIAL INFORMATION

Accounting Policies

Business Combinations and Goodwill

Business combinations are accounted for using the acquisition method except for business combination under common control. The consideration transferred is measured at the acquisition date fair value which is the sum of the acquisition date fair values of assets transferred by the Group, liabilities assumed by the Group to the former owners of the acquiree and the equity interests issued by the Group in exchange for control of the acquiree. For each business combination, the Group elects whether to measure the non-controlling interests in the acquiree that are present ownership interests and entitle their holders to a proportionate share of net assets in the event of liquidation at fair value or at the proportionate share of the acquiree's identifiable net assets. All other components of non-controlling interests are measured at fair value. Acquisition-related costs are expensed as incurred.

The Group determines that it has acquired a business when the acquired set of activities and assets includes an input and a substantive process that together significantly contribute to the ability to create outputs.

When the Group acquires a business, it assesses the financial assets and liabilities assumed for appropriate classification and designation in accordance with the contractual terms, economic circumstances and pertinent conditions as at the acquisition date. This includes the separation of embedded derivatives in host contracts of the acquiree.

If the business combination is achieved in stages, the previously held equity interest is remeasured at its acquisition date fair value and any resulting gain or loss is recognized in profit or loss.

Any contingent consideration to be transferred by the acquirer is recognized at fair value at the acquisition date. Contingent consideration classified as an asset or liability is measured at fair value with changes in fair value recognized in profit or loss. Contingent consideration that is classified as equity is not remeasured and subsequent settlement is accounted for within equity.

An acquisition of a business which is a business combination under common control is accounted for in a manner similar to a uniting of interests whereby the assets and liabilities acquired are accounted for at carryover predecessor values to the other party to the business combination within all periods presented as if the operations of the Group and the business acquired had always been combined. The difference between the consideration paid by the Group and the net assets or liabilities of the business acquired is adjusted against equity.

Goodwill is initially measured at cost, being the excess of the aggregate of the consideration transferred, the amount recognized for non-controlling interests and any fair value of the Group's previously held equity interests in the acquiree over the identifiable net assets acquired and liabilities assumed. If the sum of this consideration and other items is lower than the fair value of the net assets acquired, the difference is, after reassessment, recognized in profit or loss as a gain on bargain purchase.

After initial recognition, goodwill is measured at cost less any accumulated impairment losses. Goodwill is tested for impairment annually or more frequently if events or changes in circumstances indicate that the carrying value may be impaired. The Group performs its annual impairment test of goodwill as at December 31. For the purpose of impairment testing, goodwill acquired in a business combination is, from the acquisition date, allocated to the Group's cash-generating units, or groups of cash-generating units, that are expected to benefit from the synergies of the combination, irrespective of whether other assets or liabilities of the Group are assigned to those units or groups of units.

FINANCIAL INFORMATION

Impairment is determined by assessing the recoverable amount of the cash-generating unit (group of cash-generating units) to which the goodwill relates. Where the recoverable amount of the cash-generating unit (group of cash-generating units) is less than the carrying amount, an impairment loss is recognized. An impairment loss recognized for goodwill is not reversed in a subsequent period.

Where goodwill has been allocated to a cash-generating unit (or group of cash-generating units) and part of the operation within that unit is disposed of, the goodwill associated with the operation disposed of is included in the carrying amount of the operation when determining the gain or loss on the disposal. Goodwill disposed of in these circumstances is measured based on the relative value of the operation disposed of and the portion of the cash-generating unit retained.

Impairment of Non-financial Assets

Where an indication of impairment exists, or when annual impairment testing for an asset is required (other than inventories, deferred tax assets, financial assets and goodwill), the asset's recoverable amount is estimated. An asset's recoverable amount is the higher of the asset's or cash-generating unit's value in use and its fair value less costs of disposal, and is determined for an individual asset, unless the asset does not generate cash inflows that are largely independent of those from other assets or groups of assets, in which case the recoverable amount is determined for the cash-generating unit to which the asset belongs.

An impairment loss is recognized only if the carrying amount of an asset exceeds its recoverable amount. In assessing value in use, the estimated future cash flows are discounted to their present value using a pre-tax discount rate that reflects current market assessments of the time value of money and the risks specific to the asset. An impairment loss is charged to profit or loss in the period in which it arises in those expense categories consistent with the function of the impaired asset.

An assessment is made at the end of each reporting period as to whether there is an indication that previously recognized impairment losses may no longer exist or may have decreased. If such an indication exists, the recoverable amount is estimated. A previously recognized impairment loss of an asset other than goodwill is reversed only if there has been a change in the estimates used to determine the recoverable amount of that asset, but not to an amount higher than the carrying amount that would have been determined (net of any depreciation/amortisation) had no impairment loss been recognized for the asset in prior years. A reversal of such an impairment loss is credited to profit or loss in the period in which it arises, unless the asset is carried at a revalued amount, in which case the reversal of the impairment loss is accounted for in accordance with the relevant accounting policy for that revalued asset.

Property, Plant and Equipment and Depreciation

Property, plant and equipment, other than construction in progress, are stated at cost less accumulated depreciation and any impairment losses. The cost of an item of property, plant and equipment comprises its purchase price and any directly attributable costs of bringing the asset to its working condition and location for its intended use.

Expenditure incurred after items of property, plant and equipment have been put into operation, such as repairs and maintenance, is normally charged to profit or loss in the period in which it is incurred. In situations where the recognition criteria are satisfied, the expenditure for a major inspection is capitalized in the carrying amount of the asset as a replacement. Where significant parts of property, plant and equipment are required to be replaced at intervals, the Group recognizes such parts as individual assets with specific useful lives and depreciates them accordingly.

FINANCIAL INFORMATION

Depreciation is calculated on the straight-line basis to write off the cost of each item of property, plant and equipment to its residual value over its estimated useful life. The principal annual rates used for this purpose are as follows:

Buildings	3.17% to 31.67%
Leasehold improvements	20.00% to 50.00%
Plant and machinery	9.50% to 31.67%
Motor vehicles	9.50% to 23.75%
Equipment and others	9.50% to 31.67%

Where parts of an item of property, plant and equipment have different useful lives, the cost of that item is allocated on a reasonable basis among the parts and each part is depreciated separately. Residual values, useful lives and the depreciation method are reviewed, and adjusted if appropriate, at least at each financial year end.

An item of property, plant and equipment including any significant part initially recognized is derecognized upon disposal or when no future economic benefits are expected from its use or disposal. Any gain or loss on disposal or retirement recognized in profit or loss in the year the asset is derecognized is the difference between the net sales proceeds and the carrying amount of the relevant asset.

Construction in progress represents a building under construction, which is stated at cost less any impairment losses, and is not depreciated. Cost comprises the direct costs of construction and capitalized borrowing costs on related borrowed funds during the period of construction. Construction in progress is reclassified to the appropriate category of property, plant and equipment when completed and ready for use.

Intangible Assets (Other Than Goodwill)

Intangible assets acquired separately are measured on initial recognition at cost. The cost of intangible assets acquired in a business combination is the fair value at the date of acquisition. The useful lives of intangible assets are assessed to be either finite or indefinite. Intangible assets with finite lives are subsequently amortized over the useful economic life and assessed for impairment whenever there is an indication that the intangible asset may be impaired. The amortisation period and the amortisation method for an intangible asset with a finite useful life are reviewed at least at each financial year end.

Patents and Proprietary Know-how

Patents and proprietary know-how are stated at cost less any impairment losses and are amortized on the straight-line basis over their estimated useful lives of 16 to 18 years.

Brands

Brands are stated at cost less any impairment losses and are amortized on the straight-line basis over their estimated useful lives of 18 years.

The brands and patents and proprietary know-how of the Group were associated with different vaccine products arising from business combinations and acquisitions from third parties. The useful lives of brands and patents and proprietary know-how were estimated based on the remaining period of economic benefits to be derived from the respective vaccine products to be produced relying on the brands and patents and proprietary know-how. The Group estimated the period of economic benefits to be derived from the respective vaccine products based on the expected time period required for a vaccine product from its development to commercialization and other factors, including the patent protection period, the

FINANCIAL INFORMATION

historical life of similar vaccine products, the characteristics of such technologies, their update frequency and market requirement and competition. Based on such assessment, the Group considered that the maximum economic useful life of brands and patents and proprietary know-how was 30 years. As different vaccine products have different commercialization commencement dates, acquisition dates by the Group and the expected lifespan of economic benefits, the remaining useful live of the Group's brands and patents and proprietary know-how varies at a range of 18 years and 16 to 18 years, respectively.

Software

Software is stated at cost less any impairment losses and are amortized on the straight-line basis over their estimated useful lives of 2 to 10 years. The expected useful life of software is assessed by the Group after considering the contractual term, the current functionality equipped by the software, using plan and operation needs of the software. The software served as basement IT system is amortized over a longer period as 10 years. Other software served as fast updating applications and single application software is amortized over a shorter period as 2 to 5 years.

Research and Development Costs

All research costs are charged to the profit or loss as incurred.

Expenditure incurred on projects to develop new products is capitalized and deferred only when the Group can demonstrate the technical feasibility of completing the intangible asset so that it will be available for use or sale, its intention to complete and its ability to use or sell the asset, how the asset will generate future economic benefits, the availability of resources to complete the project and the ability to measure reliably the expenditure during the development. Product development expenditure which does not meet these criteria is expensed when incurred.

Deferred development costs are stated at cost less any impairment losses and are amortized using the straight-line basis over the commercial lives of the underlying products, commencing from the date when the products are put into commercial production.

Income Tax

Income tax mainly comprises current tax and deferred tax. Income tax relating to items recognized outside profit or loss is recognized outside profit or loss, either in other comprehensive income or directly in equity.

Current tax assets and liabilities for the current and prior periods are measured at the amount expected to be recovered from or paid to the taxation authorities, based on tax rates (and tax laws) that have been enacted or substantively enacted by the end of each reporting period, taking into consideration interpretations and practices prevailing in the countries in which the Group operates.

Deferred tax is provided, using the liability method, on all temporary differences at the end of the reporting period between the tax bases of assets and liabilities and their carrying amounts for financial reporting purposes.

Deferred tax liabilities are recognized for all taxable temporary differences, except:

- when the deferred tax liability arises from the initial recognition of goodwill or an asset or liability in a transaction that is not a business combination and, at the time of the transaction, affects neither the accounting profit nor taxable profit or loss; and

FINANCIAL INFORMATION

- in respect of taxable temporary differences associated with investments in subsidiaries, associates and joint ventures, when the timing of the reversal of the temporary differences can be controlled and it is probable that the temporary differences will not reverse in the foreseeable future.

Deferred tax assets are recognized for all deductible temporary differences, and the carryforward of unused tax credits and any unused tax losses. Deferred tax assets are recognized to the extent that it is probable that taxable profit will be available against which the deductible temporary differences, and the carryforward of unused tax credits and unused tax losses can be utilized, except:

- when the deferred tax asset relating to the deductible temporary differences arises from the initial recognition of an asset or liability in a transaction that is not a business combination and, at the time of the transaction, affects neither the accounting profit nor taxable profit or loss; and
- in respect of deductible temporary differences associated with investments in subsidiaries, associates and joint ventures, deferred tax assets are only recognized to the extent that it is probable that the temporary differences will reverse in the foreseeable future and taxable profit will be available against which the temporary differences can be utilized.

The carrying amount of deferred tax assets is reviewed at the end of each reporting period and reduced to the extent that it is no longer probable that sufficient taxable profit will be available to allow all or part of the deferred tax asset to be utilized. Unrecognized deferred tax assets are reassessed at the end of each reporting period and are recognized to the extent that it has become probable that sufficient taxable profit will be available to allow all or part of the deferred tax asset to be recovered.

Deferred tax assets and liabilities are measured at the tax rates that are expected to apply to the period when the asset is realized or the liability is settled, based on tax rates (and tax laws) that have been enacted or substantively enacted by the end of the reporting period.

Deferred tax assets and deferred tax liabilities are offset if and only if the Group has a legally enforceable right to set off current tax assets and current tax liabilities and the deferred tax assets and deferred tax liabilities relate to income taxes levied by the same taxation authority on either the same taxable entity or different taxable entities which intend either to settle current tax liabilities and assets on a net basis, or to realize the assets and settle the liabilities simultaneously, in each future period in which significant amounts of deferred tax liabilities or assets are expected to be settled or recovered.

Revenue Recognition

Revenue From Contracts with Customers

Revenue from contracts with customers is recognized when control of goods or services is transferred to the customers at an amount that reflects the consideration to which the Group expects to be entitled in exchange for those goods or services. When the consideration in a contract includes a variable amount, the amount of consideration is estimated to which the Group will be entitled in exchange for transferring the goods or services to the customer. The variable consideration is estimated at contract inception and constrained until it is highly probable that a significant revenue reversal in the amount of cumulative revenue recognized will not occur when the associated uncertainty with the variable consideration is subsequently resolved.

Sale of vaccine

Revenue from the sale of vaccine is recognized at the point in time when control of the goods is transferred, being when the goods are delivered to the customers, and the customers have accepted the goods in accordance with the sales contracts.

FINANCIAL INFORMATION

Research and development services

Revenue from research and development services was recognized only when it satisfied a performance obligation by rendering the service or transferring the control of the result of research and development and there is no unfulfilled obligation that could affect the buyer's acceptance of the result. Before that, the counterparty had no right to receive and consume the benefits of the research and development services.

Revenue From Other Sources

Rental income is recognized on a time proportion basis over the lease terms. Variable lease payments that do not depend on an index or a rate are recognized as income in the accounting period in which they are incurred.

Other Income

Interest income is recognized on an accrual basis using the effective interest rate method by applying the rate that exactly discounts the estimated future cash receipts over the expected life of the financial instrument or a shorter period, when appropriate, to the net carrying amount of the financial asset.

Share-based Payments

The Company operates employee share plans for the purpose of providing incentives and rewards to eligible participants who contribute to the success of the Group's operations. Employees (including directors) of the Group receive remuneration in the form of share-based payments, whereby employees render services as consideration for equity instruments ("**equity-settled transactions**").

The cost of equity-settled transactions with employees is measured by reference to the fair value at the date at which they are granted. Further details are given in note 32 in the Accountants' Report set out in Appendix I to this prospectus.

The cost of equity-settled transactions is recognized in employee benefit expense, together with a corresponding increase in equity, over the period in which the performance and/or service conditions are fulfilled. The cumulative expense recognized for equity-settled transactions at the end of each reporting period until the vesting date reflects the extent to which the vesting period has expired and the Group's best estimate of the number of equity instruments that will ultimately vest. The charge or credit to profit or loss for a period represents the movement in the cumulative expense recognized as at the beginning and end of that period.

Service and non-market performance conditions are not taken into account when determining the grant date fair value of awards, but the likelihood of the conditions being met is assessed as part of the Group's best estimate of the number of equity instruments that will ultimately vest. Market performance conditions are reflected within the grant date fair value. Any other conditions attached to an award, but without an associated service requirement, are considered to be non-vesting conditions. Non-vesting conditions are reflected in the fair value of an award and lead to an immediate expensing of an award unless there are also service and/or performance conditions.

For awards that do not ultimately vest because non-market performance and/or service conditions have not been met, no expense is recognized. Where awards include a market or non-vesting condition, the transactions are treated as vesting irrespective of whether the market or non-vesting condition is satisfied, provided that all other performance and/or service conditions are satisfied.

FINANCIAL INFORMATION

Where the terms of an equity-settled award are modified, as a minimum an expense is recognized as if the terms had not been modified, if the original terms of the award are met. In addition, an expense is recognized for any modification that increases the total fair value of the share-based payments, or is otherwise beneficial to the employee as measured at the date of modification.

Where an equity-settled award is cancelled, it is treated as if it had vested on the date of cancellation, and any expense not yet recognized for the award is recognized immediately. This includes any award where non-vesting conditions within the control of either the Group or the employee are not met. However, if a new award is substituted for the cancelled award, and is designated as a replacement award on the date that it is granted, the cancelled and new awards are treated as if they were a modification of the original award, as described in the previous paragraph.

The dilutive effect of outstanding options is reflected as additional share dilution in the computation of earnings per share.

Accounting Judgements and Estimates

Research and Development Expenses

All research expenses are charged to the profit or loss as incurred. Expenses incurred on each pipeline to develop new products are capitalized and deferred in accordance with the accounting policy for research and development expenses. See note 3 in the Accountants' Report set out in Appendix I to this prospectus. Determining the amounts to be capitalized requires management to make judgements on the technical feasibility of existing pipelines to be successfully commercialized and bring economic benefits to the Group.

Significant Judgement in Determining the Lease Term of Contracts with Renewal Options

The Group has several lease contracts that include extension options. The Group applies judgement in evaluating whether or not to exercise the option to renew the lease. That is, it considers all relevant factors that create an economic incentive for it to exercise either the renewal. After the commencement date, the Group reassesses the lease term if there is a significant event or change in circumstances that is within its control and affects its ability to exercise or not to exercise the option to renew the lease (e.g., construction of significant leasehold improvements or significant customisation to the leased asset).

Impairment of Goodwill

The Group determines whether goodwill is impaired at least on an annual basis. This requires an estimation of the value in use of the cash-generating units to which the goodwill is allocated. Estimating the value in use requires us to make an estimate of the expected future cash flows from the cash-generating units and also to choose a suitable discount rate in order to calculate the present value of those cash flows.

Provision for Expected Credit Losses on Trade Receivables

The Group uses a provision matrix to calculate expected credit losses for trade receivables. The provision rates are based on aging analysis of customers that have similar loss patterns.

The provision matrix is initially based on the Group's historical observed default rates. The Group will calibrate the matrix to adjust the historical credit loss experience with forward-looking information. For instance, if forecast economic conditions are expected to deteriorate over the next year which can lead to an increased number of defaults in the distribution sector, the historical default rates are adjusted. At each reporting date, the historical observed default rates are updated and changes in the forward-looking estimates are analyzed.

FINANCIAL INFORMATION

The assessment of the correlation among historical observed default rates, forecast economic conditions and expected credit losses is a significant estimate. The amount of expected credit losses is sensitive to changes in circumstances and forecast economic conditions. The Group's historical credit loss experience and forecast of economic conditions may also not be representative of a customer's actual default in the future.

Leases—Estimating the Incremental Borrowing Rate

The Group cannot readily determine the interest rate implicit in a lease, and therefore, it uses an incremental borrowing rate to measure lease liabilities. The incremental borrowing rate is the rate of interest that the Group would have to pay to borrow over a similar term, and with a similar security, the funds necessary to obtain an asset of a similar value to the right-of-use asset in a similar economic environment. The incremental borrowing rate therefore reflects what the Group “would have to pay”, which requires estimation when no observable rates are available or when it needs to be adjusted to reflect the terms and conditions of the lease. The Group estimates the incremental borrowing rate using observable inputs when available and is required to make certain entity-specific estimates.

Impairment of Non-Financial Assets (Other Than Goodwill)

The Group assesses whether there are any indicators of impairment for all non-financial assets (including the right-of-use assets) at the end of each of the relevant period. Other non-financial assets are tested for impairment when there are indicators that the carrying amounts may not be recoverable. An impairment exists when the carrying value of an asset or a cash-generating unit exceeds its recoverable amount, which is the higher of its fair value less costs of disposal and its value in use. The calculation of the fair value less costs of disposal is based on available data from binding sales transactions in an arm's length transaction of similar assets or observable market prices less incremental costs for disposing of the asset. When value in use calculations are undertaken, management must estimate the expected future cash flows from the asset or cash-generating unit and choose a suitable discount rate in order to calculate the present value of those cash flows.

Deferred Tax Assets

Deferred tax assets are recognized for unused tax losses to the extent that it is probable that taxable profit will be available against which the losses can be utilized. Significant management judgement is required to determine the amount of deferred tax assets that can be recognized, based upon the likely timing and level of future taxable profits together with future tax planning strategies.

Write-down of Inventories

The Group's inventories are stated at the lower of cost and net realizable value. The Group writes down its inventories based on estimates of the realizable value with reference to the age and conditions of the inventories, together with the economic circumstances on the marketability of such inventories. Inventories will be reviewed annually for write-down, if appropriate.

Useful Lives and Residual Values of Items of Property, Plant and Equipment

In determining the useful lives and residual values of items of property, plant and equipment, the Group has to consider various factors, such as technical or commercial obsolescence arising from changes or improvements in the production and provision of services, or from a change in the market demand for the product or service output of the asset, expected usage of the asset, expected physical wear and tear, care and maintenance of the asset, and legal or similar limits on the use of the asset. The estimation of the useful life of the asset is based on the experience of the Group with similar assets that are used in a similar way. Additional depreciation is made if the estimated useful lives and/or residual values of items of property, plant and equipment are different from previous estimation. Useful lives and residual values are reviewed at the end of each of the years based on changes in circumstances.

FINANCIAL INFORMATION

Useful Lives of Items of Intangible Assets

The Group determines the estimated useful lives and related amortization charges for its intangible assets. The useful lives of intangible assets are assessed to be finite. Intangible assets with finite lives are amortized over the useful economic lives and assessed for impairment whenever there is an indication that the intangible asset may be impaired. The amortization period and the amortization method for an intangible asset with a finite useful life are reviewed at least at the end of each of the relevant periods.

CONSOLIDATED STATEMENTS OF PROFIT OR LOSS

The consolidated statements of profit or loss for the years ended December 31, 2019, 2020 and 2021 and the four months ended April 30, 2022 set forth below are derived from our audited consolidated financial statements, including the notes thereto, set forth in the Accountants' Report included in Appendix I to this prospectus. The unaudited consolidated statements of profit or loss for the four months ended April 30, 2021 are derived from our unaudited consolidated financial statements set forth in the Accountants' Report included in Appendix I to this prospectus. You should read the consolidated statements of profit and loss in conjunction with our consolidated financial statements included in Appendix I to this prospectus, together with the accompanying notes, which were prepared in accordance with IFRSs.

	Year ended December 31,						Four months ended April 30,			
	2019		2020		2021		2021		2022	
	Amount	% of revenue	Amount	% of revenue	Amount	% of revenue	Amount	% of revenue	Amount	% of revenue
	(unaudited)									
	(in thousands of RMB, except for percentages)									
Revenue	951,648	100.0	1,637,970	100.0	1,570,129	100.0	464,926	100.0	275,255	100.0
Cost of sales	(218,803)	(23.0)	(283,882)	(17.3)	(275,429)	(17.5)	(80,858)	(17.4)	(55,280)	(20.0)
Gross profit	732,845	77.0	1,354,088	82.7	1,294,700	82.5	384,068	82.6	219,975	80.0
Other income and gains	26,163	2.7	40,714	2.5	53,622	3.4	21,256	4.6	8,314	3.0
Selling and distribution expenses	(330,009)	(34.7)	(533,249)	(32.6)	(460,114)	(29.3)	(156,778)	(33.7)	(117,944)	(42.8)
Administrative expenses	(157,181)	(16.5)	(198,697)	(12.1)	(1,167,979)	(74.4)	(79,160)	(17.0)	(85,023)	(30.9)
Research and development costs	(98,886)	(10.4)	(157,761)	(9.6)	(307,353)	(19.6)	(81,894)	(17.6)	(113,620)	(41.3)
Impairment losses on financial assets, net	2,103	0.2	(826)	(0.1)	(7,981)	(0.5)	(2,008)	(0.5)	(4,915)	(1.8)
Other expenses	(7,493)	(0.7)	(2,642)	(0.2)	(895)	*	(47)	*	(3,322)	(1.2)
Finance costs	(10,781)	(1.1)	(15,741)	(1.0)	(10,703)	(0.7)	(3,154)	(0.7)	(6,269)	(2.3)
Profit/(loss) before tax	156,761	16.5	485,886	29.6	(606,703)	(38.6)	82,283	17.7	(102,804)	(37.3)
Income tax expense	(36,947)	(3.9)	(85,472)	(5.2)	(69,170)	(4.4)	(24,606)	(5.3)	7,000	2.5
Profit/(loss) for the year/period	119,814	12.6	400,414	24.4	(675,873)	(43.0)	57,677	12.4	(95,804)	(34.8)
Profit/(loss) attributable to:										
Owners of the parent	117,406	12.3	379,287	23.2	(692,774)	(44.1)	57,677	12.4	(93,832)	(34.1)
Non-controlling interests	2,408	0.3	21,127	1.3	16,901	1.1	—	—	(1,972)	(0.7)
	<u>119,814</u>	<u>12.6</u>	<u>400,414</u>	<u>24.4</u>	<u>(675,873)</u>	<u>(43.0)</u>	<u>57,677</u>	<u>12.4</u>	<u>(95,804)</u>	<u>(34.8)</u>

* Less than 0.1%

FINANCIAL INFORMATION

Revenue

We had revenue of RMB951.6 million, RMB1,638.0 million, RMB1,570.1 million, RMB464.9 million and RMB275.3 million in 2019, 2020, 2021 and the four months ended April 30, 2021 and 2022, respectively. We generated substantially all of our revenue from sales of vaccine products during the Track Record Period. We also generated revenue of RMB2.8 million and RMB28,000 from provision of research and development services related to mRNA-based drugs to Independent Third Parties in 2021 and the four months ended April 30, 2022, respectively. The following table sets forth a breakdown of our revenue for the periods indicated:

	Year ended December 31,						Four months ended April 30,			
	2019		2020		2021		2021		2022	
	Amount	% of revenue	Amount	% of revenue	Amount	% of revenue	Amount	% of revenue	Amount	% of revenue
(in thousands of RMB, except for percentages)										
Sales of vaccine	951,648	100.0	1,637,970	100.0	1,567,282	99.8	464,926	100.0	275,227	100.0
Research and development services	—	—	—	—	2,847	0.2	—	—	28	*
Total	951,648	100.0	1,637,970	100.0	1,570,129	100.0	464,926	100.0	275,255	100.0

* Less than 0.1%

Revenue by Vaccine Product

As of the Latest Practicable Date, we commercialized eight vaccine products against six common and vaccine-preventable diseases, including rabies, HBV, HAV, mumps, HFRS and meningococcal diseases. Among our eight vaccine products, we have developed two recombinant HBV vaccine products and two inactivated HAV vaccine products, both are differentiated in terms of relevant antigen concentration. The following table sets forth a breakdown of our revenue by product for the periods indicated:

	Year ended December 31,						Four months ended April 30,			
	2019		2020		2021		2021		2022	
	Amount	% of revenue	Amount	% of revenue	Amount	% of revenue	Amount	% of revenue	Amount	% of revenue
(in thousands of RMB, except for percentages)										
Vaccine products										
Human rabies vaccine (Vero cell)	446,114	46.9	1,072,854	65.5	937,414	59.7	301,548	64.9	175,765	63.9
Recombinant HBV vaccines (Hansenula Polymorpha) ⁽¹⁾	354,910	37.3	404,781	24.7	523,252	33.3	136,872	29.4	77,425	28.1
Inactivated HAV vaccines (HDC) ⁽²⁾	87,249	9.2	97,221	5.9	86,057	5.5	20,473	4.4	15,819	5.7
MPSV4	—	—	26,739	1.6	18,666	1.2	4,411	1.0	6,218	2.3
Mumps vaccine	39,551	4.2	35,505	2.2	1,893	0.1	1,622	0.3	—	—
HFRS vaccine	23,824	2.4	870	0.1	—	—	—	—	—	—
Sub-total	951,648	100.0	1,637,970	100.0	1,567,282	99.8	464,926	100.0	275,227	100.0
Research and development services	—	—	—	—	2,847	0.2	—	—	28	*
Total	951,648	100.0	1,637,970	100.0	1,570,129	100.0	464,926	100.0	275,255	100.0

FINANCIAL INFORMATION

Notes:

* Less than 0.1%

- (1) We have developed two recombinant HBV vaccine products, differentiated in terms of HBsAg concentration: 10µg HBsAg per dose and 20µg HBsAg per dose. See “Business—Our Vaccine Products and Vaccine Candidates—Our Vaccine Products—Recombinant HBV Vaccines (Hansenula Polymorpha).”
- (2) We have developed two inactivated HAV vaccine products, differentiated in terms of isolated HAV antigen concentration: the 320Eu/0.5ml per dose indicated for the age group of one to 15 years old, and the 640Eu/0.5ml per dose indicated for people older than 15. See “Business—Our Vaccine Products and Vaccine Candidates—Our Vaccine Products—Inactivated HAV Vaccines (HDC).”

During the Track Record Period, we sold substantially all of our products to CDCs in the PRC. A majority of our revenue was derived from sales of our human rabies vaccine (Vero cell) and recombinant HBV vaccines (Hansenula Polymorpha), which collectively accounted for 84.2%, 90.2%, 93.0%, 94.3% and 92.0% of our total revenue in 2019, 2020, 2021 and the four months ended April 30, 2021 and 2022, respectively. See “Risk Factors—Risks Relating to the Sales and Marketing of Our Vaccine Products and Commercialization of Our Vaccine Candidates—Our market-leading key commercialized vaccine products generate a significant portion of our profits and cash flows. Any decrease in their revenue or market share would adversely affect our business, financial condition, results of operations and prospects.” By selling vaccine products against other diseases and developing a robust vaccine pipeline of 22 vaccine candidates against 13 disease areas, we have been and will continue to diversify our product portfolio and revenue sources. See “Business—Our Vaccine Products and Vaccine Candidates—Our Vaccine Products—Overview.” Our significant revenue growth from 2019 to 2020 was primarily driven by increases in sales of our human rabies vaccine (Vero cell) and Class II recombinant HBV vaccines (Hansenula Polymorpha) due to increases in sales volume and average unit price. Our revenue slightly decreased by 4.1% from 2020 to 2021, primarily because CDCs in China mobilized and focused more resources on COVID-19 vaccination (e.g., cold-chain logistics resources and physicians for vaccination) due to the recurrence of the COVID-19 in certain cities in China since late July 2021 and delayed certain procurement and vaccination of other vaccines, especially Class II vaccines, which had an adverse impact on our sales volume and revenue in the second half of 2021. Our revenue decreased by 40.8% from the four months ended April 30, 2021 to the same period in 2022 as we faced slowdowns in sales volume of our vaccines other than MPSV4, when various cities and areas in China were hit by a new wave of COVID-19 resurgence.

Human Rabies Vaccine (Vero Cell)

Revenue from sales of our human rabies vaccine (Vero cell) increased by 140.5% from 2019 to 2020, primarily driven by a 114.0% increase in sales volume, which was mainly because (i) we recovered to uninterrupted commercial supply from September 2019 following a prolonged GMP renewal process in 2018 and (ii) supply shortage of human rabies vaccines during 2020. See also “Business—Manufacturing—Manufacturing Facilities and Production Capacity.” From 2020 to 2021, sales volume and revenue from sales of our human rabies vaccine (Vero cell) decreased by 18.5% and 12.6%, respectively, due to relatively low procurement levels by CDCs in the second half of 2021 compared to the same period in 2020. Although the vaccination of human rabies vaccines had remained largely unaffected by the recurrence of COVID-19 due to the life-threatening nature of human rabies, due to the recurrence of COVID-19 in certain cities in China since late July 2021, CDCs mobilized and focused more resources on COVID-19 vaccination, especially cold-chain storage facilities for storing COVID-19 vaccines, which reduced their common inventories and procurement level of our human rabies vaccines. Since early 2022, amid COVID-19 local outbreaks, residents were encouraged to stay indoors and minimize unnecessary outdoor activities, and certain cities and areas also imposed quarantines, travel restrictions and other COVID-19 prevention and containment measures. These measures reduced incidents of animal bites and scratches and, as a result, sales volume and revenue from sales of our human rabies vaccine (Vero cell) decreased by 42.2% and 41.7%, respectively, from the four months ended April 30, 2021 to the same period in 2022.

FINANCIAL INFORMATION

Recombinant HBV Vaccines (Hansenula Polymorpha)

Our centralized sales and marketing management and continuous sales efforts enabled the continued growth in sales revenue of our recombinant HBV vaccines, which increased by 14.1% from 2019 to 2020 and further increased by 29.3% from 2020 to 2021. The sales revenue increase from 2019 to 2020 was primarily driven by the sales growth in our Class II recombinant HBV vaccines; whereas the increase from 2020 to 2021 was mainly driven by an 80.0% increase in average unit price of our Class I recombinant HBV vaccines. Revenue from sales of our recombinant HBV vaccines decreased by 43.4% from the four months ended April 30, 2021 to the same period in 2022, as revenue from sales of our Class I and Class II recombinant HBV vaccines were both affected by COVID-19 resurgence and decreased by 75.4% and 27.0%, respectively. For more details, see “—Revenue by Vaccine Category.”

Inactivated HAV Vaccines (HDC)

We have leveraged our centralized sales and marketing management to help build up sales of inactivated HAV vaccines (HDC) across the PRC, with a marketing focus on the safer and more convenient prefilled syringe packaging specifications, which have relatively higher prices, as compared to vaccines in single vial packaging specifications. As a result, average unit price and revenue from sales of our inactivated HAV vaccines (HDC) increased by 30.7% and 11.4% respectively from 2019 to 2020. Our revenue from sales of inactivated HAV vaccines (HDC) decreased by 11.5% from 2020 to 2021. This was mainly because certain provincial CDCs did not procure our Class I inactivated HAV vaccines in 2021, leading to a 75.7% decrease in revenue from sales of Class I inactivated HAV vaccines as compared to 2020; this was partially offset by a 7.2% increase in revenue from sales of Class II inactivated HAV vaccines driven by our continued marketing efforts. Revenue from sales of our inactivated HAV vaccines decreased by 22.7% from the four months ended April 30, 2021 to the same period in 2022, as we did not sell any Class I inactivated HAV vaccines and the revenue from sales of our Class II inactivated HAV vaccines decreased by 15.8% in the four months ended April 30, 2022 under the impact of COVID-19 resurgence. For more details, see “—Revenue by Vaccine Category.”

MPSV4

We launched MPSV4 in March 2020. Revenue from sales of our MPSV4 was RMB26.7 million, RMB18.7 million, RMB4.4 million and RMB6.2 million in 2020, 2021 and the four months ended April 30, 2021 and 2022, respectively. We recorded meaningful revenue from sales of our MPSV4 shortly after its commercial launch in 2020, particularly in the second half of 2020. However, compared to the second half of 2020, our sales volume of MPSV4 in the second half of 2021 was adversely affected by the recurrence of COVID-19 in certain cities in China since July 2021 and CDC’s delay in procurement and vaccination of MPSV4 and other vaccines in favor of COVID-19 vaccination. As such, we recorded a 33.9% decrease in sales volume and a 30.2% decrease in revenue from sales of MPSV4 from 2020 to 2021. Benefiting from PRC government’s increasing emphasis on mass vaccination against respiratory diseases and transmissible diseases, our MPSV4 vaccine products has gained more market opportunities, with sales volume and revenue increasing by 39.7% and 41.0%, respectively, from the four months ended April 30, 2021 to the same period in 2022.

Mumps Vaccine

The decreases in sales revenue of our mumps vaccine during the Track Record Period were mainly driven by decreases in sales volume. We ceased production of mumps vaccines from September 2018 to mid-February 2019 and since February 2020 for maintenance and upgrades. See “Business—Manufacturing—Manufacturing Facilities and Production Capacity.” As a result of such production interruptions, sales volume of our mumps vaccine decreased by 23.7% from 2019 to 2020, and further decreased by 96.1% from 2020 to 2021. We did not sell any mumps vaccine in the four months ended April 30, 2022. We expect to resume production and continue to generate revenue from this product upon completion of maintenance and upgrades of the production line.

FINANCIAL INFORMATION

HFRS Vaccine

Our sales revenue from the HFRS vaccine was RMB23.8 million in 2019 and decreased afterwards as we ceased production of HFRS vaccine products at the end of 2018 to relocate the relevant production line. Accordingly, the sales volume of our HFRS vaccine decreased by 93.5% from 2019 to 2020, and we did not sell any HFRS vaccine in 2021 or in the four months ended April 30, 2022. See “Business—Manufacturing—Manufacturing Facilities and Production Capacity.” We passed GMP inspections in June 2022, and expect to produce new HFRS vaccine for commercial sales in the fourth quarter of 2022 and continue to generate revenue from this product.

Revenue by Vaccine Category

The following table sets forth a breakdown of our revenue by vaccine category for the periods indicated:

	Year ended December 31,						Four months ended April 30,			
	2019		2020		2021		2021		2022	
	Amount	% of revenue	Amount	% of revenue	Amount	% of revenue	Amount	% of revenue	Amount	% of revenue
(unaudited)										
(in thousands of RMB, except for percentages)										
Class I vaccines										
Recombinant HBV vaccines										
(Hansenula Polymorpha) . . .	86,850	9.1	80,019	4.9	183,403	11.7	46,466	10.0	11,425	4.2
Inactivated HAV										
vaccines (HDC)	30,786	3.2	21,914	1.3	5,329	0.3	1,692	0.4	—	—
HFRS vaccine ⁽¹⁾	17,133	1.8	861	0.1	—	—	—	—	—	—
Mumps vaccine ⁽¹⁾	—	—	—	—	—	—	—	—	—	—
Sub-total	<u>134,769</u>	<u>14.1</u>	<u>102,794</u>	<u>6.3</u>	<u>188,732</u>	<u>12.0</u>	<u>48,157</u>	<u>10.4</u>	<u>11,425</u>	<u>4.2</u>
Class II vaccines										
Human rabies vaccine										
(Vero cell)	446,114	46.9	1,072,854	65.5	937,414	59.7	301,548	64.9	175,765	63.9
Recombinant HBV vaccines										
(Hansenula Polymorpha) . . .	268,060	28.2	324,762	19.8	339,849	21.6	90,406	19.4	66,000	23.9
Inactivated HAV										
vaccines (HDC)	56,463	5.9	75,307	4.6	80,728	5.1	18,782	4.0	15,819	5.7
MPSV4	—	—	26,739	1.6	18,666	1.3	4,411	1.0	6,218	2.3
Mumps vaccine ⁽¹⁾	39,551	4.2	35,505	2.2	1,893	0.1	1,622	0.3	—	—
HFRS vaccine ⁽¹⁾	6,691	0.7	9	*	—	—	—	—	—	—
Sub-total	<u>816,879</u>	<u>85.9</u>	<u>1,535,176</u>	<u>93.7</u>	<u>1,378,550</u>	<u>87.8</u>	<u>416,769</u>	<u>89.6</u>	<u>263,802</u>	<u>95.8</u>
Research and development										
services	—	—	—	—	2,847	0.2	—	—	28	*
Total	<u>951,648</u>	<u>100.0</u>	<u>1,637,970</u>	<u>100.0</u>	<u>1,570,129</u>	<u>100.0</u>	<u>464,926</u>	<u>100.0</u>	<u>275,255</u>	<u>100.0</u>

FINANCIAL INFORMATION

Notes:

- (1) Our HFRS vaccine and mumps vaccine are typically classified as Class II vaccines in the PRC. However, they may be procured by certain provincial level CDCs as a Class I vaccine under some special circumstances, such as local outbreaks. See “Industry Overview—HFRS Vaccines in the PRC” and “Industry Overview—Mumps Vaccine in the PRC.”

* Less than 0.1%.

We value both Class I and Class II vaccines markets:

- Our revenue from Class I vaccines decreased by 23.7% from 2019 to 2020, mainly driven by (i) a 28.8% decrease in sales of Class I inactivated HAV vaccines due to decreased procurement volume from certain provincial CDCs, and (ii) a 95.0% decrease in revenue from sales of Class I HFRS vaccines as we ceased producing HFRS vaccines at the end of 2018. Our revenue from Class I vaccines increased by 83.6% from 2020 to 2021, primarily due to a 129.2% increase in revenue from Class I recombinant HBV vaccines. Our revenue from Class I vaccines decreased by 76.3% from the four months ended April 30, 2021 to the same period in 2022, driven by a 75.4% and 100% decrease in revenue from sales of Class I HBV and HAV vaccines, respectively, as CDCs delayed centralized bidding processes for Class I HBV/HAV vaccines from late 2021 to March 2022 due to COVID-19 resurgence.
- Our revenue from Class II vaccines recorded a 87.9% increase from 2019 to 2020, primarily driven by a 140.5% increase in revenue from our market-leading human rabies vaccine. We had a 10.2% decrease in revenue from Class II vaccines from 2020 to 2021, primarily due to the recurrence of COVID-19 in certain cities in China which impacted CDC’s procurement and vaccination of Class II vaccines. Our revenue from Class II vaccines decreased by 36.7% from the four months ended April 30, 2021 to the same period in 2022, primarily due to a 41.7% decrease in revenue from sales of human rabies vaccine (Vero cell) as people refrained from outdoor activities and incidents of animal bites reduced, and also as CDCs generally allocated their resources to COVID-19 prevention and vaccination and delayed procurement and vaccination of other Class II vaccines. For details, see below and “—Revenue by Vaccine Product.”

We have Class II vaccine products within all six covered disease areas, and the human rabies vaccine (Vero cell) and MPSV4 are sold completely in the Class II vaccine market. With relatively flexible pricing mechanism and higher pricing as compared to Class I vaccine market, we derived a substantial majority of our revenue from sales of Class II vaccines during the Track Record Period, accounting for 85.9%, 93.7%, 87.8%, 89.6% and 95.8% of our total revenue in 2019, 2020, 2021 and the four months ended April 30, 2021 and 2022, respectively. We expect to continue to generate most of our revenue from Class II vaccines.

FINANCIAL INFORMATION

The following table sets forth the sales volume and average unit price of our vaccine products by category for the periods indicated:

	Year ended December 31,						Four months ended April 30,			
	2019		2020		2021		2021		2022	
	Sales volume	Average unit price ⁽³⁾	Sales volume	Average unit price ⁽³⁾	Sales volume	Average unit price ⁽³⁾	Sales volume	Average unit price ⁽³⁾	Sales volume	Average unit price ⁽³⁾
	('000 units)	(RMB/unit)	('000 units)	(RMB/unit)	('000 units)	(RMB/unit)	('000 units)	(RMB/unit)	('000 units)	(RMB/unit)
Class I vaccines										
Recombinant HBV vaccines (Hansenu Polymorpha) ⁽¹⁾	26,073	3.3	23,764	3.4	30,262	6.1	7,615	6.1	1,578	7.2
Inactivated HAV vaccines (HDC) ⁽¹⁾	1,421	21.7	957	22.9	196	27.2	58	29.1	—	—
HFRS vaccine ⁽¹⁾	2,321	7.4	161	5.3	—	—	—	—	—	—
Mumps vaccine ⁽¹⁾	—	—	—	—	—	—	—	—	—	—
Class II vaccines										
Human rabies vaccine (Vero cell) ⁽²⁾	1,667	267.6	3,569	300.6	2,907	322.5	936	322.0	541	324.7
Recombinant HBV vaccines (Hansenu Polymorpha) ⁽¹⁾	4,257	63.0	4,752	68.3	4,120	82.5	1,125	80.4	781	84.5
Inactivated HAV vaccines (HDC) ⁽¹⁾	627	90.1	788	95.6	655	123.2	170	110.2	130	122.0
MPSV4 ⁽¹⁾	—	—	345	77.6	228	81.9	54	81.1	76	81.9
Mumps vaccine ⁽¹⁾	939	42.1	717	49.5	28	66.6	23	70.5	—	—
HFRS vaccine ⁽¹⁾	157	42.7	*	—	—	—	—	—	—	—

Notes:

* Less than 1,000 units.

(1) Each unit represents one dose.

(2) Each unit represents one set, being five doses.

(3) Average unit price represents revenue from sales of a vaccine product divided by sales volume of that vaccine product, net of value-added taxes.

Our human rabies vaccine (Vero cell) and MPSV4 are Class II vaccines. For discussion on the revenue trends of our human rabies vaccine (Vero cell) and MPSV4 products, see “—Revenue by Vaccine Product.”

For our recombinant HBV vaccines, the 10µg HBsAg/0.5ml dosage is a Class I vaccine for newborns and a Class II vaccine for other vaccinees, and the 20µg HBsAg/0.5ml dosage is a Class II vaccine in most cases, and a Class I vaccine procured under certain government procurement programs. A majority of our revenue from recombinant HBV vaccines were derived from sales of Class II HBV vaccines, which accounted for 75.5%, 80.2%, 64.9%, 66.1% and 85.2% of total revenue from recombinant HBV vaccines in 2019, 2020, 2021 and the four months ended April 30, 2021 and 2022, respectively. Through our continuous sales and marketing effort, revenue from our Class II recombinant HBV vaccines, which are voluntarily vaccinated by citizens, increased by 21.2% from 2019 and 2020. In 2021, our revenue from Class II HBV vaccines remained relatively stable, with sales in the second half of 2021 being moderately affected by the recurrence of COVID-19 and CDC’s delay in procurement. However, as CDCs are required to offer HBV vaccines to all newborns, recurrence of COVID-19 had minimal impact on sales of our Class

FINANCIAL INFORMATION

I HBV vaccines, with sales revenue increasing by 129.2% from 2020 to 2021, mainly due to (i) an 80.0% increase in average unit price of our Class I recombinant HBV vaccines as CDCs agreed to raise the unit price to better reflect our production cost and (ii) a 27.3% increase in sales volume. In the four months ended April 30, 2022, sales volume of our Class I and Class II recombinant HBV vaccines were both affected by COVID-19 resurgence and decreased by 79.3% and 30.6%; the significant decrease in Class I HBV vaccines sales was mainly due to CDCs delaying centralized bidding processes for Class I HBV vaccines from late 2021 to March 2022, whereas the decrease in Class II HBV vaccines sales was primarily due to CDCs generally prioritizing their resources for COVID-19 prevention and vaccination. The decreases in sales volume were partly offset by 18.7% and 5.1% increases in average unit price, respectively, as compared to the same period in 2021.

For our inactivated HAV vaccines, the 320Eu/0.5ml dosage is a Class I vaccine in Beijing, Shanghai, Tianjin and Jiangsu Province, and a Class II vaccine in other regions in the PRC. Our 640Eu/1.0ml dosage is a Class II vaccine in the PRC. Revenue from sales of Class II inactivated HAV vaccines benefitted from our sales and marketing effort and increased by 33.4% from 2019 to 2020 and by 7.2% from 2020 to 2021. Meanwhile, revenue from sales of our Class I inactivated HAV vaccines decreased by 28.8% from 2019 to 2020 and by 75.7% from 2020 to 2021, mainly due to 32.6% and 79.5% decreases in sales volume, respectively. This was mainly because decreased procurement volume from certain provincial CDCs. The procurement volume of CDCs is affected by, among others, local birth rate and their inventory level. We did not sell any Class I inactivated HAV vaccines in the four months ended April 30, 2022 as CDCs delayed centralized bidding processes for Class I HAV vaccines. Like HBV vaccines, sales volume and revenue from sales of our Class II HAV vaccines were affected by COVID-19 resurgence and decreased by 23.9% and 15.8%, respectively.

During the Track Record Period, a majority of sales revenue from our HFRS vaccine was from the Class I market, whereas substantially all revenue from sales of our mumps vaccine was from the Class II market. For more discussion, see “—Revenue by Vaccine Product.”

Revenue by Geographical Region

During the Track Record Period, we derived most of our revenue from sales of our vaccine products in the PRC. We divide and operate our sales and marketing team into four regions, namely Eastern, Southern, Western and Northern China. See “Business—Sales and Marketing.” The following table sets forth a breakdown of our revenue by geographic area for the periods indicated:

	Year ended December 31,						Four months ended April 30,			
	2019		2020		2021		2021		2022	
	Amount	% of revenue	Amount	% of revenue	Amount	% of revenue	Amount	% of revenue	Amount	% of revenue
(unaudited)										
(in thousands of RMB, except for percentages)										
Sales of vaccine										
Eastern China ⁽¹⁾	180,989	19.0	264,497	16.1	289,830	18.4	54,951	11.8	41,382	15.0
Southern China ⁽²⁾	266,796	28.0	530,464	32.4	488,051	31.1	132,917	28.6	117,052	42.5
Western China ⁽³⁾	203,435	21.4	318,858	19.5	289,799	18.5	101,133	21.8	53,158	19.3
Northern China ⁽⁴⁾	300,428	31.6	524,151	32.0	499,602	31.8	175,926	37.8	63,635	23.2
Sub-total	951,648	100.0	1,637,970	100.0	1,567,282	99.8	464,926	100.0	275,227	100.0
Research and development services	—	—	—	—	2,847	0.2	—	—	28	*
Total	951,648	100.0	1,637,970	100.0	1,570,129	100.0	464,926	100.0	275,255	100.0

FINANCIAL INFORMATION

Notes:

* Less than 0.1%

- (1) Comprising Shanghai, Anhui, Jiangsu and Zhejiang.
- (2) Comprising Fujian, Guangdong, Guangxi, Hainan, Hubei, Hunan and Jiangxi.
- (3) Comprising Gansu, Guizhou, Ningxia, Qinghai, Shaanxi, Sichuan, Xinjiang, Yunnan, Chongqing and Tibet.
- (4) Comprising Beijing, Tianjin, Hebei, Henan, Heilongjiang, Jilin, Liaoning, Inner Mongolia, Shandong and Shanxi.

We derived 59.6%, 64.4%, 62.9%, 66.4% and 65.7% of our revenue in 2019, 2020, 2021 and the four months ended April 30, 2021 and 2022, respectively, from Southern and Northern China. This was primarily attributable to larger populations covered by these regions. Meanwhile, the divergence of our revenue in different regions was also attributable to differences in local economic conditions, product coverage by disease area and vaccine category and sales and marketing strategies and efforts in each region.

Cost of Sales

Our cost of sales primarily consists of manufacturing cost, raw materials cost, direct labor cost and transportation cost. The following table sets forth a breakdown of our cost of sales in absolute amount and as percentage of our revenue by nature for the periods indicated:

	Year ended December 31,						Four months ended April 30,			
	2019		2020		2021		2021		2022	
	Amount	% of revenue	Amount	% of revenue	Amount	% of revenue	Amount	% of revenue	Amount	% of revenue
(unaudited)										
(in thousands of RMB, except for percentages)										
Manufacturing cost	105,843	11.1	124,898	7.6	110,783	7.0	34,777	7.5	23,187	8.5
Raw materials cost	52,159	5.5	81,482	5.0	77,441	4.9	22,387	4.8	13,856	5.0
Direct labor cost	25,812	2.7	34,972	2.1	31,803	2.0	9,333	2.0	5,544	2.0
Transportation cost	17,250	1.8	19,717	1.2	16,808	1.1	5,243	1.1	2,888	1.0
Tax and surcharge	12,208	1.3	16,225	1.0	16,923	1.1	1,891	0.4	1,194	0.4
Provision for impairment of inventories	5,531	0.6	6,588	0.4	21,671	1.4	7,227	1.6	8,611	3.1
Total	218,803	23.0	283,882	17.3	275,429	17.5	80,858	17.4	55,280	20.0

Manufacturing cost mainly consists of overhead costs (primarily cost of non-frontline workers such as staff for production management and quality control), depreciation of our manufacturing equipment and utility. Raw materials cost primarily consists of the cost for antigen culture mediums and packaging material. Direct labor cost primarily includes salaries and benefits for workers involved in the production process. Transportation cost primarily consists of costs for the cold chain transportation in the distribution of our vaccine products to CDCs. Our manufacturing cost increased by 18.0% from 2019 to 2020, decreased by 11.3% from 2020 to 2021 and decreased by 33.3% from the four months ended April 30, 2021 to the same period in 2022, in each case primarily corresponded with our sales performance.

Our raw materials cost increased by 56.2% from 2019 to 2020, decreased by 5.0% from 2020 to 2021 and decreased by 38.1% from the four months ended April 30, 2021 to the same period in 2022. Such fluctuations primarily corresponded with changes in our sales volume during such periods.

FINANCIAL INFORMATION

Driven by increased compensation, including performance-based compensation, for our production staff in recognition of their contribution to the increased sales, our direct labor cost increased by 35.5% from 2019 to 2020. Our direct labor cost decreased by 9.1% from 2020 to 2021 and by 40.6% from the four months ended April 30, 2021 to the same period in 2022, corresponding to our decrease in sales over such periods.

Our transportation cost increased by 14.3% from 2019 to 2020, decreased by 14.8% from 2020 to 2021 and decreased by 44.9% from the four months ended April 30, 2021 to the same period in 2022, mainly driven by our sales performance.

We made provision for impairment primarily for raw materials, work in progress and finished products that (i) were expired, (ii) were close to their expiry dates or (iii) did not meet our quality control and assurance requirements. We made relatively significant provision for impairment of inventories of RMB21.7 million in 2021, mainly consisting of (i) finished goods that would expire within six months and (ii) certain work in progress discarded during our ordinary course quality assurance process.

As a percentage of revenue, our cost of sales decreased from 23.0% in 2019 to 17.3% in 2020 mainly because our revenue from Class II vaccine products significantly increased in 2020, especially the revenue from human rabies vaccine products. Our cost of sales as a percentage of revenue remained relatively stable at 17.5% in 2021. In the four months ended April 30, 2022, we had to make provision for finished goods that were close to their expiry dates and continued to incur overhead manufacturing cost despite the downturn in sales. As such, our cost of sales as a percentage of revenue increased from 17.4% in the four months ended April 30, 2021 to 20.0% in the same period in 2022.

Gross Profit and Gross Margin

Gross profit represents revenue less cost of sales. We had gross profit of RMB732.8 million, RMB1,354.1 million, RMB1,294.7 million, RMB384.1 million and RMB220.0 million in 2019, 2020, 2021 and the four months ended April 30, 2021 and 2022, respectively. Gross margin represents gross profit divided by total revenue, expressed as a percentage. Our gross margin was 77.0%, 82.7%, 82.5%, 82.6% and 80.0% in 2019, 2020, 2021 and the four months ended April 30, 2021 and 2022, respectively.

The following table sets forth our gross profit and gross margin by product for the periods indicated:

	Year ended December 31,						Four months ended April 30,			
	2019		2020		2021		2021		2022	
	Gross profit	Gross margin %	Gross profit	Gross margin %	Gross profit	Gross margin %	Gross profit	Gross margin %	Gross profit	Gross margin %
(unaudited)										
(in thousands of RMB, except for percentages)										
Vaccine products										
Human rabies vaccine										
(Vero cell)	375,786	84.2	914,726	85.3	789,453	84.2	248,566	82.4	147,238	83.8
Recombinant HBV vaccines										
(Hansenula Polymorpha) . . .	290,215	81.8	338,384	83.6	450,061	86.0	119,076	87.0	66,658	86.1
Inactivated HAV vaccines										
(HDC)	44,554	51.1	62,283	64.1	54,860	63.7	15,230	74.4	5,354	33.8

FINANCIAL INFORMATION

	Year ended December 31,						Four months ended April 30,			
	2019		2020		2021		2021		2022	
	Gross profit	Gross margin %	Gross profit	Gross margin %	Gross profit	Gross margin %	Gross profit	Gross margin %	Gross profit	Gross margin %
(unaudited)										
(in thousands of RMB, except for percentages)										
MPSV4 ⁽¹⁾	(3,104)	N/A	16,192	60.6	(4,059) ⁽²⁾	(21.7) ⁽²⁾	485	11.0	697	11.2
Mumps vaccine	29,852	75.5	22,582	63.6	1,730	91.4	712	43.9	—	—
HFRS vaccine ⁽³⁾	(4,458)	(18.7)	(79)	(9.0)	—	—	—	—	—	—
Sub-total	732,845	77.0	1,354,088	82.7	1,292,045	82.4	384,068	82.6	219,947	80.0
Research and development services	—	—	—	—	2,655	93.3	—	—	28	100.0
Total	732,845	77.0	1,354,088	82.7	1,294,700	82.5	384,068	82.6	219,975	80.0

Notes:

- (1) We launched MPSV4 in March 2020.
- (2) The negative gross profit and margin were mainly caused by fixed production overheads arising from scheduled non-production and impairment of inventories, as we decreased our production volume for our MPSV4 in 2021 considering that we had sufficient inventory. See “Business—Manufacturing—Manufacturing Facilities and Production Capacity.”
- (3) We ceased production of HFRS vaccines at the end of 2018 to relocate the relevant production line, which led to significant decrease in revenue from sales of HFRS vaccines. See “Business—Manufacturing—Manufacturing Facilities and Production Capacity.” However, we continue to incur certain fixed costs of sales, leading to a negative gross margin.

Our gross profit increased from RMB732.8 million in 2019 to RMB1,354.1 million in 2020, and slightly decreased to RMB1,294.7 million in 2021, primarily corresponding to our sales performance in the relevant periods. Our gross profit margin increased from 77.0% in 2019 to 82.7% in 2020, which was primarily because our sales of Class II vaccine products, especially for our human rabies vaccine (Vero cell) and recombinant HBV vaccines (Hansenula Polymorpha) with relatively higher gross margins than Class I vaccine products, increased as a primary source of our total revenue. See “—Revenue—Revenue by Vaccine Product—Human Rabies Vaccine (Vero Cell).” Our gross profit margin remained relatively stable at 82.5% in 2021. Our gross profit decreased from RMB384.1 million in the four months ended April 30, 2021 to RMB220.0 million in the same period in 2022, reflecting the decrease in our revenue. Over this period, our gross margin decreased from 82.6% to 80.0%, primarily due to increased provision for impairment of inventories and also as we continued to incur overhead manufacturing cost despite the downturn in sales.

FINANCIAL INFORMATION

Other Income and Gains

In 2019, 2020, 2021 and the four months ended April 30, 2021 and 2022, we had other income and gains of RMB26.2 million, RMB40.7 million, RMB53.6 million, RMB21.3 million and RMB8.3 million, respectively, representing 2.7%, 2.5%, 3.4%, 4.6% and 3.0% of our revenue, respectively. Our other income and gains primarily consist of government grants, bank interest income and net foreign exchange gains. The following table sets forth a breakdown of our other income and gains for the periods indicated:

	Year ended December 31,						Four months ended April 30,			
	2019		2020		2021		2021		2022	
	Amount	% of revenue	Amount	% of revenue	Amount	% of revenue	Amount	% of revenue	Amount	% of revenue
(unaudited)										
(in thousands of RMB, except for percentages)										
Government grants related to:										
– Assets ⁽¹⁾	2,104	0.2	3,399	0.2	3,894	0.3	1,258	0.3	1,453	0.5
– Income ⁽²⁾	18,780	1.9	17,407	1.0	33,390	2.1	13,567	2.9	1,886	0.7
Bank interest income	3,667	0.4	10,736	0.7	10,777	0.7	4,076	0.9	1,527	0.6
Gain on disposal of wealth investment products	—	—	1,312	0.1	1,673	0.1	376	0.1	3,074	1.1
Foreign exchange gains, net	—	—	6,123	0.4	2,032	0.1	787	0.2	—	—
Others ⁽³⁾	1,612	0.2	1,737	0.1	1,856	0.1	1,192	0.2	374	0.1
Total	26,163	2.7	40,714	2.5	53,622	3.4	21,256	4.6	8,314	3.0

Notes:

- (1) Including certain government grants related to assets for investment in laboratory equipment and plant.
- (2) Including grants for compensating our operating and vaccine research and development activities including subsidies for industrialization and technology development.
- (3) Including other miscellaneous non-operating income.

Government grants represent various grants and subsidies we received from government authorities primarily in relation to our operating and research and development activities. Bank interest income represents interest earned from our bank deposits and balances. Gain on disposal of wealth investment products refers to gain on disposal of certain wealth investment products held by the Group, details of which are set out in “—Discussion of Certain Key Balance Sheet Items—Financial Assets at Fair Value Through Profit or Loss.” Net foreign exchange gains were primarily due to changes in exchange rate between Renminbi and foreign currency.

FINANCIAL INFORMATION

Research and Development Costs

Our research and development costs mainly include staff cost, research materials cost, professional service fee and depreciation and amortization. The following table sets forth a breakdown of our research and development costs for the periods indicated:

	Year ended December 31,						Four months ended April 30,			
	2019		2020		2021		2021		2022	
	% of		% of		% of		% of		% of	
	Amount	revenue	Amount	revenue	Amount	revenue	Amount	revenue	Amount	revenue
(unaudited)										
(in thousands of RMB, except for percentages)										
Staff cost ⁽¹⁾	26,285	2.8	33,484	2.0	86,310	5.5	25,522	5.5	31,318	11.4
Research materials cost ⁽²⁾	28,350	3.0	45,386	2.8	82,927	5.3	29,248	6.3	19,467	7.1
Professional service fee	16,825	1.7	39,795	2.4	82,784	5.3	13,196	2.8	40,600	14.8
Depreciation and amortization	17,134	1.8	27,760	1.7	34,126	2.2	9,546	2.1	13,735	5.0
Utility cost	6,519	0.7	6,092	0.4	13,536	0.9	2,561	0.6	6,116	2.2
Others ⁽³⁾	3,773	0.4	5,244	0.3	7,670	0.5	1,822	0.4	2,384	0.9
Total	98,886	10.4	157,761	9.6	307,353	19.6	81,894	17.6	113,620	41.3

Notes:

- (1) Including (i) salaries, benefits and other compensation, and (ii) share-based compensation of nil, RMB1.2 million, RMB5.0 million, RMB2.9 million and RMB3.9 million in 2019, 2020, 2021 and the four months ended April 30, 2021 and 2022, respectively, for our research and development staff.
- (2) Including costs of raw materials used in the course of research and development.
- (3) Including inspection and maintenance expenses and other miscellaneous expenses.

Our research and development costs increased by 59.5% from 2019 to 2020 and 94.8% from 2020 to 2021, primarily due to the continuous increases in the research materials cost, professional service fees and staff cost, in line with advancement and expansion of our vaccine pipeline. Our research and development costs also increased by 38.7% from the four months ended April 30, 2021 to the same period in 2022 as we simultaneously advanced research and clinical development of various vaccine candidates, especially candidates in our COVID-19 and pneumococcal portfolios, driven in particular by an increase in professional service fee for clinical studies mainly in connection with our COVID-19 vaccine candidates.

FINANCIAL INFORMATION

As a percentage of revenue, our research and development costs remained relatively stable from 10.4% in 2019 to 9.6% in 2020 then increased to 19.6% in 2021, and also increased from 17.6% in the four months ended April 30, 2021 to 41.3% in the same period in 2022. Such increase corresponded to our continuously increased investment to advance, diversify and enrich our vaccine pipeline. The following table sets forth our research and development expenses by vaccine products and vaccine candidates for the periods indicated:

	Year ended December 31,						Four months ended April 30,			
	2019		2020		2021		2021		2022	
	Amount	% of revenue	Amount	% of revenue	Amount	% of revenue	Amount	% of revenue	Amount	% of revenue
	(unaudited)									
	(in thousands of RMB, except for percentages)									
Pneumococcal vaccines	39,045	4.1	35,135	2.1	81,421	5.2	20,751	4.5	26,736	9.7
Inactivated COVID-19 vaccines	—	—	34,879	2.1	67,341	4.3	15,890	3.4	19,901	7.2
mRNA COVID-19 vaccine	—	—	—	—	34,053	2.2	—	—	29,665	10.8
EV71-CA16 Bivalent HFMD Vaccine Candidate (HDC)	9,657	1.0	11,927	0.7	33,860	2.2	17,115	3.7	8,432	3.1
Human rabies vaccines	24,361	2.6	28,909	1.8	23,521	1.5	10,481	2.3	7,697	2.8
DTP vaccines	3,332	0.4	11,812	0.7	17,982	1.1	6,957	1.5	7,864	2.9
MCV4	3,716	0.4	6,231	0.4	17,639	1.1	5,176	1.1	1,779	0.6
Tetavalent influenza vaccine (MDCK cells)	4,744	0.5	7,403	0.5	13,263	0.8	4,085	0.9	5,994	2.2
Recombinant HBV vaccines	5,441	0.6	3,998	0.2	1,094	0.1	398	0.1	644	0.2
Inactivated HAV vaccines (HDC)	1,816	0.2	7,655	0.5	619	*	117	*	—	—
Others	6,774	0.7	9,813	0.6	16,560	1.1	924	0.1	4,908	1.8
Total	98,886	10.4	157,761	9.6	307,353	19.6	81,894	17.6	113,620	41.3

* Less than 0.1%

Professional service fee includes various professional service expenses, test and evaluation fees for our research and development projects. The following table sets forth a breakdown of professional service fee by nature for the periods indicated:

	Year ended December 31,						Four months ended April 30,			
	2019		2020		2021		2021		2022	
	Amount	% of total	Amount	% of total	Amount	% of total	Amount	% of total	Amount	% of total
	(unaudited)									
	(in thousands of RMB, except for percentages)									
Clinical studies	—	—	—	—	37,591	45.4	2,462	18.7	29,550	72.8
Outsourced and collaborative research and development ⁽¹⁾	4,000	23.8	13,284	33.4	20,990	25.4	5,274	40.0	10	*
Safety evaluation	2,172	12.9	5,546	13.9	11,751	14.2	3,897	29.5	3,907	9.6
Animal studies	—	—	2,228	5.6	874	1.1	50	0.4	1,139	2.8
COVID-19 vaccine antigen preparation	—	—	13,700	34.4	—	—	—	—	—	—
Pneumonia strains screening	6,173	36.7	—	—	—	—	—	—	—	—
Others ⁽²⁾	4,480	26.6	5,037	12.7	11,579	14.0	1,513	11.4	5,994	14.8
Total	16,825	100.0	39,795	100.0	82,785	100.0	13,197	100.0	40,600	100.0

FINANCIAL INFORMATION

Notes:

* Less than 0.1%

- (1) Primarily including service fees paid to companies and other institutions for contract research and development activities related to our vaccines as well as payment to Zhejiang Provincial CDC under a technical collaboration agreement for the development of our inactivated COVID-19 vaccine candidate against the Delta variant strain. See “Business—Research and Development—Collaboration Agreements—Collaboration with Zhejiang Provincial CDC.”
- (2) Including other miscellaneous expenses such as test and evaluation fees, technical consultancy fees, professional drafting service fees, compatibility studies fees, sequencing testing fees and appraisal service fees.

We engage various third party professional service providers to support our vaccine research and development. The following table sets forth details of the five largest professional service providers for the respective period during the Track Record Period in terms of professional service fee for research and development charged to profit or loss:

<u>Service provider</u>	<u>Background</u>	<u>Amount of professional service fee (RMB'000)</u>	<u>% of total professional service fee</u>	<u>Nature of services provided</u>
Year ended December 31, 2019				
Service Provider A	National institution for drug testing under NMPA	6,426	38.2%	Pneumonia strains screening; vaccine sample testing
Service Provider B ⁽¹⁾	Company engaged in research and development of drugs and cell culture technologies	4,000	23.8%	Outsourced and collaborative research and development
Service Provider C ⁽²⁾	Company engaged in providing biotechnology research consultancy services	3,170	18.8%	Technical consultancy services
Service Provider D	Company engaged in providing technical services for vaccine research and development	943	5.6%	Safety evaluation
Service Provider E	Company engaged in providing preclinical research services	821	4.9%	Safety evaluation
Year ended December 31, 2020				
Service Provider F	National public health agency	14,152	35.6%	COVID-19 vaccine antigen preparation; COVID-19 serology testing
Service Provider G	Company engaged in vaccine research and development	8,739	22.0%	Outsourced and collaborative research and development; safety evaluation
Service Provider E	Company engaged in providing preclinical research services	4,579	11.5%	Safety evaluation; pathogen research

FINANCIAL INFORMATION

Service provider	Background	Amount of professional service fee (RMB'000)	% of total professional service fee	Nature of services provided
Service Provider B ⁽¹⁾	Company engaged in research and development of drugs and cell culture technologies	2,000	5.0%	Outsourced and collaborative research and development
Service Provider H	University specializing in medicine	2,000	5.0%	Outsourced and collaborative research and development
Year ended December 31, 2021				
Service Provider I	Provincial public health agency	10,166	12.3%	Clinical studies
Service Provider J	Company engaged in providing pre-clinical and clinical research services	9,501	11.5%	Clinical studies; safety evaluation
Service Provider K ⁽³⁾	Company engaged in providing clinical research services	8,663	10.5%	Clinical studies
Service Provider G	Company engaged in vaccine research and development	7,856	9.5%	Outsourced and collaborative research and development
Service Provider L	Privately-owned hospital	5,514	6.7%	Clinical studies
Four months ended April 30, 2022				
Service Provider M	Virology research institute	7,242	17.8%	Clinical studies; COVID-19 vaccine sample testing
Service Provider K ⁽³⁾	Company engaged in providing clinical research services	6,951	17.1%	Clinical studies
Service Provider I	Provincial public health agency	6,841	16.9%	Clinical studies
Service Provider A	National institution for drug testing under NMPA	3,725	9.2%	Clinical studies; others
Service Provider J	Company engaged in providing pre-clinical and clinical research services	3,353	8.3%	Vaccine sample testing; safety evaluation; clinical studies

Notes:

- (1) To the Company's knowledge, Dr. Ningning MA, a member of our external scientific advisory board (not our employee) and an Independent Third Party, is a shareholder and a director of Service Provider B. In addition, Dr. Ningning MA is also a shareholder and a director of one other R&D professional service provider in 2020 and a shareholder of another R&D professional service provider in 2021, to which we paid professional service fee of RMB0.7 million and RMB5.0 million, respectively. We engaged these service providers primarily to leverage their expertise in vaccine development. Our Directors confirm that these transactions were conducted in the ordinary course of business and on an arm's length basis and with normal commercial terms.

FINANCIAL INFORMATION

- (2) Service Provider C is a company controlled by Mr. Xiaojun HUANG, who is an existing Shareholder of our Company and controls 0.25% of our Shares as at the Latest Practicable Date and immediately prior to the Global Offering. Service Provider C is not a connected person of our Group. Our Directors confirm that this transaction was conducted in the ordinary course of business and on an arm's length basis and with normal commercial terms.
- (3) To the Company's knowledge, Shenzhen Cowin Asset Management Co., Ltd. (深圳同創偉業資產管理股份有限公司) ("Shenzhen Cowin") indirectly controls 1.00% of Service Provider K. Shenzhen Cowin indirectly controls 0.91% of our Shares as at the Latest Practicable Date and immediately prior to the Global Offering. Service Provider K is not a connected person of our Group. Our Directors confirm that these transactions were conducted in the ordinary course of business and on an arm's length basis and with normal commercial terms.

During the Track Record Period, to the knowledge of our Company, all of our professional service providers for research and development were Independent Third Parties. Save as disclosed, to the knowledge of our Company, there is no other past or present relationship (including, without limitation, business, employment, family, trust, financing, fund flow or otherwise) between (i) our professional service providers for research and development during the Track Record Period, their shareholders, directors and senior management and (ii) our Group, our Shareholders, our Directors and senior management, and their respective associates as at the Latest Practicable Date.

Our professional service fee incurred for research and development increased over the Track Record Period as we advanced research and development of our vaccine candidates. The following table sets forth a breakdown of professional service fee by vaccine for the periods indicated:

	Year ended December 31,						Four months ended April 30,			
	2019		2020		2021		2021		2022	
	Amount	% of total	Amount	% of total	Amount	% of total	Amount	% of total	Amount	% of total
(unaudited)										
(in thousands of RMB, except for percentages)										
Pneumococcal vaccines	11,614	69.0	5,733	14.4	7,503	9.1	3,742	28.4	3,413	8.4
Inactivated COVID-19 vaccines	—	—	17,020	42.8	30,255	36.5	2,603	19.7	14,201	35.0
mRNA COVID-19 vaccine . .	—	—	—	—	19,400	23.4	—	—	18,609	45.8
DTP vaccines	216	1.3	8,524	21.4	11,190	13.5	5,274	40.0	3,111	7.7
Tetavalent influenza vaccine (MDCK cells)	4,003	23.8	4,000	10.0	770	0.9	—	—	3	*
EV71-CA16 Bivalent HFMD Vaccine Candidate (HDC) .	153	0.9	877	2.2	158	0.2	3	*	74	0.2
Human rabies vaccines	372	2.2	306	0.8	2,891	3.5	1,201	9.1	5	*
Recombinant HBV vaccines . .	433	2.6	1,183	3.0	—	—	—	—	—	—
MCV4	—	—	1,087	2.7	643	0.8	207	1.6	711	1.8
Others	34	0.2	1,065	2.7	9,974	12.1	167	1.2	474	1.1
Total	16,825	100.0	39,795	100.0	82,784	100.0	13,197	100.0	40,600	100.0

* Less than 0.1%

FINANCIAL INFORMATION

Selling and Distribution Expenses

Our selling and distribution expenses primarily consist of marketing and promotion expenses and staff cost. The marketing and promotion expenses primarily consist of costs and expenses paid to our CSOs for various marketing and academic promotion activities, industry research and post-sales customer service. The staff cost includes salaries, benefits and other compensation for our sales and marketing staff. The following table sets forth a breakdown of our selling and distribution expenses for the periods indicated:

	Year ended December 31,						Four months ended April 30,			
	2019		2020		2021		2021		2022	
	Amount	% of revenue	Amount	% of revenue	Amount	% of revenue	Amount	% of revenue	Amount	% of revenue
(unaudited)										
(in thousands of RMB, except for percentages)										
Marketing and promotion expenses	252,803	26.6	439,620	26.9	344,375	21.9	114,857	24.7	70,980	25.8
Staff cost ⁽¹⁾	46,974	4.9	62,074	3.9	76,093	4.8	30,174	6.5	35,748	13.0
Market outreach expenses	9,260	1.0	10,302	0.6	18,170	1.2	4,945	1.1	5,480	2.0
Transportation and storage expenses	6,460	0.7	8,690	0.5	8,418	0.5	2,348	0.5	2,382	0.9
Travel expenses	5,019	0.5	3,991	0.2	5,263	0.3	1,243	0.3	1,059	0.4
Others ⁽²⁾	9,493	1.0	8,572	0.5	7,795	0.6	3,211	0.6	2,295	0.7
Total	330,009	34.7	533,249	32.6	460,114	29.3	156,778	33.7	117,944	42.8

Notes:

- (1) Including (i) salaries, benefits and other compensations and (ii) share-based compensation of RMB3.5 million, RMB5.7 million, RMB10.2 million, RMB4.4 million and RMB11.3 million in 2019, 2020, 2021 and the four months ended April 30, 2021 and 2022, respectively, for our sales and marketing staff.
- (2) Primarily including office expenses and depreciation and amortization.

From 2019 to 2020, our selling and distribution expenses increased by 61.6%, which was due to the increases in the marketing and promotion expenses as well as staff cost, in line with our business expansion and revenue increase in this period. However, a percentage of revenue, our selling and distribution expenses decreased from 34.7% in 2019 to 32.6% in 2020, because (i) we concentrated more marketing efforts on products that have a higher average unit price. For example, for HAV and HBV products, both our CSOs and in-house team put more effort in promoting products in the prefilled syringe packaging, which are relatively more expensive as compared to products in the single vial packaging, therefore the same level of marketing and promotion efforts generated more revenue; and (ii) we continued to effectively manage our CSO and in-house sales and marketing team. From 2019 to 2020, we further enhanced CSO management, terminated subpar CSOs and consolidated our CSO team from approximately 60 to approximately 40, by allocating more areas and types of products to CSOs with superior performance, which significantly reduced our marketing and promotion expenses paid to CSOs. Meanwhile, we continued to concentrate manpower on the cities and regions with higher sales volumes, and kept the number of our in-house sales and marketing personnel at 101. See “Business—Sales and Marketing.” These two factors led to more significant increase in our revenue while our selling and distribution expenses only increased moderately for the same period.

FINANCIAL INFORMATION

Our selling and distribution expenses decreased by 13.7% from 2020 to 2021, which was attributable to our continued effort in enhancing efficiency of our marketing activities as well as decreased sales activities in the second half of 2021 due to the recurrence of COVID-19. Accordingly, our selling and distribution expenses as a percentage of revenue decreased from 32.6% in 2020 to 29.3% in 2021.

Our selling and distribution expenses decreased by 24.8% from the four months ended April 30, 2021 to the same period in 2022, which was mainly attributable to a reduction in marketing and promotion activities amid outbreaks of COVID-19. As our revenue decreased, and on the other hand our sales and marketing staff cost increased primarily due to increased share-based compensation expenses pursuant to a modification of the vesting conditions of the Pre-IPO ESOP, our selling and distribution expenses as a percentage of revenue increased from 33.7% to 42.8% over the same period.

Administrative Expenses

Our administrative expenses primarily consist of staff cost, depreciation and amortization, inventory loss and rental expenses. The following table sets forth a breakdown of our administrative expense for the periods indicated:

	Year ended December 31,						Four months ended April 30,			
	2019		2020		2021		2021		2022	
	Amount	% of revenue	Amount	% of revenue	Amount	% of revenue	Amount	% of revenue	Amount	% of revenue
(unaudited)										
(in thousands of RMB, except for percentages)										
Staff cost ⁽¹⁾	71,095	7.5	100,593	6.1	1,044,850	66.5	52,040	11.2	50,590	18.4
Depreciation and amortization	20,215	2.1	29,542	1.8	31,603	2.0	11,451	2.5	11,749	4.3
Inventory loss	9,934	1.0	17,968	1.1	4,995	0.3	404	0.1	2,975	1.1
Rental expenses	11,447	1.2	1,246	0.1	1,500	0.1	208	*	616	0.2
Professional service fee	5,418	0.6	9,424	0.6	12,955	0.8	1,874	0.4	3,783	1.4
Business and travel expenses	7,992	0.8	9,141	0.6	10,895	0.7	2,760	0.6	2,272	0.8
Others ⁽²⁾	31,080	3.3	30,783	1.8	61,181	3.9	10,425	2.2	13,038	4.7
Total	<u>157,181</u>	<u>16.5</u>	<u>198,697</u>	<u>12.1</u>	<u>1,167,979</u>	<u>74.4</u>	<u>79,160</u>	<u>17.0</u>	<u>85,023</u>	<u>30.9</u>

Notes:

* Less than 0.1%.

(1) Including (i) salaries, benefits and other compensation, and (ii) share-based compensation of RMB4.2 million, RMB15.1 million, RMB931.3 million, RMB17.8 million and RMB7.8 million in 2019, 2020, 2021 and the four months ended April 30, 2021 and 2022, respectively, for our administrative staff.

(2) Including maintenance expenses, insurance fees and other miscellaneous expenses.

FINANCIAL INFORMATION

Our administrative expenses increased by 26.4% from 2019 to 2020, primarily driven by a 41.5% increase in staff cost, attributable to increases in headcount of and compensation for our administrative staff, to recruit and retain talents to meet our management needs. Our administrative expenses further increased by 487.8% from 2020 to 2021, primarily reflecting a one-off share-based compensation expense of RMB896.9 million, as well as increases in remuneration and recurring share-based compensation to our administrative staff. Our administrative expenses increased by 7.4% from the four months ended April 30, 2021 to the same period in 2022, mainly driven by increases in inventory loss and professional service fee.

As a percentage of revenue, our administrative expenses decreased from 16.5% in 2019 to 12.1% in 2020 due to a significant increase in revenue in 2020 and increased to 74.4% in 2021, primarily attributable to a one-off share-based compensation expense of RMB896.9 million, as well as increases in remuneration and recurring share-based compensation to our administrative staff. Our administrative expenses as a percentage of revenue increased from 17.0% in the four months ended April 30, 2021 to 30.9% in the same period in 2022 due to the increase in administrative expenses amid the downturn in revenue.

Finance Costs

Our financial costs primarily consist of interest on bank loans and interest on lease liabilities. The following table sets forth a breakdown of finance costs for the periods indicated:

	Year ended December 31,						Four months ended April 30,			
	2019		2020		2021		2021		2022	
	Amount	% of total	Amount	% of total	Amount	% of total	Amount	% of total	Amount	% of total
	(in thousands of RMB, except for percentages)									
Interest on bank loans	9,316	86.4	12,951	82.3	13,654	127.6	2,560	81.2	11,426	182.3
Interest on lease liabilities . . .	1,465	13.6	2,790	17.7	2,376	22.2	774	24.5	723	11.5
Less: Interest capitalized	—	—	—	—	(5,327)	(49.8)	(180)	(5.7)	(5,880)	(93.8)
Total	10,781	100.0	15,741	100.0	10,703	100.0	3,154	100.0	6,269	100.0

Income Tax Expense

Our income tax expense mainly consists of PRC enterprise income tax (“EIT”). The following table sets forth a breakdown of our income tax expense for the periods indicated:

	Year ended December 31,			Four months ended April 30,	
	2019	2020	2021	2021	2022
	(in thousands of RMB)				
Current income tax	38,250	91,115	79,797	28,049	2,700
Deferred tax	(1,303)	(5,643)	(10,627)	(3,443)	(9,700)
Total	36,947	85,472	69,170	24,606	(7,000)

FINANCIAL INFORMATION

Under the EIT Law and Implementation Rules of the EIT Law, the EIT rate of our PRC subsidiaries is 25%, except for certain subsidiaries that enjoy tax exemption or preferential EIT rates as approved by relevant tax authorities. AIM Kanghuai was certified as a High and New Technology Enterprise in the PRC in 2019 and was therefore entitled to a preferential EIT rate of 15% from 2019 to 2021. AIM Honesty, Rong'an Bio and AIM Weixin were certified as High and New Technology Enterprises in 2018 and renewed their certificates in 2021, and were therefore entitled to a preferential EIT rate of 15% from 2018 to 2023, subject to renewal thereafter. As of the Latest Practicable Date, we have made an application to renew the certification of AIM Kanghuai, which we expect to receive in late 2022.

Our effective income tax rate, calculated by dividing income tax expense by profit/(loss) before tax, expressed as a percentage, was 23.6%, 17.6% and negative 11.4%, in 2019, 2020 and 2021, respectively. The decrease in effective income tax rate from 2019 to 2020 was mainly because we utilized the loss in previous years. We had a negative effective income tax rate in 2021 because we recorded a loss before tax. See “—Profit/(Loss) for the Year/Period and Net Margin.” Our effective income tax rate in the four months ended April 30, 2021 was 29.9%. We recorded a tax income of RMB7.0 million in the four months ended April 30, 2022. During the Track Record Period, we had paid all relevant taxes in accordance with tax regulations and did not have any disputes or unresolved tax issues with the relevant tax authorities.

Impairment Losses on Financial Assets

Our impairment losses on financial assets mainly include the impairment losses on trade and other receivables. We use a provision matrix to calculate expected credit losses for trade receivables. The provision rates are based on days past due for groupings of various customer segments that have similar loss patterns.

Our impairment losses on financial assets were negative RMB2.1 million, RMB0.8 million, RMB8.0 million, RMB2.0 million and RMB4.9 million in 2019, 2020, 2021 and the four months ended April 30, 2021 and 2022, respectively. These changes were primarily due to the fluctuations in balance of our trade receivables as well as the expected credit loss rate.

Other Expenses

Our other expenses mainly consist of foreign exchange loss and loss on disposal of items of property, plant and equipment. We had other expenses of RMB7.5 million, RMB2.6 million, RMB0.9 million, RMB47,000 and RMB3.3 million in 2019, 2020, 2021 and the four months ended April 30, 2021 and 2022, respectively. The following table sets forth a breakdown of our other expenses for the periods indicated:

	Year ended December 31,						Four months ended April 30,			
	2019		2020		2021		2021		2022	
	Amount	% of revenue	Amount	% of revenue	Amount	% of revenue	Amount	% of revenue	Amount	% of revenue
(unaudited)										
(in thousands of RMB, except for percentages)										
Foreign exchange loss, net	1,929	0.2	—	—	—	—	—	—	3,286	1.2
Donations	122	*	192	*	208	*	—	—	—	—
Loss on disposal of items of property, plant and equipment	5,009	0.5	2,010	0.1	202	*	29	*	36	*
Others	433	*	439	*	485	*	18	*	—	—
Total	7,493	0.8	2,642	0.2	895	0.1	47	*	3,322	1.2

* Less than 0.1%.

FINANCIAL INFORMATION

Net foreign exchange loss was primarily due to changes in exchange rate between Renminbi and foreign currencies. Donations refer to payments made to charitable organizations. Loss on disposal of items of property, plant and equipment primarily consists of loss relating to disposal of old facilities and equipment during upgrades to our production lines.

Profit/(Loss) for the Year/Period and Net Margin

As a result of the foregoing, our profit in 2019 and 2020 was RMB119.8 million and RMB400.4 million, respectively. The increase in profit from 2019 to 2020 was primarily driven by our revenue growth as well as efficient operation cost and expense control. We had a loss of RMB675.9 million in 2021 primarily due to (i) our share-based compensation expenses totaling RMB952.1 million, including a one-off share-based compensation expense of RMB896.9 million and other share-based compensation expenses of RMB55.2 million for other share awards and options granted to our employees and (ii) an increase in research and development costs from RMB157.8 million to RMB307.4 million to develop our rich pipeline of 22 vaccine candidates. We had a profit of RMB57.7 million in the four months ended April 30, 2021 but recorded a loss of RMB95.8 million in the same period in 2022, mainly because of a slowdown in sales amid COVID-19 outbreaks in China and as we rapidly advanced clinical trials of our vaccine candidates, which drove up our research and development costs.

Net margin represents profit/(loss) for the year/period divided by revenue, expressed as a percentage. In 2019, 2020, 2021 and the four months ended April 30, 2021 and 2022, our net margin was 12.6%, 24.4%, negative 43.0%, 12.4% and negative 34.8%, respectively.

PERIOD-TO-PERIOD COMPARISON OF RESULTS OF OPERATIONS

Four Months Ended April 30, 2022 Compared to Four Months Ended April 30, 2021

Revenue

Our revenue decreased by RMB189.7 million, or 40.8%, from RMB464.9 million in the four months ended April 30, 2021 to RMB275.3 million in the same period in 2022, primarily due to decreases in revenue of our human rabies vaccine (Vero cell), recombinant HBV vaccines (Hansenula Polymorpha) and inactivated HAV vaccines (HDC) due to COVID-19 outbreaks and prevention and containment measures. The decrease was partially offset by an increase in revenue of our MPSV4, as the PRC government placed more emphasis on mass vaccination against respiratory diseases and transmissible diseases.

In the first four months of 2022, sales volume and revenue from sales of our vaccines other than MPSV4 were generally affected by a new wave of COVID-19 resurgence in China. Since early 2022, various cities and areas in China (such as Xi'an, Shenzhen, Shanghai, Beijing, Tianjin, and certain cities in Jilin, Zhejiang, Henan, Inner Mongolia and Sichuan provinces) were hit by local COVID-19 outbreaks. To achieve "dynamic-zero COVID-19 cases" (動態清零), the PRC government has adopted a series of prevention and containment measures, including but not limited to, quarantines, epidemiological investigations on infection sources and close contacts, large-scale community nucleic acid testing, travel restrictions, control on public events and continuous booster vaccination measures. Such measures posed obstacles to our sales, marketing and promotion activities, particularly in the first quarter of 2022. Inter-city and inter-province transportation restrictions in certain provinces with high population density (such as Henan, Shandong, Hebei, Guangdong, Sichuan, Jiangsu, Shaanxi and Jiangxi) also interrupted our delivery to CDCs.

FINANCIAL INFORMATION

As CDCs continued to allocate and focus their resources on COVID-19 prevention and containment, many of them delayed or reduced procurement of other vaccines, utilized their stocks for vaccination of Class I vaccines and delayed vaccination of Class II vaccines. For example, the 2022 national centralized bidding results for Class I HBV/HAV vaccines were delayed from late 2021 to March 2022; the centralized bidding processes held by provincial CDCs in Shandong, Henan, Inner Mongolia and Jiangsu for our Class II vaccines were also delayed in the first quarter of 2022; and certain county-level CDCs slowed down their negotiations with our Group on supply volume of Class II vaccines in 2022 due to the COVID-19 resurgence. Furthermore, incidents of animal bites and scratches also decreased as residents were encouraged to stay indoors and minimize unnecessary outdoor activities, which had an impact on the sales volume of our human rabies vaccine (Vero cell).

As a result, from the four months ended April 30, 2021 to the same period in 2022, our revenue from sales of (i) human rabies vaccine (Vero cell) decreased by RMB125.8 million, or 41.7%, from RMB301.5 million to RMB175.8 million; (ii) recombinant HBV vaccines (Hansenula Polymorpha) decreased by RMB59.4 million, or 43.4%, from RMB136.9 million to RMB77.4 million and (iii) inactivated HAV vaccines (HDC) decreased by RMB4.7 million, or 22.7%, from RMB20.5 million to RMB15.8 million, while sales volume decreased by 42.2%, 73.0% and 43.0%, respectively. According to CIC, such decreases were consistent with the prevailing market conditions amid the COVID-19 resurgence. For instance, China's total approved lot release volume of human rabies vaccines and HBV vaccines decreased by approximately 82.4% and 52.4%, respectively, from the four months ended April 30, 2021 to the same period in 2022.

On the other hand, as the PRC government has placed more emphasis on mass vaccination against respiratory diseases and transmissible diseases, our MPSV4 vaccine products has gained more market opportunities. Sales volume and revenue from sales of our MPSV4 increased by 39.7% and 41.0%, respectively, from the four months ended April 30, 2021 to the same period in 2022. Meanwhile, as we have ceased production of mumps vaccines since February 2020 for maintenance and upgrades, we did not generate any revenue from sales of mumps vaccines in the four months ended April 30, 2022.

Cost of Sales

Our cost of sales decreased by RMB25.6 million, or 31.6%, from RMB80.9 million in the four months ended April 30, 2021 to RMB55.3 million in the same period in 2022. Over the same period, as our sales volume decreased due to resurgence of COVID-19, our manufacturing cost, raw materials cost, direct labor cost, transportation cost, and tax and surcharge decreased by RMB11.6 million, RMB8.5 million, RMB3.8 million, RMB2.4 million and RMB0.7 million, or 33.3%, 38.1%, 40.6%, 44.9% and 36.9%, respectively. These were partially offset by an increase of RMB1.4 million, or 19.2%, in provision for impairment of inventories. We made provision for impairment of inventories of RMB8.6 million in the four months ended April 30, 2022, mainly consisting of a RMB7.7 million provision for impairment of finished inactivated HAV vaccines (HDC) that were close to expiry. As a percentage of revenue, our cost of sales increased from 17.4% to 20.0%, primarily due to the increased provision for impairment of inventories and also as we continued to incur overhead manufacturing cost (such as cost of non-frontline workers) despite the downturn in sales.

Gross Profit and Gross Margin

Our gross profit decreased by RMB164.1 million, or 42.7%, from RMB384.1 million in the four months ended April 30, 2021 to RMB220.0 million in the same period in 2022, reflecting the decrease in our revenue. Over this period, our gross margin decreased from 82.6% to 80.0%, primarily due to overhead manufacturing cost despite the downturn in sales, as well as a decrease in the gross margin of inactivated HAV vaccines (HDC) from 74.4% to 33.8% driven by a relatively significant impairment of inventories in finished products.

FINANCIAL INFORMATION

Other Income and Gains

Our other income and gains decreased by RMB12.9 million, or 60.9%, from RMB21.3 million in the four months ended April 30, 2021 to RMB8.3 million in the same period in 2022, which was primarily driven by a decrease of RMB11.7 million in government grants related to income.

Research and Development Costs

As we simultaneously advanced research and clinical development of various vaccine candidates, especially candidates in our COVID-19 and pneumococcal portfolios, our research and development costs increased by RMB31.7 million, or 38.7%, from RMB81.9 million in the four months ended April 30, 2021 to RMB113.6 million in the same period in 2022. This was primarily driven by an increase of RMB27.4 million in professional service fee, including an increase of RMB27.1 million in professional service fee for clinical studies, mainly in connection with our COVID-19 vaccine candidates. At the same time, our research and development staff cost and utility cost also increased by RMB5.8 million and RMB3.6 million, respectively. As we continued to rapidly advance our vaccine research and development to diversify our product portfolio and tap into new markets for sustainable business growth, our research and development costs as a percentage of revenue increased from 17.6% to 41.3%.

Selling and Distribution Expenses

Our selling and distribution expenses decreased by RMB38.8 million, or 24.8%, from RMB156.8 million in the four months ended April 30, 2021 to RMB117.9 million in the same period in 2022. Our marketing and promotion expenses decreased by RMB43.9 million as our marketing and promotion activities reduced due to outbreaks of COVID-19 and relevant prevention and control measures. On the other hand, our staff cost increased by RMB5.6 million primarily due to increased share-based compensation expenses pursuant to a modification of the vesting conditions of the Pre-IPO ESOP. Our selling and distribution expenses as a percentage of revenue increased from 33.7% to 42.8%, primarily as a result of the decrease in our revenue and the increase in our sales and marketing staff cost.

Administrative Expenses

Our administrative expenses increased by RMB5.9 million, or 7.4%, from RMB79.2 million in the four months ended April 30, 2021 to RMB85.0 million in the same period in 2022. The increase was primarily driven by an increase of RMB2.6 million in inventory loss, which mainly relates to losses of excess vaccine stoste that became expired, and an increase of RMB1.9 million in professional service fee mainly in connection with the Listing. These were partially offset by a decrease of RMB1.5 million in administrative staff cost. As a result of the above increases in administrative expenses and our decrease in revenue over the same period, our administrative expenses as a percentage of revenue increased from 17.0% to 30.9%.

Finance Costs

Our finance costs increased significantly by RMB3.1 million, or 98.8%, from RMB3.2 million in the four months ended April 30, 2021 to RMB6.3 million in the same period in 2022. This was primarily attributable to an increase of RMB8.9 million in interest on bank loans, mainly because we made more bank borrowings for working capital purposes and the construction and upgrade of production facilities. Interest on certain loans relating to construction in progress were capitalized. In the four months ended April 30, 2021 and 2022, interest capitalized amounted to RMB0.2 million and RMB5.9 million, respectively.

Income Tax Expense

Our income tax expense and effective income tax rate in the four months ended April 30, 2021 were RMB24.6 million and 29.9%, respectively. We recorded a tax income of RMB7.0 million in the four months ended April 30, 2022 as our current income tax expense of RMB2.7 million were offset by deferred tax income of RMB9.7 million.

FINANCIAL INFORMATION

Profit/(Loss) for the Period

As a result of the foregoing, we recorded a loss of RMB95.8 million in the four months ended April 30, 2022 as compared to a profit of RMB57.7 million in the same period in 2021.

Year Ended December 31, 2021 Compared to Year Ended December 31, 2020

Revenue

Our revenue slightly decreased by RMB67.8 million, or 4.1%, from RMB1,638.0 million in 2020 to RMB1,570.1 million in 2021, primarily due to decreases in sales revenue of our human rabies vaccine (Vero cell), inactivated HAV vaccines (HDC), MPSV4 and mumps vaccines. Such decreases were partially offset by an increase in sales revenue of our recombinant HBV vaccines (Hansenula Polymorpha).

Due to the recurrence of the COVID-19 in certain cities in China since late July 2021, CDCs in China mobilized and focused more resources on COVID-19 vaccination (e.g., cold-chain logistics resources and physicians for vaccination) and delayed certain procurement and vaccination of other vaccines, especially Class II vaccines, which had an adverse impact on our sales volume and revenue in the second half of 2021. As such, from 2020 to 2021, our revenue from sales of (i) human rabies vaccine (Vero cell) decreased by RMB135.4 million, or 12.6%, from RMB1,072.9 million in 2020 to RMB937.4 million in 2021; (ii) inactivated HAV vaccines (HDC) decreased by RMB11.2 million, or 11.5%; and (iii) MPSV4 decreased by RMB8.1 million, or 30.2%. In addition, our revenue from sales of mumps vaccines decreased by RMB33.6 million, or 94.7%, over the same period as we have ceased production of mumps vaccines since February 2020 for maintenance and upgrades, which had led to a 96.1% decrease in sales volume of mumps vaccines.

On the other hand, revenue from sales of our recombinant HBV vaccines (Hansenula Polymorpha) increased by RMB118.5 million, or 29.3%, from RMB404.8 million in 2020 to RMB523.3 million in 2021. Such increase was attributable to sales of Class I recombinant HBV vaccines, which increased significantly by RMB103.4 million, or 129.2%, driven by a 27.3% increase in sales volume and a 80.0% increase in average unit price. The significant increase in average unit price was because CDCs agreed to raise the unit price of our Class I recombinant HBV vaccines to better reflect our production cost. Revenue from sales of Class II recombinant HBV vaccines also had an increase of RMB15.1 million, or 4.6%, over 2020 driven by a 20.7% increase in average unit price of our Class II recombinant HBV vaccines as we (a) sold more recombinant HBV vaccines in prefilled syringe packaging specifications, with relatively higher prices as compared to recombinant HBV vaccines in single vial packaging specifications and (b) increased the unit price of vaccines in prefilled syringe packaging in response to increased market demand for such safer and more convenient packaging.

Cost of Sales

Our cost of sales slightly decreased by RMB8.5 million, or 3.0%, from RMB283.9 million in 2020 to RMB275.4 million in 2021, primarily due to decreases of RMB14.1 million, RMB4.0 million and RMB3.2 million in manufacturing cost, raw materials cost and direct labor cost, respectively, corresponding to a decrease in our sales volume in the second half of 2021 due to the short-term impact of the recurrence of COVID-19. Such decreases were partially offset by an increase of RMB15.1 million in the provision for impairment of inventories, mainly consisting of certain work in progress discarded during our own ordinary course quality assurance process.

Gross Profit and Gross Margin

Our gross profit slightly decreased by RMB59.4 million, or 4.4%, from RMB1,354.1 million in 2020 to RMB1,294.7 million in 2021. This decrease was primarily driven by a decrease in sales revenue of our human rabies vaccine (Vero cell). Our gross margin remained relatively stable at 82.7% in 2020 and 82.5% in 2021.

FINANCIAL INFORMATION

Other Income and Gains

Our other income and gains increased by RMB12.9 million, or 31.7%, from RMB40.7 million in 2020 to RMB53.6 million in 2021. The increase was primarily due to an increase of RMB16.0 million in government grants related to income for our operating activities and research and development activities.

Research and Development Costs

Our research and development costs increased significantly by RMB149.6 million, or 94.8%, from RMB157.8 million in 2020 to RMB307.4 million in 2021. The increase was primarily due to increases in research materials cost, professional service fee and research and development staff cost as we advanced development programs of our vaccine candidates, including primarily our pneumococcal vaccine portfolio, inactivated COVID-19 vaccine candidate against the Original Strain and the Delta variant strain, mRNA COVID-19 vaccine candidates as well as our EV71-CA16 Bivalent HFMD Vaccine Candidate, for which we incurred research and development costs of RMB81.4 million, RMB67.3 million, RMB34.1 million and RMB33.9 million in 2021, respectively. See “—Consolidated Statements of Profit or Loss—Research and Development Costs.”

Selling and Distribution Expenses

Our selling and distribution expenses decreased by RMB73.1 million, or 13.7%, from RMB533.2 million in 2020 to RMB460.1 million in 2021. The decrease was primarily due to decrease of RMB95.2 million in marketing and promotion expenses paid to our CSOs, attributable to our continued effort in enhancing efficiency of our marketing activities as well as decreased sales activities in the second half of 2021. Such decrease was partially offset by an increase of RMB14.0 million in sales and marketing staff cost due to increased remuneration (including share-based compensation) for our sales and marketing staff to attract and retain sales and marketing talents, as well as expansion of our sales and marketing team in anticipation for the imminent launch of several new vaccines in the coming few years. As we continued to enhanced our sales efficiency, our selling and distribution expenses as a percentage of revenue decreased from 32.6% in 2020 to 29.3% in 2021.

Administrative Expenses

Our administrative expenses increased significantly by RMB969.3 million, from RMB198.7 million in 2020 to RMB1,168.0 million in 2021, reflecting primarily (i) a one-off share-based compensation expense of RMB896.9 million. On June 1, 2021, our Board approved the issue of 40,000,000 shares for a consideration of RMB40,000,000 to Tibet Sincere Heart, an entity with its 99.99% equity interests owned by Mr. Yan ZHOU, to reward Mr. Yan ZHOU's contributions to our Group. All the award shares have been vested and settled without being subject to further conditions. In June 2021, we issued 40,000,000 shares in total with par value of RMB1.00 each to Tibet Sincere Heart. As the consideration paid by Tibet Sincere Heart to subscribe for the shares was lower than the fair value of the shares, we deemed this transaction as an equity-settled share-based compensation and recognized RMB896.9 million compensation charges accordingly; and (ii) an increase in remuneration and recurring share-based compensation to our administrative staff.

Finance Costs

Our finance costs decreased by RMB5.0 million, or 32.0%, from RMB15.7 million in 2020 to RMB10.7 million in 2021, primarily due to capitalization of interest expenses on certain loans relating to construction in progress.

Income Tax Expense

Our income tax expense decreased from RMB85.5 million in 2020 to RMB69.2 million in 2021, primarily due to the decrease in our profit. The effective income tax rates for 2020 and 2021 were 17.6% and negative 11.4%, respectively. We had a negative effective income tax rate in 2021 because we recorded a loss before tax.

FINANCIAL INFORMATION

Profit/(Loss) for the Year

As a result of the foregoing, we recorded a loss of RMB675.9 million in 2021 as compared to a profit of RMB400.4 million in 2020, primarily due to (i) our share-based compensation expenses totaling RMB952.1 million, including a one-off share-based compensation expense of RMB896.9 million and other share-based compensation expenses of RMB55.2 million for other share awards and options granted to our employees, and (ii) an increase in research and development costs from RMB157.8 million to RMB307.4 million to develop our rich pipeline.

Year Ended December 31, 2020 Compared with Year Ended December 31, 2019

Revenue

Our revenue increased by RMB686.4 million, or 72.1%, from RMB951.6 million in 2019 to RMB1,638.0 million in 2020, primarily due to an increase in revenue of our human rabies vaccine (Vero cell) and recombinant HBV vaccines (Hansenula Polymorpha).

Revenue from sales of human rabies vaccine (Vero cell) increased significantly by RMB626.7 million, or 140.5%, from RMB446.1 million in 2019 to RMB1,072.9 million in 2020, and our sales volume increased by 114.0%, primarily because (i) we recovered to uninterrupted commercial supply from September 2019 following a prolonged GMP renewal process in 2018. In 2018, the renewal of our GMP certificate was prolonged after the Changsheng Incident. We resumed normal production in December 2018 after obtaining the renewed GMP certification, and we received the first product lot release approval in September 2019 under the new GMP certification after a full production cycle of 6.5 months and following three-month lot release audit and review process. See “Business—Manufacturing—Manufacturing Facilities and Production Capacity;” and (ii) the supply shortage of human rabies vaccines in the PRC following the Changsheng Incident drove the significant increases in our production and sales volumes in 2020 to meet the significant market demand. In addition, our sales and marketing efforts and increased market demand enabled us to achieve a 12.4% increase in average unit price.

Revenue from sales of recombinant HBV vaccines (Hansenula Polymorpha) increased by RMB49.9 million, or 14.1%, from RMB354.9 million in 2019 to RMB404.8 million in 2020, primarily driven by a 11.6% increase in the sales volume and a 8.5% increase in the average unit price of Class II recombinant HBV vaccine especially the ones with the more convenient and safer prefilled syringe packaging at relatively higher prices, due to the increasing market demand for better vaccines, our centralized sales and marketing management and continuous sales efforts.

Cost of Sales

Our cost of sales increased by RMB65.1 million, or 29.7%, from RMB218.8 million in 2019 to RMB283.9 million in 2020, primarily due to (i) an increase of RMB29.3 million in costs of raw materials and an increase of RMB19.1 million in manufacturing cost, which were in line with our increased production and sales, and (ii) an increase in direct labor cost from RMB25.8 million in 2019 to RMB35.0 million in 2020, mainly because of the increased compensation for our production employees as a result of the increased revenue and manufacturing activities.

Gross Profit and Gross Margin

Our gross profit increased by RMB621.3 million, or 84.8%, from RMB732.8 million in 2019 to RMB1,354.1 million in 2020. This increase primarily reflected an increase in our revenue. Our gross margin, which is equal to gross profit divided by revenue, increased from 77.0% in 2019 to 82.7% in 2020. Such increase was primarily attributable to (i) the increased sales of our human rabies vaccine (Vero cell) due to the significant increased sales volume and the overall selling prices, and (ii) the increased sales volume of our Class II recombinant HBV vaccines (Hansenula Polymorpha).

FINANCIAL INFORMATION

Other Income and Gains

Our other income and gains increased by RMB14.5 million, or 55.3%, from RMB26.2 million in 2019 to RMB40.7 million in 2020. The increase was primarily due to (i) a foreign exchange gain of RMB6.1 million in 2020, and (ii) an increase in bank interest income of RMB7.1 million, primarily due to the increase in bank deposits in 2020.

Research and Development Costs

Our research and development costs increased by RMB58.9 million, or 59.5%, from RMB98.9 million in 2019 to RMB157.8 million in 2020. The increase in research and development costs was primarily because we increased vaccine development efforts for multiple candidates especially for COVID-19 pipeline candidates and pneumococcal disease pipeline candidates, which resulted in (i) an increase in professional service fee, (ii) an increase of 60.1% in research materials cost, and (iii) an increase in depreciation and amortization relating to research and development equipment and buildings renovation. As a percentage of our revenue, our research and development costs slightly decreased from 10.4% in 2019 to 9.6% in 2020, because our revenue increased more rapidly.

Selling and Distribution Expenses

Our selling and distribution expenses increased by RMB203.2 million, or 61.6%, from RMB330.0 million in 2019 to RMB533.2 million in 2020. The increase in our selling and distribution expenses was primarily due to (i) a 73.9% increase in marketing and promotion expenses, which was in line with the increase in our sales, and (ii) a 32.1% increase in staff cost mainly reflecting increased compensation for our sales and marketing staff as a result of our business expansion. As a percentage of our revenue, our selling and distribution expenses decreased from 34.7% in 2019 to 32.6% in 2020, which was primarily because (i) we concentrated more marketing efforts on products that have a higher average unit price. For example, for HAV and HBV products, both our CSOs and in-house team put more effort in promoting products in the prefilled syringe packaging, which are relatively more expensive as compared to products in the single vial packaging, therefore the same level of marketing and promotion efforts generated more revenue; and (ii) we continued to effectively manage our CSO and in-house sales and marketing team. These led to more significant increase in our revenue while our selling and distribution expenses only increased moderately for the same period.

Administrative Expenses

Our administrative expenses increased by RMB41.5 million, or 26.4%, from RMB157.2 million in 2019 to RMB198.7 million in 2020. As a percentage of our revenue, administrative expenses decreased from 16.5% in 2019 to 12.1% in 2020. The increase in our administrative expenses was primarily due to (i) an increase in our staff cost as a result of the increased salaries, benefits and other compensation for our administrative staff and management team, including share-based compensation expenses, and (ii) an increase in depreciation and amortization.

Finance Costs

Our finance costs increased by RMB4.9 million, or 45.4%, from RMB10.8 million in 2019 to RMB15.7 million in 2020, primarily due to (i) an increase in interest on bank loans from RMB9.3 million in 2019 to RMB13.0 million in 2020 as a result of the increase in the average utilized amount of the relevant loans, and (ii) an increase in interests on lease liabilities from RMB1.5 million in 2019 to RMB2.8 million in 2020 because of the increase in the lease liabilities in 2020.

FINANCIAL INFORMATION

Income Tax Expense

Our income tax expense increased from RMB36.9 million in 2019 to RMB85.5 million in 2020, primarily due to an increase in our profit before tax. The effective income tax rate in 2019 and 2020 was 23.6% and 17.6%, respectively.

Profit for the Year

As a result of the foregoing, our profit for the year increased significantly by RMB280.6 million from RMB119.8 million in 2019 to RMB400.4 million in 2020.

DISCUSSION OF CERTAIN KEY BALANCE SHEET ITEMS

The following table sets forth our current assets and current liabilities as of the dates indicated:

	As of December 31,			As of	As of
	2019	2020	2021	April 30,	July 31,
				2022	2022
					(unaudited)
	(in thousands of RMB)				
Current assets					
Inventories	228,816	252,713	367,397	441,816	465,473
Trade and bills receivables . .	444,838	869,864	1,063,653	1,018,035	1,071,395
Prepayments, other receivables and other assets	101,739	112,072	148,572	173,075	172,013
Financial assets at fair value through profit or loss	50,000	—	100,000	—	—
Due from related parties	146,556	76,573	10,000	—	—
Restricted cash	55,720	24,406	22,320	21,159	10,030
Cash and cash equivalents . .	318,639	1,102,830	646,742	690,484	722,884
Prepaid income tax	—	—	—	91	653
Total current assets	1,346,308	2,438,458	2,358,684	2,344,660	2,442,448
Current liabilities					
Trade payables	42,925	37,972	51,762	75,377	65,509
Other payables and accruals . .	722,051	829,356	1,003,384	985,549	1,052,770
Contract liabilities	30,839	14,658	41,074	46,382	73,681
Interest-bearing bank borrowings	256,190	173,725	407,364	733,418	954,822
Lease liabilities	7,351	14,627	16,904	17,300	17,320
Tax payable	15,739	51,124	40,893	10,849	282
Deferred government grants . .	3,196	3,796	4,571	4,359	4,869
Due to related parties	109,691	151	—	—	—
Provisions	2,987	5,560	4,090	4,038	3,893
Total current liabilities	1,190,969	1,130,969	1,570,042	1,877,272	2,173,146
Net current assets	155,339	1,307,489	788,642	467,388	269,302

FINANCIAL INFORMATION

The following table sets forth a breakdown of our non-current assets and non-current liabilities as of the dates indicated:

	As of December 31,			As of
	2019	2020	2021	April 30,
				2022
	(in thousands of RMB)			
Non-current assets				
Property, plant and equipment	683,139	1,318,874	2,655,133	2,886,057
Right-of-use assets	184,519	208,562	215,467	206,908
Goodwill	234,572	234,572	482,897	482,897
Other intangible assets	390,757	356,856	2,192,693	2,211,664
Prepayments for equipment	95,180	107,795	149,565	228,428
Deferred tax assets	—	1,464	—	—
Other non-current assets	16,247	21,372	17,914	4,969
Total non-current assets	1,604,414	2,249,495	5,713,669	6,020,923
Non-current liabilities				
Interest-bearing bank borrowings . . .	27,440	—	184,334	199,832
Lease liabilities	23,462	46,685	41,829	39,101
Deferred tax liabilities	41,189	37,010	491,828	481,487
Deferred government grants	49,538	51,664	85,030	131,106
Total non-current liabilities	141,629	135,359	803,021	851,526
Net non-current assets	1,462,785	2,114,136	4,910,648	5,169,397

Net Current Assets

We had net current assets of RMB1,307.5 million as of December 31, 2020, representing an increase of RMB1,152.2 million, or 741.7%, from RMB155.3 million as of December 31, 2019. The increase was primarily due to (i) an increase of RMB425.0 million, or 95.5%, in trade and bills receivables from RMB444.8 million to RMB869.9 million, which primarily corresponded with the 72.1% increase in revenue from 2019 to 2020 and (ii) an increase of RMB784.2 million, or 246.1%, in cash and cash equivalents from RMB318.6 million to RMB1,102.8 million, which was mainly due to proceeds from Pre-IPO Investments in 2020 (including capital increases in May, September and November 2020). See “History and Development—Pre-IPO Investments.”

We had net current assets of RMB788.6 million as of December 31, 2021, representing a decrease of RMB518.8 million, or 39.7%, from RMB1,307.5 million as of December 31, 2020. The decrease was primarily due to a decrease of RMB456.1 million, or 41.4%, in cash and cash equivalents from RMB1,102.8 million to RMB646.7 million, which was mainly due to increased capital expenditure on property, plant and equipment to support our business expansion and the research, development and commercialization of our rich pipeline. See “Business—Manufacturing—Manufacturing Facilities and Production Capacity—New Production Facilities.”

FINANCIAL INFORMATION

We had net current assets of RMB467.4 million as of April 30, 2022, representing a decrease of RMB321.3 million, or 40.7%, from RMB788.6 million as of December 31, 2021. The decrease was primarily due to an increase of RMB326.1 million, or 80.0%, in interest-bearing bank borrowings from RMB407.4 million to RMB733.4 million, as we obtained short-term bank loans to support our business operations and development.

Our net current assets was RMB269.3 million as of July 31, 2022.

Inventories

Our inventories mainly consist of raw materials, work in progress and finished goods. Finished goods consist mainly of vaccines products we manufactured at our manufacturing facilities. We regularly monitor our sales performance and demand, production progress, inventory level and projected sales of each of our products and adjust our sales and purchase plans accordingly to minimize the risk of inventory shortage or over-accumulation. We have established an inventory management system that monitors each stage of the warehousing process. See “Business—Raw Materials and Services Suppliers—Inventory Management.” The following table sets forth our inventory balances as of the dates indicated:

	As of December 31,			As of April 30, 2022
	2019	2020	2021	
	(in thousands of RMB)			
Raw materials	52,277	54,368	114,360	130,264
Work in progress	78,983	84,348	86,862	101,814
Finished goods	97,556	113,997	166,175	209,738
Total	228,816	252,713	367,397	441,816

Our inventories increased by 10.4% from RMB228.8 million as of December 31, 2019 to RMB252.7 million as of December 31, 2020, primarily due to (i) an increase of 16.8% in finished goods from RMB97.6 million as of December 31, 2019 to RMB114.0 million as of December 31, 2020, and (ii) an increase of 6.7% in work in progress from RMB79.0 million as of December 31, 2019 to RMB84.3 million as of December 31, 2020. Such increases were mainly due to a significant increase in the production and sales of our vaccine products, especially our human rabies vaccine (Vero cell) and recombinant HBV vaccines (Hansenula Polymorpha).

Our inventories increased by 45.4% from RMB252.7 million as of December 31, 2020 to RMB367.4 million as of December 31, 2021, primarily due to (i) an increase of 110.3% in raw materials from RMB54.4 million as of December 31, 2020 to RMB114.4 million as of December 31, 2021 in anticipation of increase in prices of certain raw materials and (ii) an increase of 45.8% in finished goods from RMB114.0 million as of December 31, 2020 to RMB166.2 million as of December 31, 2021. The increase in inventories of finished goods was due to the relatively weak sales performance in the second half of 2021 due to the short-term effect of recurrence of COVID-19 in certain cities in China, under which CDCs slowed down new purchases of traditional non-COVID-19 vaccines by consuming stocks.

FINANCIAL INFORMATION

Our inventories further increased by 20.3% from RMB367.4 million as of December 31, 2021 to RMB441.8 million as of April 30, 2022, primarily due to (i) an increase of 26.2% in finished goods from RMB166.2 million as of December 31, 2021 to RMB209.7 million as of April 30, 2022 due to generally lower sales levels in the first quarter in light of the Chinese New Year holidays as well as the impact of COVID-19 resurgences in certain cities, and (ii) an increase of 13.9% in raw materials from RMB114.4 million to RMB130.3 million in accordance with our typical procurement cycle, and as we stocked certain raw materials to avoid supply shortage.

As of July 31, 2022, RMB222.0 million and RMB174.9 million, or 60.4% and 39.6%, of our total inventories as of December 31, 2021 and April 30, 2022 were utilized or sold.

The following table sets forth an aging analysis for our inventories as of the dates indicated:

	Within 1 year	1-2 years	2-3 years	3-4 years	4-5 years	Above 5 years	Total
(in thousands of RMB)							
As of December 31, 2019:							
Raw materials	47,138	2,129	2,508	154	47	301	52,277
Work in progress	67,169	11,814	—	—	—	—	78,983
Finished goods	87,125	9,379	1,052	—	—	—	97,556
Total	<u>201,432</u>	<u>23,322</u>	<u>3,560</u>	<u>154</u>	<u>47</u>	<u>301</u>	<u>228,816</u>
As of December 31, 2020:							
Raw materials	45,200	7,750	697	432	59	230	54,368
Work in progress	72,186	6,052	6,110	—	—	—	84,348
Finished goods	110,869	748	2,380	—	—	—	113,997
Total	<u>228,255</u>	<u>14,550</u>	<u>9,187</u>	<u>432</u>	<u>59</u>	<u>230</u>	<u>252,713</u>
As of December 31, 2021:							
Raw materials	102,638	6,454	4,749	193	121	205	114,360
Work in progress	76,769	4,004	—	6,089	—	—	86,862
Finished goods	150,933	15,216	26	—	—	—	166,175
Total	<u>330,340</u>	<u>25,674</u>	<u>4,775</u>	<u>6,282</u>	<u>121</u>	<u>205</u>	<u>367,397</u>
As of April 30, 2022:							
Raw materials	113,649	12,106	4,013	165	128	203	130,264
Work in progress	92,141	3,756	—	—	5,917	—	101,814
Finished goods	192,183	17,466	89	—	—	—	209,738
Total	<u>397,973</u>	<u>33,328</u>	<u>4,102</u>	<u>165</u>	<u>6,045</u>	<u>203</u>	<u>441,816</u>

Our management performs regular review on aging of our inventories and the conditions of our inventories, together with the economic circumstances on the marketability of such inventories. See “—Significant Accounting Policies, Judgements and Estimates—Accounting Judgements and Estimates—Write-down of Inventories.” We make provisions for impairment primarily for inventories that (i) were expired, (ii) were close to their expiry dates or (iii) did not meet our quality control and assurance requirements. In 2019, 2020 and 2021 and the four months ended April 30, 2022, we made RMB5.5 million, RMB6.6 million, RMB21.7 million and RMB8.6 million provisions for impairment of inventories, respectively. See “—Consolidated Statements of Profit or Loss—Cost of Sales” and discussions set forth below.

FINANCIAL INFORMATION

Our raw materials primarily consist of human albumin, fetal bovine serum and chemical reagents, which generally have validity periods of at least three years and often five years or more. Our work in progress primarily consist of vaccine stoste, the validity period of which varies and ranges from three months to one year before use in subsequent production. As of December 31, 2019, 2020, 2021 and April 30, 2022, 87.1%, 84.6%, 89.2% and 88.7% of our aggregated raw materials and work in progress were aged within one year, and 10.6%, 9.9%, 5.2% and 6.8% were aged within one to two years. We typically maintain one to two years' inventories of raw materials, and utilize work in progress within three months to one year before expiration, taking into account the validity periods of these inventories, our production plan and cycle for each product, and periods required for vaccine lot release approvals. The aging of our raw materials and work in progress is consistent with market practice as confirmed by CIC. We generally utilize our inventories of raw materials and work in progress within their validity period before they become aged for more than two years. Our raw materials and work in progress aged over two years as of December 31, 2020, 2021 and April 30, 2022 primarily consisted of serum with a typical shelf life of five years and virus seeds that do not have any expiry date, both for use in production of our vaccine products. As such, our Directors are of the view that the risks associated with obsolescence of our inventories of raw materials and work in progress are relatively low.

In 2019, 2020 and 2021 and the four months ended April 30, 2022, we made RMB0.3 million, RMB0.7 million, RMB15.5 million and RMB0.9 million provisions for impairment of aggregated inventories of raw materials and work in progress, respectively. Despite the relatively significant increases in our inventory balances of raw materials from December 31, 2020 to April 30, 2022, a substantial majority of such inventories were fresh inventories aged within one year and were considered not slow-moving items based on our production needs and cycles. As of July 31, 2022, 54.4% and 35.1% of our inventories of raw materials as well as 90.4% and 79.4% of our inventories of work in progress as of December 31, 2021 and April 30, 2022 were utilized, respectively.

The shelf life of our vaccine products ranges from 18 to 36 months. As of December 31, 2019, 2020, 2021 and April 30, 2022, 89.3%, 97.3%, 90.8% and 91.6% of our finished goods were aged within one year and 9.6%, 0.7%, 9.2% and 8.3% were aged within one to two years. Our customers generally require us to supply vaccines with validity period of at least six months, accordingly, we make provisions for impairment of finished goods that would expire within six months. In 2019, 2020 and 2021 and the four months ended April 30, 2022, we made RMB5.2 million, RMB5.9 million, RMB6.2 million and RMB7.7 million provisions for impairment of inventories of finished goods, respectively. The relatively significant balances of finished goods as of December 31, 2021 and April 30, 2022 primarily consisted of human rabies vaccines and HBV vaccines aged within one year out of a validity period of 36 months, and therefore did not require significant adjustment in provisions for impairment based on their remaining validity periods. As of July 31, 2022, 48.9% and 23.0% of our inventories of finished goods as of December 31, 2021 and April 30, 2022 were sold, respectively.

The following table sets forth our inventory turnover days for the periods indicated:

	Year ended December 31,			Four months ended April 30, 2022
	2019	2020	2021	
Inventory turnover days ⁽¹⁾	339.3	309.6	410.9	878.3
Finished goods turnover days ⁽²⁾	165.4	136.0	185.6	408.0

FINANCIAL INFORMATION

Notes:

- (1) The inventory turnover days are calculated by dividing the arithmetic mean of the opening and ending balance of inventories (net of provision for impairment of inventories) in that period by cost of sales for the corresponding period and then multiplying by the days of the relevant period.
- (2) The finished goods turnover days are calculated by dividing the arithmetic mean of the opening and ending balance of finished goods (net of provision for impairment of inventories) in that period by cost of sales for the corresponding period and then multiplying by the days of the relevant period.

Our inventory turnover days were 339.3 days, 309.6 days and 410.9 days, and our finished goods turnover days were 165.4 days, 136.0 days and 185.6 days, in 2019, 2020 and 2021, respectively. Our inventory turnover days and finished goods turnover days increased to 410.9 days and 185.6 days in 2021, respectively, primarily due to increases in our inventory balances as of December 31, 2021 due to reasons set out above as well as a decrease in cost of sales in 2021. Our inventory turnover days and finished goods turnover days further increased to 878.3 days and 408.0 days in the four months ended April 30, 2022, respectively, driven by increases in inventory balances and a decrease in cost of sales due to sales slowdown amid COVID-19 outbreaks in China. According to CIC, there has been a common increase in the inventory turnover days of PRC domestic vaccine manufacturers in 2022 due to lower sales level affected by COVID-19 resurgences, and the inventory turnover days of our industry peers in the PRC ranged from 109 days to 1,077 days as of March 31, 2022. Therefore, we believe the length of our inventory turnover days are in line with the normal market practice.

Despite the relatively lower sales level in the second half of 2021 and the first four months in 2022 due to local COVID-19 resurgences and resulted in increases in our inventory balances as of December 31, 2021 and April 30, 2022, our Directors are of the view that the recoverability risks associated with our inventories of finished goods are relatively low, and our impairment provisions for our inventories are adequate, because (i) since the COVID-19 outbreak in late 2019 and up to the Latest Practicable Date, the market prices of our major vaccine products inventory (i.e., human rabies vaccines and recombinant HBV vaccines) did not experience any material decreases, and there had not been any indication that the net realizable value of our inventories of major raw materials had fallen below their respective costs of procurement, according to CIC; (ii) the demand for our major commercialized products are expected to be sustainable and the COVID-19 impact is expected to be limited on such vaccines. For example, according to CIC, the purchase demand from CDCs for human rabies vaccines are expected to sustain, by taking into account of the high fatality upon rabies virus infection, increasing pet dogs and cats, and low veterinary vaccination rate and limited surveillance capabilities of wild animal rabies in China. In addition, as the PRC government requires a vaccination rate of over 90% for Class I vaccines, procurement of our Class I HBV vaccines is expected to sustain especially for newborns each year, and we are also actively exploring new marketing opportunities for Class II HBV vaccines arising from the increasing vaccination awareness for HBV vaccines in light of the large number of HBV-infected population in China. From the four months ended April 30, 2022 to the six months ended June 30, 2022, the turnover days of our finished goods had decreased; (iii) we have a high percentage of fresh inventory aged one year and stable aging structure of our inventory; and (iv) we have been actively taking steps to minimize the impact from restrictive COVID-19 precautionary and containment measures on its business activities and results of operations. We believe our production process of vaccines is highly controllable, and we are able to quickly adjust our production volume (including procurement volume of raw materials) based on changes in our actual and expected sales and sales volume. This in turn will enable us to maintain our inventory and inventory turnover days at our planned levels.

FINANCIAL INFORMATION

Trade and Bills Receivables

Our trade and bills receivables primarily represent the balances due from customers in relation to sales of our vaccine products. Our customers were usually granted a credit period of around 60 days to 180 days, depending on their creditworthiness, our prior relationship with them and their estimated demand. See “Business—Sales and Marketing.” We seek to maintain strict control over our outstanding receivables and have a credit control department to minimize credit risk. Overdue balances are reviewed regularly by our senior management. We do not hold any collateral or other credit enhancements over our trade receivable balances. Trade receivables are non-interest-bearing.

As of December 31, 2019, 2020, 2021 and April 30, 2022, we had trade receivables before impairment of RMB473.0 million, RMB888.3 million, RMB1,089.9 million and RMB1,048.9 million, respectively. In addition, we had small amounts of bills receivables before impairment of RMB0.7 million, nil, nil and RMB0.3 million as of the same dates. After deducting impairment, our net trade and bills receivables were RMB444.8 million, RMB869.9 million, RMB1,063.7 million and RMB1,018.0 million as of December 31, 2019, 2020, 2021 and April 30, 2022, respectively. The increase in our trade and bills receivables from December 31, 2019 to December 31, 2020 was primarily due to the significant increase in our revenue in 2020. The increase in trade and bills receivables from December 31, 2020 to December 31, 2021 was primarily because of the impact of the COVID-19 recurrence in China since late July 2021 and CDCs’ priority in pandemic control during such period. Our trade and bills receivables slightly decreased from December 31, 2021 to April 30, 2022, driven by our trade receivables collection efforts and the slowdown in sales.

The following table sets forth our trade and bills receivables as of the dates indicated:

	As of December 31,			As of April 30,
	2019	2020	2021	2022
	(in thousands of RMB)			
Trade receivables	472,974	888,335	1,089,903	1,048,921
Bills receivables	700	—	—	279
Impairment	(28,836)	(18,471)	(26,250)	(31,165)
Total	444,838	869,864	1,063,653	1,018,035

Our management determines impairment of our trade and bills receivables in accordance with relevant accounting standards and based on a provision model to measure expected credit losses. See “—Significant Accounting Policies, Judgements and Estimates—Accounting Judgements and Estimates—Provision for Expected Credit Losses on Trade Receivable.” Since substantially all of our products were sold to CDCs in the PRC, there’s no significant concentration of credit risk. During the Track Record Period and up to the Latest Practicable Date, we did not have any material issue in recovering our trade and bills receivables. The impairment of our trade and bills receivables were RMB28.8 million, RMB18.5 million, RMB26.3 million and RMB31.2 million as of December 31, 2019, 2020, 2021 and April 30, 2022, respectively. The decrease in impairment of our trade and bills receivables from December 31, 2019 to the same date in 2020 was mainly due to our enhanced efforts to collect our trade receivables. The increase in impairment of our trade and bills receivables from RMB18.5 million as of December 31, 2020 to RMB26.3 million as of December 31, 2021 corresponded to the increase in balance of our trade receivables in 2021. Impairment of our trade and bills receivables further increased to RMB31.2 million as of April 30, 2022, primarily due to an increase in trade receivables aged one year to two years.

FINANCIAL INFORMATION

All of our bills receivables were aged within six months and were neither past due nor impaired. A significant portion of our trade receivables were due within one year as of December 31, 2019, 2020, 2021 and April 30, 2022. The following table sets forth an aging analysis for our trade receivables based on the invoice date and net of loss allowance as of the dates indicated:

	As of December 31,			As of
	2019	2020	2021	April 30, 2022
	(in thousands of RMB)			
Within one year	391,964	836,921	945,047	847,989
One year to two years	42,927	26,081	110,085	161,998
Two to three years	8,050	4,891	6,145	5,082
Three to four years	961	1,822	1,893	2,315
Four to five years	236	149	483	372
Total	<u>444,138</u>	<u>869,864</u>	<u>1,063,653</u>	<u>1,017,756</u>

The following table sets forth our trade receivables turnover days for the periods indicated:

	Year ended December 31,			Four months ended April 30,
	2019	2020	2021	2022
Trade receivables turnover days ⁽¹⁾ . .	218.3	151.7	229.9	466.2

Note:

- (1) The trade receivable turnover days are calculated by dividing the arithmetic mean of the opening and ending balance of trade receivables before provision for impairment in that period by revenue for the corresponding period and then multiplying by the number of days in the relevant period.

Our trade receivables turnover days were 218.3 days, 151.7 days, 229.9 days and 466.2 days in 2019, 2020, 2021 and the four months ended April 30, 2022, respectively. The decrease of our trade receivables turnover days from 2019 to 2020 was primarily due to our enhanced efforts to collect our trade receivables. Our trade receivables turnover days increased in 2021 and further increased in the four months ended April 30, 2022, primarily because our revenue decreased and CDCs prioritized allocation of resources to pandemic control due to the COVID-19 recurrence in China since late July 2021.

We believe sufficient provisions have been made for the trade receivables as of April 30, 2022 and there is no material recoverability issue with respect to such trade receivables, primarily because: (i) despite the significant increase in the balance amount, as of April 30, 2022, 83.3% of our trade and bills receivables were aged within one year, and only 16.7% were aged over one year (including 15.9% aged one to two years and only 0.8% aged two years or above), substantially all of which were owed to us by CDCs. Although CDCs have complex internal processes for settling payments to suppliers and therefore their settlement periods may sometimes exceed our typical credit period of two to six months, CDCs' payments are funded by government, and they generally have good credit standing and our historical receivables recovery rates from CDCs are generally high. Considering CDCs' credibility and funding source, our Directors are of the view that the risks associated with recovery of trade and bills receivables from CDCs are relatively low, including for the ones with relatively longer aging; (ii) our finance department conducts detailed impairment analysis on our trade and bills receivables at each reporting date and makes impairment provisions, having regard to historical observed default rates, current conditions and forecasts of future economic conditions, among other factors. See note 21 in the Accountants' Report set out in Appendix I to this prospectus for the determination of loss allowance for impairment of our trade and bills receivables. In particular, as of April 30, 2022, we made provision of RMB16.1 million for our

FINANCIAL INFORMATION

trade receivables aged two years or above, accounting for 67.5% of the gross carrying amount of such trade receivables, which we believe is prudent; (iii) as of July 31, 2022, RMB323.9 million, or 30.9%, of our trade receivables as of April 30, 2022 was settled. In addition, as of July 31, 2022, RMB577.1 million, or 53.0%, of our trade receivables as of December 31, 2021 was settled, reflecting impact of the COVID-19 resurgences on payments collection from CDCs; (iv) our Directors are of the view that the relatively significant increase of our trade receivables as of April 30, 2022 and longer turnover days for the first four months ended April 30, 2022, was mainly due to the short-term impact of re-emergence of the COVID-19, and does not affect the recoverability of our trade and bills receivables or the adequacy of our impairment provisions in the long run. From the four months ended April 30, 2022 to the six months ended June 30, 2022, the turnover days of our trade receivables had decreased; (v) we had a relatively low trade receivables concentration ratio. Our top five customers, in terms of trade receivables outstanding as of April 30, 2022, accounted for an aggregate of 3.7% of our total trade receivables as of the same date; and (vi) we closely monitor the outstanding trade receivables and maintain active communications with the relevant customers to improve our collection. Our sales and marketing team is responsible for following up with our customers regularly regarding receivables. Our finance department also periodically reviews the age of receivables and requires our sales and marketing team to follow up with our customers from time to time.

Prepayments, Other Receivables and Other Assets

Our prepayments, other receivables and other assets include prepayments, deposits for acquisition, deposits receivable primarily for public tender and biddings, receivables of land payments, prepaid listing expenses, other receivables and impairment allowance. Prepayments primarily include payments to our raw materials suppliers and research and development expenses. The following table sets forth our prepayments, other receivables and other assets as of the dates indicated:

	As of December 31,			As of
	2019	2020	2021	April 30, 2022
	(in thousands of RMB)			
Prepayments	9,986	19,762	17,510	30,555
Deposits for acquisition	81,751	81,751	81,751	81,751
Deposits receivable	7,711	6,043	11,545	12,566
Receivables of land payments	5,375	5,375	5,375	5,375
Prepaid listing expenses	—	—	31,948	40,145
Other receivables	11,646	10,676	11,988	14,228
Sub-total	116,469	123,607	160,117	184,620
Impairment allowance	(14,730)	(11,535)	(11,545)	(11,545)
Total	101,739	112,072	148,572	173,075

FINANCIAL INFORMATION

As of December 31, 2019, 2020, 2021 and April 30, 2022, we had prepayments, other receivables and other assets of RMB101.7 million, RMB112.1 million, RMB148.6 million and RMB173.1 million, respectively. The increase in our prepayments, other receivables and other assets in 2020 was primarily due to the increase in prepayments in 2020 for raw materials. Our prepayments, other receivables and other assets further increased from RMB112.1 million as of December 31, 2020 to RMB148.6 million as of December 31, 2021, primarily due to (i) an increase in deposits paid to our customers due to an increase in sales of certain products and (ii) an increase in prepaid listing expenses. Our prepayments, other receivables and other assets further increased to RMB173.1 million as of April 30, 2022, primarily driven by (i) an increase in prepayments, mainly for research materials and other research and development costs, as we rapidly advance research in vaccine candidates, and (ii) an increase in prepaid listing expenses.

We had deposits for acquisition of RMB81.8 million, RMB81.8 million, RMB81.8 million and RMB81.8 million as of December 31, 2019, 2020, 2021 and April 30, 2022, respectively, representing deposit balance in Renminbi paid to a previous offshore shareholder of AIM Weixin for our acquisition of AIM Weixin. While the consideration for this acquisition was payable in U.S. dollars, we completed the acquisition after the payment of such deposit. We are in the process of proceeding with the final settlement and the deposit balance will be collected accordingly.

As of July 31, 2022, RMB28.0 million, or 15.1%, of our prepayments, other receivables and other assets as of April 30, 2022 was settled.

Goodwill

We recognized goodwill during our acquisitions of Rong'an Bio, AIM Honesty, AIM Kanghuai and Liverna. As of December 31, 2019, 2020, 2021 and April 30, 2022, our goodwill was RMB234.6 million, RMB234.6 million, RMB482.9 million and RMB482.9 million, respectively. The increase in our goodwill from RMB234.6 million as of December 31, 2020 to RMB482.9 million as of December 31, 2021 was due to the Liverna Acquisitions in May 2021, from which we acquired a mRNA vaccine platform. See “History and Development—Our History—Changes in Shareholding and Corporate Form—Liverna Acquisitions and Capital Increases in May 2021” and “Business—Research and Development—Vaccine Development Platform Technologies—mRNA Vaccine Platform Technologies.” Our goodwill remained at the same level as of April 30, 2022.

Our goodwill is tested for impairment annually or more frequently if events or changes in circumstances indicate that the carrying amount may be impaired. We allocate our goodwill to four cash-generating units for impairment testing, namely Rong'an Bio, AIM Honesty, AIM Kanghuai and Liverna. The recoverable amount of each cash-generating unit is determined based on a value-in-use calculation using cash flow projections based on financial budgets covering a period of five to twelve years approved by senior management.

We did not incur any impairment losses on goodwill during the Track Record Period.

The following describes each key assumption on which our management had based its cash flow projections to undertake impairment testing of goodwill:

- *Budgeted gross margins* — The basis used to determine the value assigned to the budgeted gross margins was the average gross margins achieved in the year immediately before the budget year, increased for expected efficiency improvements, and expected market development.
- *Discount rates* — The discount rates used were before tax and reflected specific risks relating to the relevant units.

FINANCIAL INFORMATION

The following table sets forth the carrying amount of our goodwill allocated to each of the cash generating units as of the dates indicated:

	As of December 31,			As of
	2019	2020	2021	April 30, 2022
	(in thousands of RMB)			
Rong'an Bio	82,647	82,647	82,647	82,647
AIM Honesty	147,764	147,764	147,764	147,764
AIM Kanghuai	4,161	4,161	4,161	4,161
Liverna ⁽¹⁾	—	—	248,325	248,325
Total	<u>234,572</u>	<u>234,572</u>	<u>482,897</u>	<u>482,897</u>

Note:

(1) We acquired Liverna in May 2021.

Rong'an Bio

The recoverable amount of the Rong'an Bio cash-generating unit was determined based on a value-in-use calculation using cash flow projections based on financial budgets covering a five-year period approved by senior management. The discount rates applied to the cash flow projections were 15.14%, 14.78% and 13.78% for the years ended December 31, 2019, 2020 and 2021, respectively. The growth rate used to extrapolate the cash flows beyond the five-year period was 3% for the years ended December 31, 2019, 2020 and 2021.

The following table sets forth the headroom of the Rong'an Bio cash-generating unit under impairment testing as of the dates indicated:

	Recoverable amount of the cash-generating unit exceeds its carrying amount		
	As of December 31,		
	2019	2020	2021
	(in thousands of RMB)		
Rong'an Bio	2,105,062	2,480,990	2,259,007

The following table sets forth the impact of reasonably possible changes in each of the key assumptions, with all other variables held constant, on impairment testing of the Rong'an Bio cash-generating unit as of the dates indicated:

	Recoverable amount of the cash-generating unit exceeds its carrying amount decreases by		
	As of December 31,		
	2019	2020	2021
	(in thousands of RMB)		
Possible changes of key assumptions:			
Gross margin rate decreased by 5.0%	15,000	8,000	10,000
Discount rate increased by 1.0%	297,555	375,640	358,316

FINANCIAL INFORMATION

Our management did not identify any significant adverse changes in the operating results and the macro environment during the four months ended April 30, 2022, and considering that there was sufficient headroom based on the above, our Directors believe that any reasonably possible change in any of the key assumptions would not cause the carrying amount of the Rong'an Bio cash-generating unit to exceed its recoverable amount.

AIM Honesty

The recoverable amount of the AIM Honesty cash-generating unit was determined based on a value-in-use calculation using cash flow projections based on financial budgets covering a five-year period approved by senior management. The discount rates applied to the cash flow projections were 15.10%, 14.80% and 13.81% for the years ended December 31, 2019, 2020 and 2021, respectively. The growth rate used to extrapolate the cash flows beyond the five-year period was 3% for the years ended December 31, 2019, 2020 and 2021.

The following table sets forth the headroom of the AIM Honesty cash-generating unit under impairment testing as of the dates indicated:

	Recoverable amount of the cash-generating unit exceeds its carrying amount		
	As of December 31,		
	2019	2020	2021
	(in thousands of RMB)		
AIM Honesty	473,593	658,274	774,738

The following table sets forth the impact of reasonably possible changes in each of the key assumptions, with all other variables held constant, on impairment testing of the AIM Honesty cash-generating unit as of the dates indicated:

	Recoverable amount of the cash-generating unit exceeds its carrying amount decreases by		
	As of December 31,		
	2019	2020	2021
	(in thousands of RMB)		
Possible changes of key assumptions:			
Gross margin rate decreased by 5.0%	5,000	4,000	17,000
Discount rate increased by 1.0%	85,967	103,580	137,579

Our management did not identify any significant adverse changes in the operating results and the macro environment during the four months ended April 30, 2022, and considering that there was sufficient headroom based on the above, our Directors believe that any reasonably possible change in any of the key assumptions would not cause the carrying amount of the AIM Honesty cash-generating unit to exceed its recoverable amount.

FINANCIAL INFORMATION

AIM Kanghuai

The recoverable amount of the AIM Kanghuai cash-generating unit was determined based on a value-in-use calculation using cash flow projections based on financial budgets covering an eight-year period approved by senior management. The discount rates applied to the cash flow projections were 14.80%, 14.89% and 14.17% for the years ended December 31, 2019, 2020 and 2021, respectively. The growth rate used to extrapolate the cash flows beyond the eight-year period was 3% for the years ended December 31, 2019, 2020 and 2021.

With respect to AIM Kanghuai, our senior management considered that using an eight-year forecast period for the financial budget in the goodwill impairment test was appropriate because the useful life of AIM Kanghuai's relevant intellectual property was no less than eight years, and it generally takes longer for a vaccine company to reach perpetual growth mode, compared to companies in other industries, especially when its products are still under clinical trials and the markets of such products are at an early stage of development with substantial growth potential. Hence, a forecast period longer than five years was feasible and reflected a more accurate entity value.

The following table sets forth the headroom of the AIM Kanghuai cash-generating unit under impairment testing as of the dates indicated:

	Recoverable amount of the cash-generating unit exceeds its carrying amount		
	As of December 31,		
	2019	2020	2021
	(in thousands of RMB)		
AIM Kanghuai	82,941	34,392	31,512

The following table sets forth the impact of reasonably possible changes in each of the key assumptions, with all other variables held constant, on impairment testing of the AIM Kanghuai cash-generating unit as of the dates indicated:

	Recoverable amount of the cash-generating unit exceeds its carrying amount decreases by		
	As of December 31,		
	2019	2020	2021
	(in thousands of RMB)		
Possible changes of key assumptions:			
Gross margin rate decreased by 5.0%	6,000	28,000	23,000
Discount rate increased by 1.0%	7,164	8,027	10,120

Our management did not identify any significant adverse changes in the operating results and the macro environment during the four months ended April 30, 2022, and considering that there was sufficient headroom based on the above, our Directors believe that any reasonably possible change in any of the key assumptions would not cause the carrying amount of the AIM Kanghuai cash-generating unit to exceed its recoverable amount.

FINANCIAL INFORMATION

Liverna

We acquired Liverna in May 2021. See “History and Development—Our History—Changes in Shareholding and Corporate Form—Liverna Acquisitions and Capital Increases in May 2021.” The recoverable amount of the Liverna cash-generating unit was determined based on a value-in-use calculation using cash flow projections based on financial budgets covering a twelve-year period approved by senior management. The discount rate applied to the cash flow projections was 17.22%. The growth rate used to extrapolate the cash flows beyond the twelve-year period was 3% for the year ended December 31, 2021.

With respect to Liverna, our senior management considered that using a twelve-year forecast period for the financial budget in the goodwill impairment test was appropriate because the useful lives of Liverna’s relevant intellectual properties ranged from eight years to 20 years, and it generally takes longer for a vaccine company to reach perpetual growth mode, compared to companies in other industries, especially when its products are still under clinical trials and the markets of such products are at an early stage of development with substantial growth potential. Hence, a forecast period longer than five years was feasible and reflected a more accurate entity value.

The following table sets forth the headroom of the Liverna cash-generating unit under impairment testing as of the date indicated:

	Recoverable amount of the cash-generating unit exceeds its carrying amount
	As of December 31, 2021
	(in thousands of RMB)
Liverna	162,944

The following table sets forth the impact of reasonably possible changes in each of the key assumptions, with all other variables held constant, on impairment testing of the Liverna cash-generating unit as of the date indicated:

	Recoverable amount of the cash-generating unit exceeds its carrying amount decreases by
	As of December 31, 2021
	(in thousands of RMB)
Possible changes of key assumptions:	
Gross margin rate decreased by 5.0%	19,703
Discount rate increased by 1.0%	156,600

Our management did not identify any significant adverse changes in the operating results and the macro environment during the four months ended April 30, 2022, and considering that there was sufficient headroom based on the above, our Directors believe that any reasonably possible change in any of the key assumptions would not cause the carrying amount of the Liverna cash-generating unit to exceed its recoverable amount.

FINANCIAL INFORMATION

Other Intangible Assets

We had other intangible assets, which mainly included patents and proprietary know-how, brand, deferred development costs and software, of RMB390.8 million, RMB356.9 million, RMB2,192.7 million and RMB2,211.7 million as of December 31, 2019, 2020, 2021 and April 30, 2022, respectively. The following table sets forth our other intangible assets as of the dates indicated:

	As of December 31,			As of
	2019	2020	2021	April 30, 2022
	(in thousands of RMB)			
Deferred development costs	14,977	13,271	1,880,965	1,910,650
Patents and proprietary know-how . .	355,854	325,418	294,982	284,824
Brands	16,884	15,586	14,288	13,855
Software	2,951	2,581	2,458	2,335
Others	91	—	—	—
Total	390,757	356,856	2,192,693	2,211,664

The decrease in our other intangible assets from December 31, 2019 to December 31, 2020 were primarily because of amortization. The increase of our other intangible assets from December 31, 2020 to December 31, 2021 was primarily reflecting the acquired deferred development costs as a result of the Liverna Acquisitions in May 2021. See “History and Development—Our History—Changes in Shareholding and Corporate Form—Liverna Acquisitions and Capital Increases in May 2021.” For accounting policies relating to our deferred development costs, see “—Significant Accounting Policies, Judgements and Estimates—Accounting Policies—Intangible Assets (Other Than Goodwill)—Research and Development Costs.” Our other intangible assets remained relatively stable as of April 30, 2022.

The deferred development costs acquired in connection with the Liverna Acquisitions were not yet available for use but subject to mandatory impairment testing on an annual basis. The fair value of the deferred development costs not yet available for use was determined using multi-period excess earnings method taking into account the nature of the assets, using cash flow projections and the contributory asset charges. The multi-period excess earnings method is a specific application of the discounted cash flow method. The principle behind the multi-period excess earnings method is that the value of an intangible asset is equal to the present value of the incremental after-tax cash flows attributable only to the subject intangible asset after deducting contributory asset charges. The incremental after-tax cash flows attributable to the subject intangible asset are then discounted to their present value. Cash flow projection is estimated by the management based on the financial budget covering the expected life of respective vaccine products, ranging from 8 to 20 years. Our senior management considered that using an eight to 20-year forecast period for the financial budget in the impairment testing of our deferred development costs was appropriate because it generally takes longer for a vaccine company to reach a stable growth mode, compared to companies in other industries, especially when its products are still under clinical trials and the markets of such products are at an early stage of development with substantial growth potential.

Key assumptions used in the calculation were as follows:

Discount rate	15.45%
Contributory asset charges	1.38%-5.11%

- *Discount rate* — The discount rates used reflect specific risks relating to deferred development costs.
- *Contributory asset charges* — The basis used to determine the value assigned to contributory asset charges is the return of revenue (“ROR”) of the contributory assets. ROR was determined according to the borrowing rate and cost of equity. And the contributory assets mainly included working capital, tangible assets and assembled workforce.

FINANCIAL INFORMATION

Based on the result of impairment test, the recoverable amount of deferred development costs not yet available for use is estimated to exceed the carrying amount as at December 31, 2021. The following table sets forth the headroom of the deferred development costs under impairment testing as of December 31, 2021:

	Recoverable amount exceeds its carrying amount
	As of December 31, 2021
	(in thousands of RMB)
Deferred development costs	109,095

The following table sets forth the impact of reasonably possible changes in each of the key assumptions, with all other variables held constant, on impairment testing of the deferred development costs as of December 31, 2021:

	Recoverable amount exceeds its carrying amount decreases by
	As of December 31, 2021
	(in thousands of RMB)
Possible changes of key assumptions:	
Discount rate increased by 1.0%	92,400
Contributory asset charges increased by 1.0%	25,220

Our management did not identify any significant adverse changes in the operating results and the macro environment during the four months ended April 30, 2022, and considering that there was sufficient headroom based on the above, our Directors believe that any reasonably possible change in any of the key assumptions would not cause the carrying amount of the deferred development costs not yet available for use to exceed their recoverable amount.

We determine the estimated useful lives and related amortization charges for our other intangible assets. The useful lives of our other intangible assets are assessed to be finite. Our other intangible assets with finite lives are amortized over the useful economic lives and assessed for impairment whenever there is an indication that the intangible asset may be impaired. The amortization period and the amortization method for our other intangible assets with finite useful lives are reviewed at least at the end of each of the relevant periods. See “—Significant Accounting Policies, Judgements and Estimates—Accounting Policies—Intangible Assets (Other Than Goodwill)” and “—Significant Accounting Policies, Judgements and Estimates—Accounting Judgements and Estimates—Useful Lives of Items of Intangible Assets.” For more details on our other intangible assets, see note 17 in the Accountants’ Report set out in Appendix I to this prospectus.

Financial Assets at Fair Value Through Profit or Loss

Our financial assets at fair value through profit or loss represent wealth investment product investments at fair value. As of December 31, 2019, 2020, 2021 and April 30, 2022, we had financial assets at fair value through profit or loss of RMB50.0 million, nil, RMB100.0 million and nil, respectively.

Our primary cash management strategy is to maintain liquidity and meet our business and operational needs, and therefore we generally preserve liquidity in our unutilized funds until they are used in our business and operations. To the extent that we invest with our unutilized funds, such investment activities shall generally be limited to (1) term deposits with prime quality banks and with a duration not exceeding one year and (2) wealth management products from prime quality commercial banks or other reputable financial institutions. To manage our financial risks, we generally do not invest in wealth management products other than those with low-risk and short-term (within one year), or with flexible redemption options, or other periods that are consistent with our budget and expenditure plans. We have never invested in “high-yield” bonds or other speculative bonds or equity/equity-linked securities or funds.

FINANCIAL INFORMATION

Our finance department is responsible for managing our investment activities using our bank balances. Our financial management personnel have years of experience in financial and working capital management. Our finance department makes investment proposals having regard to, among others, our cash flow, operational needs and capital expenditure, and investment products' risk profile and return. Investment proposals are subject to review and approval of the management of our Company or the relevant subsidiary.

Our financial assets at fair value through profit or loss as of December 31, 2019 were non-principal guaranteed wealth investment products which were redeemable on demand. We disposed of the entire holding of these non-principal guaranteed wealth investment products in 2020. Our financial assets at fair value through profit or loss of RMB100.0 million as of December 31, 2021 represented certain principal-guaranteed wealth investment products of Liverna which we recognized upon and after completion of the Liverna Acquisitions, with fixed terms due in April 2022 with expected annual yield of 1.50%-3.25%. Consistent with our treasury policy as stated above, we have disposed of the entire holding of such wealth investment products as of April 30, 2022 and deposited the proceeds to short-term interest-bearing bank account.

We will comply with relevant size test requirements under Chapter 14 of the Listing Rules and disclose the details of our investments or other notifiable transactions to the extent necessary and as appropriate after the Listing.

Trade Payables

Our trade payables primarily consist of the payments due to our suppliers, which are non-interest-bearing and are typically settled between 30 to 90 days. The balance of our trade payables fluctuates with the timing of our purchase activities and payment schedules. As of December 31, 2019, 2020, 2021 and April 30, 2022, we had trade payables of RMB42.9 million, RMB38.0 million, RMB51.8 million and RMB75.4 million, respectively.

The following table sets forth an aging analysis of our trade payables as of the dates indicated:

	As of December 31,			As of
	2019	2020	2021	April 30, 2022
	(in thousands of RMB)			
Within one year	41,167	35,166	50,287	72,609
One to two years	579	1,728	742	1,994
Two to three years	339	92	50	243
Over three years	840	986	683	531
Total	42,925	37,972	51,762	75,377

As of July 31, 2022, RMB45.8 million, or 60.8%, of our trade payables as of April 30, 2022 was settled.

The following table sets forth our average trade payables turnover days for the periods indicated:

	Year ended December 31,			Four months ended April 30, 2022
	2019	2020	2021	
Trade payables turnover days ⁽¹⁾	49.6	52.0	59.5	138.0

Note:

- (1) The trade payables turnover days are calculated by the arithmetic mean of the beginning and ending trade payables balances divided by cost of sales for that period and multiplying by the days of the relevant periods.

FINANCIAL INFORMATION

Our average trade payables turnover days were 49.6 days, 52.0 days, 59.5 days and 138.0 days in 2019, 2020, 2021 and the four months ended April 30, 2022, respectively. Our average trade payables turnover days remained relatively stable during the Track Record Period, except for an increase in the four months ended April 30, 2022 driven by (i) a decrease in cost of sales in line with our revenue and (ii) an increase in trade payables, mainly in connection with increased procurement of raw materials in accordance with our typical procurement cycle and to avoid supply shortage.

Other Payables and Accruals

Our other payables and accruals primarily consist of promotion fee payable, payable for purchase of property, plant and equipment, payable for acquisition, deposits payable and salary payable. Our deposits payable are related to deposits paid by certain CSOs and suppliers to us as deposits for performance of contractual obligations. Our other payables are unsecured, non-interest-bearing and repayable according to relevant agreements.

The following table sets forth the details of our other payables and accruals as of the dates indicated:

	As of December 31,			As of April 30,
	2019	2020	2021	2022
	(in thousands of RMB)			
Promotion fee payable	262,919	346,382	320,218	313,759
Payable for acquisition	94,713	88,586	86,560	89,846
Payable for purchase of property, plant and equipment	30,493	98,058	316,160	332,014
Deposits payable	84,936	88,325	77,980	78,191
Salary payables	32,237	53,011	88,268	48,782
Other tax payables	24,734	17,863	20,611	12,122
Freight payable	6,415	34,537	68,510	64,954
Others	185,604	102,594	25,077	45,881
Total	722,051	829,356	1,003,384	985,549

As of December 31, 2019, 2020, 2021 and April 30, 2022, we had other payables and accruals of RMB722.1 million, RMB829.4 million, RMB1,003.4 million and RMB985.5 million, respectively. The increase of our other payables and accruals in 2020 was primarily due to (i) a 31.7% increase in promotion fee payable, which was in line with our increased revenue and sales effort in 2020, and (ii) a 221.6% increase in payable for purchase of property, plant and equipment as we increased procurement of property, equipment and machinery for our current vaccine products as well as new research and development projects in 2020. Our other payables and accruals continued to increase in 2021 mainly as a result of a 222.4% increase in payable for purchase of property, plant and equipment as we further invested in our manufacturing facilities, to support growth of our existing vaccine products as well as upcoming launch of our vaccine candidates. Our payable for purchase of property, plant and equipment as of December 31, 2021 mainly consisted of payables relating to the construction of new production facilities (i) at Rong'an Bio for new viral-based vaccines and (ii) at AIM Weixin for bacterial vaccines. The decrease in our other payables and accruals towards April 30, 2022 was primarily due to a decrease of RMB39.5 million in salary payables as we paid out year-end bonuses to our staff in January 2022, which was partially offset by an increase of RMB15.9 million in our payable for purchase of property, plant and equipment, primarily relating to the construction of (i) new production facilities at Rong'an Bio for new viral-based vaccines and (ii) new mRNA vaccines production facilities in Ningbo. For details, see "Business—Manufacturing—Manufacturing Facilities and Production Capacity—New Production Facilities."

FINANCIAL INFORMATION

We had payable for acquisition of RMB94.7 million, RMB88.6 million, RMB86.6 million and RMB89.8 million as of December 31, 2019, 2020, 2021 and April 30, 2022, respectively. Our payable for acquisition refers to consideration balance payable for the acquisition of AIM Weixin. See “—Prepayments, Other Receivables and Other Assets.” Fluctuations in our payable for acquisition during the Track Record Period were attributable to (i) settlement of a portion of the consideration amounting to US\$2.3 million in 2019 and (ii) fluctuation in exchange rate between Renminbi and U.S. dollars, as the consideration was denominated in U.S. dollars.

As of July 31, 2022, RMB252.2 million, or 25.6%, of our other payables and accruals as of April 30, 2022 was settled.

Contract Liabilities

Our contract liabilities represent the advance payment received from customers in respect of sales of our vaccines before delivery of products, which primarily include advance payments by CDCs for the purchase of our Class I vaccine products. We had contract liabilities of RMB30.8 million, RMB14.7 million, RMB41.1 million and RMB46.4 million, respectively, as of December 31, 2019, 2020, 2021 and April 30, 2022. Changes in contract liabilities as of each date primarily reflected the balance of advance payments made by CDCs for purchases of vaccine products from us as of such dates.

As of July 31, 2022, RMB4.1 million, or 8.9%, of our contract liabilities as of April 30, 2022 was settled.

Accumulated Losses or Retained Profits

In order to accelerate building up a competitive vaccine portfolio and manufacturing capabilities, we acquired Rong'an Bio, AIM Honesty, AIM Kanghuai and AIM Weixin between 2015 and 2017. As of January 1, 2019, we recorded accumulated losses of RMB389.8 million, which were primarily attributable to the accumulated losses of AIM Honesty and AIM Kanghuai due to their historical financial performance before our acquisition and impairment of goodwill related to the acquisitions.

After acquisitions, we began to capitalize the vast vaccine and fast-growing market in China with acquired vaccine products and manufacturing facilities in each subsidiary, by making comprehensive improvement from R&D, manufacturing to sales. We continue to enrich our vaccine portfolio and promote active interactions between R&D and manufacturing process and have established a dedicated R&D department in each subsidiary to develop new products. In addition, we upgrade their manufacturing infrastructure, process and techniques in pursuit of higher product quality and stronger supply capabilities. To accelerate marketing strategy formulation with a focused vision and quickly execute all strategies in a united manner, we centralized our sales and marketing function at the Group level, which also enables us to integrate quality resources and achieve a high cost-efficiency especially in team building and management. See “Business—Competitive Strengths—Strive to access the best industry resources and innovative technologies to accelerate product development and commercialization.”

As a result of the above, our profitability has significantly improved since the acquisitions, which progressively offsets our accumulated loss position, and we recognized retained profits of RMB606.5 million as of December 31, 2020.

We had accumulated losses of RMB106.3 million and RMB200.1 million as of December 31, 2021 and April 30, 2022, respectively. We recorded a net loss of RMB675.9 million in 2021, which was primarily attributable to our share-based compensation expenses totaling RMB952.1 million, including a one-off share-based compensation expense of RMB896.9 million and other share-based compensation expenses of RMB55.2 million for other share awards and options granted to our employees. We also recorded a loss of RMB95.8 million in the four months ended April 30, 2022, mainly because of a slowdown in sales amid COVID-19 outbreaks in China and as we rapidly advanced clinical trials of our vaccine candidates, which drove up our research and development costs. See “—Consolidated Statements of Profit or Loss” for a discussion of our financial performance during the Track Record Period.

FINANCIAL INFORMATION

LIQUIDITY AND CAPITAL RESOURCES

Overview

Our primary uses of capital are to fund our working capital, research and development activities, expansion of production capability, and mergers and acquisitions. During the Track Record Period, we financed these capital requirements primarily through cash flows generated from our operating activities and financing activities. After the Listing, we intend to fund our capital requirements using primarily cash flows generated from our operating activities and the proceeds from the Global Offering.

Cash Flows

The following table sets forth our cash flows for the periods indicated:

	Year ended December 31,			Four months ended April 30,	
	2019	2020	2021	2021	2022
	(unaudited)				
	(in thousands of RMB)				
Operating profit before working capital changes . .	289,352	644,854	510,863	164,813	(6,046)
Changes in working capital .	95,140	(339,191)	(327,437)	(185,881)	(84,448)
Income tax paid	(57,480)	(55,332)	(90,028)	(70,240)	(32,835)
Net cash flows generated from/(used in) operating activities	327,012	250,331	93,398	(91,308)	(123,329)
Net cash flows used in investing activities	(340,196)	(604,917)	(1,337,505)	(297,510)	(177,773)
Net cash flows (used in)/generated from financing activities	(130,447)	1,138,777	788,019	28,725	344,844
Net (decrease)/increase in cash and cash equivalents .	(143,631)	784,191	(456,088)	(360,093)	43,742
Cash and cash equivalents at beginning of year/period . .	462,270	318,639	1,102,830	1,102,830	646,742
Cash and cash equivalents at end of year/period	318,639	1,102,830	646,742	742,737	690,484

Net Cash Flows Generated from/(Used in) Operating Activities

In the four months ended April 30, 2022, we had net cash flows used in operating activities of RMB123.3 million, which was primarily attributable to our loss before tax of RMB102.8 million and working capital adjustments, including an increase in inventories of RMB83.0 million and a decrease in other payables and accruals of RMB55.9 million, as partially offset by a decrease in trade and bills receivables of RMB40.7 million. In the same period in 2021, we had net cash flows used in operating activities of RMB91.3 million, which was primarily attributable to an increase in trade and bills receivables of RMB138.4 million, as partially offset by our profit before tax of RMB82.3 million.

FINANCIAL INFORMATION

In 2021, we had net cash flows generated from operating activities of RMB93.4 million. Our loss before tax of RMB606.7 million was adjusted to reflect primarily non-cash charges of (i) equity-settled share-based compensation expense of RMB952.1 million and (ii) depreciation of property, plant and equipment of RMB87.4 million. Such adjustments were partially offset by working capital adjustments for (i) an increase in trade and bills receivables of RMB201.8 million and (ii) an increase in inventories of RMB136.4 million.

In 2020, we had net cash flows generated from operating activities of RMB250.3 million, which was primarily attributable to profit before tax of RMB485.9 million, adjusted to reflect primarily (i) working capital adjustment for an increase in other payables and accruals of RMB48.4 million and a decrease of amount due from related parties of RMB70.0 million; and (ii) non-cash charges of depreciation of property, plant and equipment of RMB72.5 million and amortization of other intangible assets of RMB33.9 million. Such adjustments were partially offset by working capital adjustments for an increase in trade and bills receivables of RMB425.2 million.

In 2019, we had net cash flows generated from operating activities of RMB327.0 million, which was primarily attributable to profit before tax of RMB156.8 million, adjusted to reflect primarily (i) working capital adjustment for a decrease in trade and bills receivables of RMB192.0 million and an increase in trade payables of RMB26.4 million, and (ii) non-cash charges of depreciation of property, plant and equipment of RMB63.4 million and amortization of other intangible assets of RMB33.8 million. Such adjustments were partially offset by working capital adjustments for (i) a decrease of other payables and accruals of RMB62.8 million, and (ii) an increase in inventories of RMB56.4 million.

We had maintained net operating cash inflows in each of 2019, 2020 and 2021 but recorded net operating cash outflows in the four months ended April 30, 2021 and 2022. Going forward, we plan to improve our net operating cash flow position by:

- continuing to increase our revenue from sales of existing vaccine products, by leveraging the opportunities presented by (a) industry-wide supply shortage of human rabies vaccines, (b) our market-leading position in the HBV vaccines market and growing demand for Class II HBV vaccines and (c) increasing preference of inactivated HAV vaccines, including our inactivated HAV vaccine (HDC) product, as safer alternatives to live attenuated HAV vaccines. Meanwhile, we expect to continue to generate meaningful revenue from sales of MPSV4, as well as mumps and HFRS vaccines after their production resumes;
- developing new sources of revenue by rapidly advancing our research, development and commercialization of vaccine candidates. We expect to launch our mRNA COVID-19 vaccine against the Original Strain in 2022, followed by PPSV23 in 2023. We also expect to launch up to two and at least five more vaccines in 2024 and 2025, respectively. See “Business—Our Vaccine Products and Vaccine Candidates—Our Vaccine Candidates.” They each represent a massive market and are expected to drive our revenue and business growth;
- continuing to monitor and enhancing management over our trade and bills receivables collection to maintain a healthy operating cash flow position. For example, in our agreements with CSOs, we have introduced terms that adjust the amounts of service fee by considering the relevant customers’ receivables settlement records to incentivise our CSOs to follow up with our customers on settlement;
- continuing to effectively manage our payables settlement and optimizing our inventory levels based on production and sales forecasts; and
- continuing to implement comprehensive measures to optimize our cost structure and control our costs and expenses.

FINANCIAL INFORMATION

Net Cash Flows Used in Investing Activities

In the four months ended April 30, 2022, we had net cash flows used in investing activities of RMB177.8 million, which was primarily attributable to our purchase of items of property, plant and equipment of RMB313.2 million, representing primarily payments in connection with the construction and upgrade of manufacturing facilities, as partially offset by a decrease in financial assets at fair value through profit or loss of RMB100.0 million due to disposal of certain wealth investment products of Liverna.

In 2021, we had net cash flows used in investing activities of RMB1,337.5 million, which was primarily attributable to (i) purchase of items of property, plant and equipment of RMB1,125.4 million, which were the payment for construction of manufacturing facilities and procurement of equipment and machinery in preparation primarily for commercialization of our vaccine candidates and (ii) acquisition of a subsidiary of RMB250.4 million, which were the payment for acquisition of Liverna.

In 2020, we had net cash flows used in investing activities of RMB604.9 million, which was primarily attributable to purchase of items of property, plant and equipment of RMB666.7 million, which were the payment for the infrastructure construction, fixed assets and relevant production facilities. These were partially offset by a decrease in financial assets at fair value through profit or loss of RMB50.0 million.

In 2019, we had net cash flows used in investing activities of RMB340.2 million, which was primarily attributable to (i) purchase of items of property, plant and equipment of RMB314.8 million, which were the payment for the infrastructure construction, fixed assets and relevant production facilities, and (ii) purchase of certain financial assets of RMB50.0 million. These were partially offset by the receipt of asset related government grants of RMB44.9 million.

Net Cash Flows (Used in)/Generated from Financing Activities

In the four months ended April 30, 2022, we had net cash flows generated from financing activities of RMB344.8 million, which was primarily attributable to new bank loans of RMB380.8 million for working capital purposes and for business expansion, as partially offset by repayment of bank loans of RMB40.0 million.

In 2021, we had net cash flows generated from financing activities of RMB788.0 million, which was primarily attributable to (i) proceeds from issue of shares of RMB553.5 million and (ii) new bank loans of RMB537.8 million. These were partially offset by repayment of bank loans of RMB244.5 million.

In 2020, we had net cash flows generated from financing activities of RMB1,138.8 million, which was primarily attributable to the capital contribution from shareholders and proceeds from issue of shares of RMB1,374.4 million and RMB519.8 million, respectively. These were partially offset by (i) the acquisition of non-controlling interests of RMB512.5 million, which was the consideration paid for the acquisition of AIM Explorer, and (ii) the repayment of bank loans of RMB380.5 million.

In 2019, we had net cash flows used in financing activities of RMB130.4 million, which was primarily attributable to (i) the acquisition of non-controlling interests of RMB434.6 million, which was the consideration paid for the acquisition of AIM Weixin, (ii) the repayment of bank loans of RMB178.3 million, and (iii) the dividends paid of RMB86.0 million. These were partially offset by the new bank loans of RMB293.6 million and the capital contribution from shareholders of RMB268.0 million.

FINANCIAL INFORMATION

WORKING CAPITAL

Taking into account the financial resources available to us, including the expected cash flows generated from our operations, cash and cash equivalents and unutilized banking facilities as of July 31, 2022, and the estimated net proceeds from the Global Offering, our Directors are of the opinion that we will have sufficient working capital required to fund our operations for at least the next 12 months from the date of this prospectus. After due consideration of the foregoing factors and discussions with our management, the Joint Sponsors have no reason to believe that the Directors' foregoing belief is unreasonable.

INDEBTEDNESS

The following table sets forth a breakdown of our financial indebtedness by nature as of the dates indicated:

	As of December 31,			As of April 30,	As of July 31,
	2019	2020	2021	2022	2022
					(unaudited)
	(in thousands of RMB)				
Interest-bearing bank borrowings	283,630	173,725	591,698	933,250	1,166,354
Lease liabilities	30,813	61,312	58,733	56,401	54,541
Due to related parties	109,691	151	—	—	—
Total	424,134	235,188	650,431	989,651	1,220,895

Our total financial indebtedness decreased from RMB424.1 million as of December 31, 2019 to RMB235.2 million as of December 31, 2020, comprising a decrease in amounts due to related parties from RMB109.7 million to RMB0.2 million and a decrease in interest-bearing bank borrowings from RMB283.6 million to RMB173.7 million, which were partially offset by an increase in lease liabilities from RMB30.8 million to RMB61.3 million as a result of a long-term lease contract entered in 2020. Our total financial indebtedness increased to RMB650.4 million as of December 31, 2021 and RMB989.7 million as of April 30, 2022, mainly due to increases in interest-bearing bank borrowings to RMB591.7 million and RMB933.3 million, respectively. We had amounts due to related parties of RMB109.7 million, RMB0.2 million, nil and nil as of December 31, 2019, 2020, 2021 and April 30, 2022, respectively. See “—Related Party Transactions.”

We had total financial indebtedness of RMB1,220.9 million as of July 31, 2022, the latest practicable date for the purpose of liquidity disclosure in this prospectus.

Interest-Bearing Bank Borrowings

As of December 31, 2019, 2020, 2021 and April 30, 2022, we had secured bank loans of RMB283.6 million, RMB123.7 million, RMB416.5 million and RMB518.0 million, respectively, with interest rate ranging from 4.7%-6.4% per annum, 1.9%-4.6% per annum, 1.9%-5.2% per annum and 3.9%-5.2% per annum, respectively. As of July 31, 2022, we had secured bank loans of RMB718.8 million, with interest rate ranging from 3.9%-5.2% per annum.

FINANCIAL INFORMATION

The following table sets forth the our interest-bearing bank borrowings with their respective effective interest rate as of the dates indicated:

	As of December 31, 2019			As of December 31, 2020			As of December 31, 2021			As of April 30, 2022			As of July 31, 2022		
	Effective interest rate (%)	Maturity	RMB'000	Effective interest rate (%)	Maturity	RMB'000	Effective interest rate (%)	Maturity	RMB'000	Effective interest rate (%)	Maturity	RMB'000	Effective interest rate (%)	Maturity	RMB'000
Current															(unaudited)
Bank loans — secured	4.7-6.0	2020	223,710	1.9-4.6	2021	123,672	1.9-4.5	2022	192,346	3.9-4.2	2022-2023	172,277	3.9-4.3	2022-2023	287,440
Bank loans — secured	—	—	—	—	—	—	5.2	On demand	29,835	5.2	On demand	123,327	5.2	On demand	195,964
Bank loans — unsecured	—	—	—	3.9	2021	50,053	3.9-4.7	2022	175,205	3.9-4.7	2022-2023	375,247	3.9-4.7	2022-2023	407,581
Current portion of long-term bank loans — unsecured	—	—	—	—	—	—	—	—	—	3.9	2023	40,000	3.9	2023	40,000
Current portion of long-term bank loans — secured	6.0-6.4	2020	32,480	—	—	—	4.7	2022	9,978	4.7	2023	22,567	4.7	2022-2023	23,838
Sub-total			256,190			173,725			407,364			733,418			954,822
Non-current															
Bank loans — secured	6.0-6.4	2021	27,440	—	—	—	4.7	2023-2028	184,334	4.7	2028	199,832	4.7	2023-2028	211,532
Sub-total			27,440			—			184,334			199,832			211,532
Total			283,630			173,725			591,698			933,250			1,166,354

FINANCIAL INFORMATION

As of December 31, 2019, certain of our bank loans with the amounts of RMB283.6 million were secured by: (i) the pledge of certain of our buildings with a carrying amount of RMB87.6 million at December 31, 2019; (ii) the pledge of certain of our leasehold land with a carrying amount of RMB34.3 million at December 31, 2019; (iii) the guarantee from subsidiaries of us; and (iv) the guarantee from the controlling shareholder, a company controlled by the controlling shareholder and the close family member of the controlling shareholder of us for free. As of December 31, 2020, certain of our bank loans with the amounts of RMB123.7 million were secured by: (i) the pledge of certain of our buildings with a carrying amount of RMB24.7 million at December 31, 2020; (ii) the pledge of certain of our leasehold land with a carrying amount of RMB6.5 million at December 31, 2020; and (iii) the guarantee from a subsidiary of us. As of December 31, 2021, certain of our bank loans with the amounts of RMB416.5 million were secured by: (i) the pledge of certain of our buildings with a carrying amount of RMB160.5 million at December 31, 2021; (ii) the pledge of certain of our leasehold land with a carrying amount of RMB56.0 million at December 31, 2021; and (iii) the guarantee from the Company and a subsidiary of us. As of April 30, 2022, certain of our bank loans with the amounts of RMB518.0 million were secured by: (i) the pledge of certain of our buildings with a carrying amount of RMB157.4 million at April 30, 2022; (ii) the pledge of certain of our leasehold land with a carrying amount of RMB55.4 million at April 30, 2022; and (iii) the guarantee from the Company and a subsidiary of us. See note 28 in the Accountants' Report set out in Appendix I to this prospectus.

The following table sets forth the maturity profile of our borrowings as of the dates indicated:

	As of December 31,			As of	As of
	2019	2020	2021	April 30, 2022	July 31, 2022
					(unaudited)
	(in thousands of RMB)				
Bank loans repayable:					
Within one year or on					
demand	256,190	173,725	407,364	733,418	954,822
In the second year	27,440	—	19,403	22,203	23,504
In the third to fifth years,					
inclusive	—	—	97,018	122,120	129,270
Over five years	—	—	67,913	55,509	58,759
Total	283,630	173,725	591,698	933,250	1,166,354

As of July 31, 2022, we had a total of RMB1,166.4 million outstanding bank borrowings and unutilized banking facilities of RMB745.7 million.

As of December 31, 2021, April 30, 2022 and July 31, 2022, we had bank loans repayable on demand of RMB29.8 million, RMB123.3 million and RMB196.0 million, respectively. Such bank loans were drawn under a RMB500.0 million bank loan facility that we obtained in July 2021 for the construction of new production facilities at AIM Weixin (the "Loan Facility"). As of December 31, 2021, April 30, 2022 and July 31, 2022, we failed to satisfy certain covenants under the Loan Facility, including (a) a covenant that requires our Company to become listed by the end of 2021 and (b) a financial covenant. In accordance with the terms of the Loan Facility, these bank loans became repayable on demand. Accordingly, we have classified such bank loans as current liabilities, and the undrawn portion of the Loan Facility was not included as part of our unutilized banking facilities as of July 31, 2022 as stated above.

FINANCIAL INFORMATION

We were in regular discussions with the lending bank on our business and financial performance. Despite our failure to comply with the said covenants, we were allowed to make further drawings under the Loan Facility. As of the Latest Practicable Date, the lending bank has not made any demand for immediate repayment of the relevant bank loans. Our Directors do not consider it probable that the lending bank will exercise its discretion to demand immediate repayment so long as we continue to make payments according to the repayment schedule. As of April 30, 2022, the relevant bank borrowings only represented 5.3% and 17.9% of our current assets and cash and cash equivalents, respectively. Based on our current cash position, we consider that we have sufficient financial resources to repay such bank loans even in the worst-case scenario that the lending bank exercises its discretion to demand immediate repayment. We have not experienced and do not expect any material adverse impact on our financial performance and operations as a result of the failure to comply with the said covenants under the Loan Facility.

Our Directors regularly monitor our compliance with covenants under bank borrowings and confirm that, save as disclosed above, we had no material defaults in payment of bank borrowings and have not breached any financial covenants thereunder during the Track Record Period and up to the Latest Practicable Date. Our Directors also confirm that, save as disclosed above, we are not subject to other material covenants under any agreements with respect to any bank loans or other borrowings. During the Track Record Period and up to the Latest Practicable Date, none of our lending banks accelerated our outstanding bank loans, and we did not experience any difficulties in obtaining bank loans.

We have implemented adequate and effective measures to enhance our internal control system to prevent the recurrence of non-compliances with loan covenants. Going forward, we will also ensure that when loan agreements are being negotiated, their terms and covenants will be carefully considered to ensure that we are, based on all surrounding circumstances and taking into account all relevant information available at such time, expected to be able to comply with all such terms and covenants.

Lease Liabilities

We have early adopted the amendment to IFRS 16 and applied the practical expedient to all eligible rent concessions granted by the lessors for leases of certain plant and equipment during the Track Record Period. See “—Basis of Preparation” and “—Significant Accounting Policies, Judgements and Estimates.” For short-term leases and leases of low-value assets, we generally recognize the lease payment on a straight-line basis over the term of the lease. The following table sets forth our lease liabilities as of the dates indicated:

	As of December 31,			As of	As of
	2019	2020	2021	April 30, 2022	July 31, 2022
					(unaudited)
	(in thousands of RMB)				
Current	7,351	14,627	16,904	17,300	17,320
Non-current	23,462	46,685	41,829	39,101	37,221
Total	30,813	61,312	58,733	56,401	54,541

As of July 31, 2022, being the latest practicable date for our indebtedness statement, except as disclosed above, we did not have any outstanding loan capital or debt securities issued or agreed to be issued, bank overdrafts, loans, borrowings or other similar indebtedness, liabilities under acceptances (other than normal trade bills) or acceptance credits, debentures, mortgages, charges, finance leases, hire purchase commitments, guarantees or other material contingent liabilities. Since April 30, 2022, to the date of this prospectus, there has not been any material adverse change in our indebtedness liabilities.

FINANCIAL INFORMATION

CAPITAL EXPENDITURE

Our capital expenditure was used primarily for purchases of production equipment and construction of production facilities. In 2019, 2020, 2021 and the four months ended April 30, 2021 and 2022, we had capital expenditure of RMB346.1 million, RMB667.0 million, RMB1,141.7 million, RMB302.2 million and RMB329.7 million, respectively.

During the Track Record Period, we funded our capital expenditure primarily with cash generated from operating activities and financing activities. We expect to incur capital expenditure of RMB0.9 billion in 2022, primarily for constructing new production facilities, purchasing new equipment and machinery, and upgrading our existing production facilities for production capacity expansion and new product development and commercialization. We plan to fund our planned capital expenditure in 2022 and 2023 using cash and cash equivalents on hand, cash generated from our operating activities, bank borrowings and financing and net proceeds from the Global Offering. See “Future Plans and Use of Proceeds.” We may adjust our capital expenditures for any given year according to our development plans or in light of market conditions and other factors we believe to be appropriate.

The following table sets forth our capital expenditures for the periods indicated:

	Year ended December 31,			Four months ended April 30,	
	2019	2020	2021	2021	2022
				(unaudited)	
				(in thousands of RMB)	
Purchase of items of property, plant and equipment	314,781	666,683	1,125,381	302,194	313,219
Purchase of right-of-use assets	30,866	296	16,122	—	—
Purchase of other intangible assets	483	36	225	—	16,472
Total	346,130	667,015	1,141,728	302,194	329,691

Purchase of Items of Property, Plant and Equipment

Our property, plant and equipment mainly include buildings, plant and machinery, construction in progress, equipment, and other fixed assets. In 2019, 2020, 2021 and the four months ended April 30, 2021 and 2022, our purchase of items of property, plant and equipment was RMB314.8 million, RMB666.7 million, RMB1,125.4 million, RMB302.2 million and RMB313.2 million, respectively. Our purchase of items of property, plant and equipment increased from RMB314.8 million in 2019 to RMB666.7 million in 2020, mainly due to the construction of manufacturing facilities and procurement of equipment for our current vaccine products as well as new research and development projects. As we continued to construct and upgrade our manufacturing facilities and procure equipment and machinery in preparation primarily for commercialization of our vaccine candidates, our purchase of items of property, plant and equipment also increased from 2020 to 2021 and from the four months ended April 30, 2021 to the same period in 2022.

Purchase of Right-of-Use Assets

During the Track Record Period, we entered into certain lease contracts in relation to items of building and motor vehicles used in our operations. Our leases of plant generally have lease terms between 30 months and eight years, while our lease of motor vehicles generally have lease terms of five years. Our other equipment generally has lease terms of 12 months or less and/or is individually of low value. Generally, the Group is restricted from assigning and subleasing the leased assets outside the Group.

FINANCIAL INFORMATION

Our purchase of right-of-use assets mainly includes leasehold land. In 2019, 2020, 2021 and the four months ended April 30, 2021 and 2022, our purchase of right-of-use assets was RMB30.9 million, RMB0.3 million, RMB16.1 million, nil and nil, respectively.

Purchase of Other Intangible Assets

Our other intangible assets mainly include patent rights, deferred development costs, software, brand and trademarks. In 2019, 2020, 2021 and the four months ended April 30, 2021 and 2022, our purchase of other intangible assets was RMB0.5 million, RMB36,000, RMB0.2 million, nil and RMB16.5 million, respectively. We did not capitalize any research and development costs in during the Track Record Period except that research and development costs of RMB16.5 million relating to PCV13, which were incurred after we commenced Phase III clinical trial for PCV13, were capitalized and deferred in the four months ended April 30, 2022. For accounting policies relating to our deferred development costs, see “—Significant Accounting Policies, Judgements and Estimates—Accounting Policies—Intangible Assets (Other Than Goodwill)—Research and Development Costs.”

CAPITAL COMMITMENTS

As of December 31, 2019, 2020, 2021 and April 30, 2022, we had the following capital commitments:

	As of December 31,			As of
	2019	2020	2021	April 30, 2022
	(in thousands of RMB)			
Contracted, but not provided for:				
Property, plant and equipment	488,425	544,201	1,235,474	1,122,187

CONTINGENT LIABILITIES

We were subject to a civil lawsuit in the PRC brought by a former CSO, which arose from disputes over certain service contracts with the CSO, for which we had recorded liabilities of RMB4.5 million as of April 30, 2022; the first instance judgment for this lawsuit was made in July 2022, under which we were ordered to pay RMB4.5 million to the CSO.

As of the Latest Practicable Date, we were also subject to certain other legal claims, primarily including (i) a lawsuit under which the plaintiff (“Plaintiff A”) alleged that AIM Honesty owes its subsidiary a sum of approximately RMB80.2 million, representing the principal amount such subsidiary paid to a bank as the guarantor for loans of AIM Honesty due from the bank together with the accrued interest as alleged; and (ii) a lawsuit under which the plaintiff (“Plaintiff B”) is a creditor of Plaintiff A, and knew that Plaintiff A is alleging indemnity against AIM Honesty as disclosed above. As a result, Plaintiff B alleged that, as Plaintiff A’s creditor, it has right to directly claim repayment from AIM Honesty for Plaintiff A’s debt, totaling approximately RMB11.3 million. Our litigation counsel for these lawsuits, S&P Law Firm, advised us that based on the evidence currently available, the likelihood of the courts finding against AIM Honesty in either case is remote. Our Directors are of the view that neither these two lawsuits would have any material adverse effect on our business, financial condition or results of operations. For details, see “Business—Legal Proceedings and Regulatory Compliance.”

We confirm that as of the Latest Practicable Date, save as disclosed above, there had been no material changes or arrangements to our contingent liabilities.

FINANCIAL INFORMATION

OFF-BALANCE SHEET COMMITMENTS AND ARRANGEMENTS

As of the Latest Practicable Date, we had not entered into any off-balance sheet transactions.

KEY FINANCIAL RATIOS

The following table sets forth the selected key financial ratios for the periods or as of the dates indicated:

	Year ended/as of December 31,			Four months ended/as of April 30,	
	2019	2020	2021	2021	2022
Gross margin ⁽¹⁾	77.0%	82.7%	82.5%	82.6%	80.0%
Net margin ⁽²⁾	12.6%	24.4%	(43.0%) ⁽⁶⁾	12.4%	(34.8%) ⁽⁷⁾
Current ratio ⁽³⁾	1.1	2.2	1.5	N/A	1.2
Quick ratio ⁽⁴⁾	0.9	1.9	1.3	N/A	1.0
Gearing ratio ⁽⁵⁾	26.2%	6.9%	11.4%	N/A	17.6%

Notes:

- (1) Gross margin equals gross profit divided by revenue for the period.
- (2) Net margin equals profit/(loss) for the year/period divided by revenue for the period.
- (3) Current ratio equals current assets divided by current liabilities as of the end of the period.
- (4) Quick ratio equals current assets less inventories divided by current liabilities as of the end of the period.
- (5) Gearing ratio equals total financial indebtedness (including interest-bearing bank borrowings, lease liabilities and amounts due to related parties) divided by total equity as of the end of the period.
- (6) We had a loss of RMB675.9 million in 2021 primarily due to (i) our share-based compensation expenses totaling RMB952.1 million, including a one-off share-based compensation expense of RMB896.9 million and other share-based compensation expenses of RMB55.2 million for other share awards and options granted to our employees, and (ii) an increase in research and development costs from RMB157.8 million to RMB307.4 million to develop our rich pipeline of 22 vaccine candidates.
- (7) We had a loss of RMB95.8 million in the four months ended April 30, 2022 mainly because of a slowdown in sales amid COVID-19 outbreaks in China and as we rapidly advanced clinical trials of our vaccine candidates, which drove up our research and development costs.

Gross Margin

See “—Consolidated Statements of Profit or Loss—Gross Profit and Gross Margin.”

Net Margin

See “—Consolidated Statements of Profit or Loss—Profit/(Loss) for the Year/Period and Net Margin.”

FINANCIAL INFORMATION

Current Ratio

As of December 31, 2019, 2020, 2021 and April 30, 2022, our current ratio was 1.1, 2.2, 1.5 and 1.2, respectively. Our current ratio increased from 1.1 as of December 31, 2019 to 2.2 as of December 31, 2020, primarily due to the growth of total current assets outgrowing the growth of total current liabilities as a result of the significant increases in cash and cash equivalents and trade and bills receivables in 2020. Our current ratio decreased from 2.2 as of December 31, 2020 to 1.5 as of December 31, 2021, primarily due to decreases in our cash and cash equivalents and current assets, as we incurred more capital expenditures on upgrading our manufacturing facilities, to support growth of our existing vaccine products as well as upcoming launch of our vaccine candidates. Our current ratio further decreased to 1.2 as of April 30, 2022, primarily due to an increase in short-term interest-bearing bank borrowings to support our business operations and development.

Quick Ratio

Consistent with the changes in our current ratio, our quick ratio increased from 0.9 as of December 31, 2019 to 1.9 as of December 31, 2020, which was mainly due to the increases in cash and cash equivalents and our repayment of certain borrowings in 2020. Similar to our current ratio, our quick ratio decreased from 1.9 as of December 31, 2020 to 1.3 as of December 31, 2021 and to 1.0 as of April 30, 2022, primarily due to a decrease in our cash and cash equivalents and an increase in short-term interest-bearing bank borrowings, respectively.

Gearing Ratio

Our gearing ratio decreased from 26.2% as of December 31, 2019 to 6.9% as of December 31, 2020, mainly due to the increase in our equity interests in 2020. Our gearing ratio increased from 6.9% as of December 31, 2020 to 11.4% as of December 31, 2021, primarily due to a 176.6% increase in our financial indebtedness, as we made more bank borrowings in 2021 to support our expenditures in construction of manufacturing facilities and procurement of equipment for our vaccine products and candidates. Our gearing ratio further increased to 17.6% as of April 30, 2022 as we utilized bank loan facilities for working capital purposes and for business expansion, including research and development in vaccine candidates as well as construction and upgrade of manufacturing facilities.

RELATED PARTY TRANSACTIONS

The following table sets forth the material related party transactions for the years/periods indicated:

	Year ended December 31,			Four months ended April 30,	
	2019	2020	2021	2021	2022
	(unaudited)				
	(in thousands of RMB)				
Rental expenses to related parties:					
Mr. Yan ZHOU ⁽¹⁾	9,404	9,404	9,759	3,180	3,423
Shanghai Tianxia Asset Management Co., Ltd. ⁽²⁾	282	336	336	112	112
Shenyang Green Sino Pharmaceutical Co., Ltd. ⁽³⁾	—	194	221	59	80

FINANCIAL INFORMATION

Notes:

- (1) We entered into lease agreements in respect of buildings from Mr. Yan ZHOU. The rental fees under the lease were RMB9,404,000, RMB9,404,000, RMB9,759,000, RMB3,180,000 and RMB3,423,000 in 2019, 2020, 2021 and the four months ended April 30, 2021 and 2022, respectively.
- (2) We entered into lease agreements in respect of motor vehicles from Shanghai Tianxia Asset Management Co., Ltd.. The rental fees under the lease were RMB282,000, RMB336,000, RMB336,000, RMB112,000 and RMB112,000 in 2019, 2020, 2021 and the four months ended April 30, 2021 and 2022, respectively. Shanghai Tianxia Asset Management Co., Ltd. was a company controlled by a Director.
- (3) We entered into lease agreements in respect of buildings from Shenyang Green Sino Pharmaceutical Co., Ltd.. The rental fees under the lease were nil, RMB194,000, RMB221,000, RMB59,000 and RMB80,000 in 2019, 2020, 2021 and the four months ended April 30, 2021 and 2022, respectively. Shenyang Green Sino Pharmaceutical Co., Ltd. was a company controlled by a Director.

In addition to the material related party transactions set forth in the table above, during the Track Record Period, we also entered into other transactions with related parties, primarily including (i) the share purchase agreement entered between Shenyang Aimei Pharmaceutical Technology Co., Ltd. (瀋陽艾美醫藥科技有限公司, a previous subsidiary of us that was deregistered in 2020) and Chambray Investment Ltd. in January 2019 for the acquisition of 20% shareholdings of AIM Weixin with a consideration of RMB220.0 million; (ii) the share purchase agreement entered between Shenyang Aimei Pharmaceutical Technology Co., Ltd. and Little Wheel Investment Ltd. in January 2019 for the acquisition of 19.3% shareholdings of AIM Weixin with a consideration of RMB213.0 million; (iii) the guarantee provided by our Controlling Shareholder, a close family member of our Controlling Shareholder, and a company controlled by our Controlling Shareholder for certain bank loans of RMB160.0 million as at December 31, 2019, which had been released in October 2020; (iv) the disposal of our 51% equity interests in our previous subsidiary named AIM Explorer Biopharmaceutical Research Institute (Shenyang) Co., Ltd. (艾美探索者生物製藥研究院(瀋陽)有限公司) to Alhealth Eye Medicine (Liaoning) Co., Ltd. (艾爾健康眼藥(遼寧)有限公司) in January 2020 with no consideration; and (v) the share purchase agreement entered between our Company and Shenyang Senturui Biotechnology Co., Ltd. (瀋陽森途瑞生物科技有限公司) (now Yifeng Senturui Biotechnology Co., Ltd. (宜豐森途瑞生物科技有限公司)) for the acquisition of 49% shareholdings of AIM Explorer with a total consideration of RMB512.5 million in November 2020. See note 40 in the Accountants' Report set out in Appendix I to this prospectus.

The following table sets forth the outstanding balances with related parties as of the dates indicated:

	As of December 31,			As of April 30,
	2019	2020	2021	2022
	(in thousands of RMB)			
Non-trade related:				
Due from related parties				
Tibet Silicon Valley Angel Venture Capital Co., Ltd. ⁽¹⁾	376	376	—	—
Zhuhai Hengqin Ruifan Technology Partnership (Limited Partnership)	—	—	10,000	—
Lhasa Meihua Biological Investment Holdings Co., Ltd.	146,180	76,197	—	—
	146,556	76,573	10,000	—

FINANCIAL INFORMATION

	As of December 31,			As of
	2019	2020	2021	April 30, 2022
	(in thousands of RMB)			
Non-trade related:				
<i>Due to related parties</i>				
Tibet Tianxia Holdings Group Co., Ltd.	73	73	—	—
Tibet Bohai Investment Group Co., Ltd.	78	78	—	—
Shanghai Zhonglianxin Investment Development Co., Ltd.	100,000	—	—	—
Mr. Yan ZHOU	9,540	—	—	—
	<u>109,691</u>	<u>151</u>	<u>—</u>	<u>—</u>

Note:

- (1) Tibet Silicon Valley Angel Venture Capital Co., Ltd. was a company controlled by a Director and his close family member. The Director and his close family member disposed of all of their shareholdings in Tibet Silicon Valley Angel Venture Capital Co., Ltd. in December 2020 to a third party. From then on, Tibet Silicon Valley Angel Venture Capital Co., Ltd. was no longer a related party of the Group.

Our Directors are of the view that each of the related party transactions set out in note 40 to our consolidated financial statements included in Appendix I to this prospectus was conducted in the ordinary course of business and on an arm's length basis and with normal commercial terms between the relevant parties. Our Directors are also of the view that our related party transactions during the Track Record Period would not distort our results of operations or make our historical results not reflective of our future performance.

FINANCIAL RISK MANAGEMENT

Our principal financial instruments comprise cash and cash equivalents and bank loans. The main purpose of these financial instruments is to support our operations. We have various other financial assets and liabilities which arise directly from our operations.

The main risks arising from the our financial instruments are interest rate risk, credit risk and liquidity risk. Generally, our senior management meets regularly to analyze and formulate measures to manage our exposure to these risks. In addition, the Board holds meetings regularly to analyze and approve the proposals made by the senior management. Generally, we introduce conservative strategies on our risk management. As our exposure to these risks is kept to a minimum, we have not used any derivatives and other instruments for hedging purposes. We do not hold or issue derivative financial instruments for trading purposes. The Board reviews and agrees policies for managing each of these risks and they are summarized below. For further details, see note 43 in the Accountants' Report set out in Appendix I to this prospectus.

Interest Rate Risk

Our exposure to market risk for changes in interest rates relates primarily to our interest-bearing bank borrowings. The increase or decrease in 100 basis points of floating rates on the Group's interest-bearing bank borrowings will not have significant impact on our profit before tax.

Credit Risk

We trade only with recognized and creditworthy third parties and there is no requirement for collateral. It is our policy that all customers who wish to trade on credit terms are subject to credit verification procedures. In addition, receivable balances are monitored on an ongoing basis and the Group's exposure to bad debts is not significant. There are no significant concentrations of credit risk within the Group as the customer bases of our trade receivables are widely dispersed in different regions.

FINANCIAL INFORMATION

Liquidity Risk

We monitor our exposure to liquidity risk by monitoring the current ratio, which is calculated by comparing the current assets with the current liabilities. The liquidity of the Group is primarily dependent on its ability to maintain adequate cash inflows from operations to meet its debt obligations as they fall due, and its ability to obtain external financing to meet its committed future capital expenditure.

Capital Management

The primary objectives of our capital management are to safeguard the Group's ability to continue as a going concern, so that it can continue to provide returns to our shareholders and benefits to other stakeholders, by pricing services commensurately with the level of risk.

We manage our capital structure and make adjustments to it in light of changes in economic conditions and the risk characteristics of the underlying assets. To maintain or adjust the capital structure, we may adjust the dividend payment to shareholders, return capital to shareholders or issue new shares. We are not subject to any externally imposed capital requirements. No changes were made in the objectives, policies or processes for managing capital during the Track Record Period.

DISTRIBUTABLE RESERVES

As of April 30, 2022, we had no distributable reserves.

DIVIDEND POLICY

No dividend was paid or declared by our Company during the Track Record Period. Under the PRC Company Law and the Articles of Association, we are required to allocate 10% of our after-tax profits at each year-end to statutory reserve until its balance reaches 50% of our Company's registered capital, and dividends shall only be paid out of accumulated distributable profits for the year. In view of our accumulated losses as of April 30, 2022, as advised by our PRC Legal Advisor, we shall not declare or pay any dividend until we have distributable profits after the accumulated losses have been made up and statutory reserves have been drawn in accordance with relevant laws and regulations and the Articles of Association. In the future, our Board of Directors will formulate our profit distribution plan based on our results of operations, cash flow, financial condition, future business prospects, statutory and regulatory restrictions on the payment of dividends and other factors that our Board deems relevant. All of our Shareholders have equal rights to dividends and other distributions proportionate to their shareholdings.

We adopt a discretionary dividend policy, which aims to provide a reasonable return on investment for our shareholders while taking into account the cash needs of our business operations. According to our internal policy, the dividends shall not exceed our accumulated distributable profits. Following the Listing of our H Shares on the Stock Exchange, any dividends to be paid to our H Share shareholders will be declared in RMB and paid in Hong Kong dollars and dividends to be paid to our domestic shareholders will continue to be declared and paid in RMB. Dividends will be paid out of our distributable profit, which are equal to our net profit as determined under PRC GAAP or IFRS, whichever is lower, less any recovery of accumulated losses and appropriations to statutory and other reserves that we are required to make. Although the calculation of net profit and distributable profit under PRC GAAP differs from that under IFRS, we do not expect such difference to have a material impact on our future decision to declare or pay dividends. If our Board does not propose a cash dividend distribution plan when we have distributable profits, we shall consult our independent directors and disclose the reasons and the use of the retained funds in our periodic report.

FINANCIAL INFORMATION

LISTING-RELATED EXPENSES INCURRED AND TO BE INCURRED

Our Listing expenses mainly comprise legal and other professional fees paid and payable to the professional parties, commissions payable to the Underwriters, and printing and other expenses for their services rendered in relation to the Listing and the Global Offering. The total Listing expenses payable by our Company are estimated to be approximately HK\$87.0 million, including (a) underwriting-related expenses of approximately HK\$7.8 million and (b) non-underwriting related expenses of approximately HK\$79.2 million, which consist of (i) fees and expenses of legal advisors and accountants of approximately HK\$57.4 million and (ii) other fees and expenses of approximately HK\$21.8 million, assuming the Over-allotment Option is not exercised and based on an Offer Price of HK\$16.16. These Listing expenses represent 55.4% of the gross proceeds from the Global Offering, assuming the Over-allotment Option is not exercised and based on an Offer Price of HK\$16.16.

No Listing expenses were recognized and charged to our consolidated statements of profit or loss and other comprehensive income in 2019 and 2020. Of the Listing expenses of approximately HK\$87.0 million: (i) approximately HK\$3.6 million and HK\$1.3 million were recognized and charged to our consolidated statements of profit or loss and other comprehensive income in 2021 and the four months ended April 30, 2022, respectively; (ii) approximately HK\$72.9 million is expected to be charged to our consolidated statements of profit or loss and other comprehensive income after April 30, 2022; and (iii) approximately HK\$9.2 million is expected to be accounted for as a deduction from equity upon Listing.

PRO FORMA ADJUSTED CONSOLIDATED NET TANGIBLE ASSETS

The following statement of unaudited pro forma adjusted net tangible assets attributable to the Shareholders of our Company has been prepared in accordance with Rule 4.29 of the Listing Rules and with reference to Accounting Guideline 7 “*Preparation of Pro Forma Financial Information for inclusion in Investment Circulars*”, and is set out below to illustrate the effect of the Global Offering on the consolidated net tangible assets attributable to the Shareholders of our Company as of April 30, 2022, as if the Global Offering had taken place on April 30, 2022.

The statement of unaudited pro forma adjusted net tangible assets has been prepared for illustrative purposes only and because of its hypothetical nature, it may not give a true picture of the financial position of the Group had the Global Offering been completed as at April 30, 2022 or at any future date.

	Consolidated net tangible assets of our Group attributable to owners of the Company as of April 30, 2022 ⁽¹⁾	Estimated net proceeds from the Global Offering ⁽²⁾	Unaudited pro forma adjusted net tangible assets of our Group attributable to owners of the Company	Unaudited pro forma adjusted net tangible assets per Share	
	RMB'000	RMB'000	RMB'000	RMB ⁽³⁾	HK\$ ⁽⁴⁾
Based on an Offer Price of HK\$16.16 per Share	3,064,328	66,112	3,130,440	2.59	2.93

FINANCIAL INFORMATION

Notes:

- (1) The consolidated net tangible assets attributable to owners of the Company as of April 30, 2022 is extracted from the Accountants' Report set out in Appendix I to this prospectus, which is based on the audited consolidated equity attributable to owners of the Company as of April 30, 2022 of RMB4,827.1 million less intangible assets attributable to the owners of the Company and goodwill as of April 30, 2022 of RMB1,279.8 million and RMB482.9 million, respectively.
- (2) The estimated net proceeds from the Global Offering are based on an Offer Price of HK\$16.16, after deducting the underwriting fees and other related expenses payable by our Group (excluding Listing expenses of RMB4.3 million that have been charged to profit or loss during the relevant periods) and does not take into account of any Shares which may be issued upon the exercise of the Over-allotment Option. The estimated net proceeds from the Global Offering are converted into Renminbi at an exchange rate of RMB0.88297 to HK\$1.00 prevailing on the Latest Practicable Date.
- (3) The unaudited pro forma adjusted consolidated net tangible assets attributable to Shareholders of the Company per Share is arrived at by dividing the unaudited pro forma adjusted net tangible assets by 1,209,713,999 shares, being the number of shares in issue assuming that the Global Offering had been completed on April 30, 2022, without taking account of the exercise of the Over-allotment Option.
- (4) The unaudited pro forma adjusted consolidated net tangible assets per Share is converted into Hong Kong dollars at an exchange rate of RMB0.88297 to HK\$1.00 prevailing on the Latest Practicable Date.
- (5) No adjustment has been made to the unaudited pro forma consolidated net tangible assets to reflect any trading results or other transactions of our Company subsequent to April 30, 2022.

DISCLOSURE UNDER RULES 13.13 TO 13.19 OF THE LISTING RULES

Our Directors confirm that, as of the Latest Practicable Date, save as disclosed in “—Indebtedness—Interest-Bearing Bank Borrowings,” they are not aware of any circumstances which would give rise to a disclosure required under Rules 13.13 to 13.19 of the Listing Rules upon the listing of the H Shares on the Stock Exchange.

NO MATERIAL ADVERSE CHANGE

Since the outbreak of the COVID-19 pandemic in early 2020, a series of prevention and control measures have been implemented in the PRC and around the world. Such isolation and quarantine measures have caused a short-term impact on the operations of the Group since the beginning of 2020. In the opinion of our Directors, the degree of the impact of COVID-19 pandemic on the Group was not significant.

Since early 2022, the Omicron variant has led to a new wave of COVID-19 resurgence in China. To achieve “dynamic-zero COVID-19 cases” (動態清零), the PRC government has adopted a series of prevention and containment measures, including but not limited to, quarantines, epidemiological investigations on infection sources and close contacts, large-scale community nucleic acid testing, travel restrictions, control on public events, and continuous booster vaccination measures. As a result, CDCs had to continuously allocate and focus major resources on executing these disease containment measures, and lowered procurement levels of non-COVID-19 vaccines. Although we did not experience any shortage of raw materials, nor any material interruptions on our manufacturing and R&D activities, due to this new wave of COVID-19 recurrence in China, together with traditionally lower purchase demand around Chinese New Year holidays, our sales were adversely affected in the first quarter of 2022. See “Summary—Impact of the COVID-19 Outbreak.”

Our Directors have confirmed that, except as disclosed above, there has been no material adverse change in our financial, operational or trading positions since April 30, 2022, being the end of the period reported in the Accountants' Report included in Appendix I to this prospectus, and up to the date of this prospectus.

FUTURE PLANS AND USE OF PROCEEDS

FUTURE PLANS

See “Business—Our Strategies” for our business strategies and future plans.

USE OF PROCEEDS

We estimate that we will receive net proceeds of approximately HK\$70.01 million from the Global Offering, assuming that the Over-allotment Option is not exercised and an Offer Price of HK\$16.16 per H Share, after deducting underwriting commissions and other estimated expenses payable by us in connection with the Global Offering.

We intend to use these net proceeds for the following purposes:

- approximately 60%, or HK\$42.00 million, to be allocated to advance R&D of our vaccine candidates and to continue to enrich our vaccine pipeline. For the expected timetable and key milestones of the research and development activities for our vaccine pipeline, please see “Business—Our Strategies—Accelerate the development of vaccine candidates and continue to enrich our product portfolio.” The allocation is planned to be:
 - approximately 42.30%, or HK\$29.61 million, to be used in the development of our mRNA COVID-19 vaccine candidate, of which approximately 34.00%, or HK\$23.80 million, will be used to conduct clinical trials and approximately 8.30%, or HK\$5.81 million, will be used to obtain registration approvals. See “Business—Our Strategies—Accelerate the development of vaccine candidates and continue to enrich our product portfolio—COVID-19 vaccine portfolio”;
 - approximately 7.00%, or HK\$4.90 million, to be used in the development of our pneumococcal vaccine candidates, including PCV13, PCV20 and PPSV23; and
 - approximately 10.70%, or HK\$7.49 million, to be used for the development of other vaccine candidates in our pipeline;
- approximately 35%, or HK\$24.50 million, to be allocated to fund the capital expenditure on the construction of new production facilities for our new vaccine products to be launched in the next two to four years. See “Business—Our Strategies—Expand our production capabilities to support our future growth” and “Business—Manufacturing—Manufacturing Facilities and Production Capacity—New Production Facilities” for details. We plan to allocate:
 - approximately 25.66%, or HK\$17.96 million, will be used to fund the capital expenditure on the new mRNA vaccine production facilities in Ningbo in the next one to two years, including plant decontamination and renovation, and equipment procurement and installation and testing; and
 - approximately 9.34%, or HK\$6.54 million, to fund the capital expenditure on construction of new production facilities by Rong’an Bio for serum free Vero cell human rabies vaccine in the next two years, including (i) 6.09%, or HK\$4.26 million, to be used in equipment procurement; (ii) 3.25%, or HK\$2.28 million, to be used in plant decontamination and renovation, and equipment installation and testing; and

FUTURE PLANS AND USE OF PROCEEDS

- approximately 5%, or HK\$3.51 million, to be invested in our sales and marketing activities to solidify and expand market leadership, including expansion of our sales and marketing team and conducting academic promotion activities, such as academic events, medical conferences and training programs, as well as pre-launch marketing activities for our new vaccine products. See “Business—Our Strategies—Continue to solidify and expand market leadership by increasing sales and marketing efforts for approved vaccine products and commercializing new products,” and

If and to the extent that the net proceeds of the Global Offering are not immediately applied towards the above purposes, we will only deposit those net proceeds into short-term interest-bearing bank accounts at licensed commercial banks and/or other authorized financial institutions in Hong Kong and/or the PRC, as defined under the Securities and Futures Ordinance or under other applicable laws of the PRC. We will make an appropriate announcement if there is any change to the above proposed use of proceeds.

UNDERWRITING

HONG KONG UNDERWRITERS

Goldman Sachs (Asia) L.L.C.

China International Capital Corporation Hong Kong Securities Limited

China Securities (International) Corporate Finance Company Limited

Macquarie Capital Limited

BOCI Asia Limited

ICBC International Securities Limited

CMB International Capital Limited

Futu Securities International (Hong Kong) Limited

Tiger Brokers (HK) Global Limited

Livermore Holdings Limited

UNDERWRITING

This prospectus is published solely in connection with the Hong Kong Public Offering. The Hong Kong Public Offering is fully underwritten by the Hong Kong Underwriters on a conditional basis. The International Offering is expected to be fully underwritten by the International Underwriters.

The Global Offering comprises the Hong Kong Public Offering of initially 971,600 Hong Kong Offer Shares and the International Offering of initially 8,742,400 International Offer Shares, subject, in each case, to reallocation on the basis as described in the section headed “Structure of the Global Offering” in this prospectus as well as to the Over-allotment Option (in the case of the International Offering).

UNDERWRITING ARRANGEMENTS AND EXPENSES

Hong Kong Public Offering

Hong Kong Underwriting Agreement

Pursuant to the Hong Kong Underwriting Agreement, our Company is offering the Hong Kong Offer Shares for subscription by the public in Hong Kong on the terms and conditions set out in this prospectus, the **GREEN** Application Form and the Hong Kong Underwriting Agreement at the Offer Price.

Subject to (a) the Listing Committee granting approval for the listing of, and permission to deal in, the H Shares to be offered pursuant to the Global Offering (including any additional H Shares that may be issued pursuant to the exercise of the Over-allotment Option) on the Main Board of the Hong Kong Stock Exchange and such approval not subsequently having been revoked prior to the commencement of trading of the H Shares on the Hong Kong Stock Exchange and (b) certain other conditions set out in the Hong Kong Underwriting Agreement, the Hong Kong Underwriters have agreed severally but not jointly to procure subscribers for, or themselves to subscribe for, their respective applicable proportions of the Hong Kong Offer Shares being offered which are not taken up under the Hong Kong Public Offering on the terms and conditions set out in this prospectus, the **GREEN** Application Form and the Hong Kong Underwriting Agreement.

UNDERWRITING

The Hong Kong Underwriting Agreement is conditional on and subject to, among other things, the International Underwriting Agreement having been executed and becoming unconditional and not having been terminated in accordance with its terms.

Grounds for Termination

If any of the events set out below occur at any time prior to 8:00 a.m. on the Listing Date, the Joint Global Coordinators (for themselves and on behalf of the Hong Kong Underwriters) shall be entitled to terminate the Hong Kong Underwriting Agreement with immediate effect, other than in respect of clause b(xi) below which any of the Joint Global Coordinators shall have the right and absolute discretion to terminate the Hong Kong Underwriting Agreement with immediate effect:

- (a) there develops, occurs, exists or comes into effect:
 - (i). any new law or regulation or any change or development involving a prospective change in existing law or regulation, or any change or development involving a prospective change in, or the interpretation or application thereof by any court or other competent authority in or affecting Hong Kong, the PRC, the United States, the United Kingdom, the European Union (or any member thereof), Singapore, or other jurisdictions relevant to any member of the Group or the Global Offering (each a “**Relevant Jurisdiction**”, collectively the “**Relevant Jurisdictions**”); or
 - (ii). any change or development involving a prospective change (whether or not permanent), or any event or series of events reasonably likely to result in a change or prospective change, in local, national, regional or international financial, political, military, industrial, economic, fiscal, regulatory, currency, credit or market conditions (including, without limitation, conditions in stock and bond markets, money and foreign exchange markets, the inter-bank markets and credit markets) or foreign exchange controls in or affecting any Relevant Jurisdictions; or
 - (iii). any local, national or international event or circumstance or series of events or circumstances in the nature of force majeure (including, without limitation, acts of government, orders of any court declaration of a regional, national or international emergency or war, calamity, crisis, economic sanctions, strikes, labor disputes, outbreak or escalation of hostilities (whether or not war is declared), lock-outs, fire, explosion, flooding, tsunami, earthquake, volcanic eruption, civil commotion, riots, paralysis in government operation, public disorder, acts of war, acts of God, epidemic, pandemic, outbreak or escalation of disease (including infectious disease, including without limitation COVID-19, SARS, MERS, H5N1, H1N1, swine or avian influenza or such related/mutated forms)) in or affecting any of the Relevant Jurisdictions, or without limiting the foregoing, any act of terrorism (whether or not responsibility has been claimed), or other state of emergency or calamity or crisis in or affecting any of the Relevant Jurisdictions; or
 - (iv). the imposition or declaration of any moratorium, suspension or limitation (including without limitation, any imposition of or requirement for any minimum or maximum price limit or price range) on trading in shares or securities generally on the Stock Exchange, the Shanghai Stock Exchange, the Shenzhen Stock Exchange, the Singapore Stock Exchange, the New York Stock Exchange, the NASDAQ Global Market or the London Stock Exchange; or any moratorium on banking activities in or affecting any of the Relevant Jurisdictions or any disruption in commercial banking or foreign exchange trading or securities settlement or clearing services, procedures or matters in those places or jurisdictions; or

UNDERWRITING

- (v). a change or development involving a prospective change or amendment in taxation or exchange control, currency exchange rates or foreign investment regulations (including, without limitation, a material devaluation of the Hong Kong dollar or Renminbi against any foreign currencies, a change in the system under which the value of the Hong Kong dollar is linked to that of the United States dollar or the Renminbi is linked to any foreign currency or currencies), or the implementation of any exchange control, in any of the Relevant Jurisdictions; or
- (vi). the commencement by any governmental authority of any Relevant Jurisdiction of any public action or investigation against a Director or an announcement by any governmental authority or regulatory or political body or organization that it intends to take any such action; or
- (vii). the imposition of economic sanctions, in whatever form, directly or indirectly, under any sanction laws, or regulations in, Relevant Jurisdiction; or
- (viii). any event, act or omission which gives rise to any liability of the Company or the Controlling Shareholder pursuant to the indemnities under the Hong Kong Underwriting Agreement; or
- (ix). an order or petition is presented for the winding-up or liquidation of any member of the Group, or any member of the Group makes any composition or arrangement with its creditors or enters into a scheme of arrangement or any resolution is passed for the winding-up of any member of the Group or a provisional liquidator, receiver or manager is appointed over all or part of the assets or undertaking of any member of the Group or anything analogous thereto occurs in respect of any member of the Group; or
- (x). a valid demand by any creditor for repayment or payment of any of the Group's indebtedness in respect of which the Company or any of the Group Companies is liable prior to its stated maturity; or
- (xi). any non-compliance of the Prospectus (or any other documents used in connection with the contemplated offering, allotment, issue, subscription or sale of any of the Offer Shares) or any aspect of the Global Offering with the Listing Rules or any other applicable laws and regulations; or
- (xii). any contravention by the Company or any Director of any laws and regulations of the Relevant Jurisdictions and the Listing Rules and guidance of the Stock Exchange; or
- (xiii). any change or prospective change involving a materialization of, any of the risks set out in the section headed "Risk Factors" in the Prospectus; or
- (xiv). any proceedings of any third party being threatened or instigated against any Director, member of the Group or the Controlling Shareholder; or
- (xv). the issue or requirement to issue by the Company of any supplement or amendment to the Prospectus (or to any other documents used in connection with the contemplated offer and sale of the H Shares) pursuant to the Companies Ordinance, the Companies (Winding up and Miscellaneous Provisions) Ordinance or the Listing Rules or any requirement or request of the Stock Exchange and/or the SFC,

UNDERWRITING

which, in any such case individually or in the aggregate, in the absolute opinion of the Joint Global Coordinators (acting jointly for themselves and on behalf of the Hong Kong Underwriters):

- (1) has or will or is reasonably expected to have a material adverse effect on the assets, liabilities, business, general affairs, management, prospects, shareholders' equity, profits, losses, results of operations, position or condition, financial or otherwise, or performance of the Company or the Group as a whole or to any present or prospective shareholder of the Company in its capacity as such; or
 - (2) has or will or is reasonably expected to have a material adverse effect on the success of the Global Offering and/or make it impracticable or inadvisable for any material part of the Hong Kong Underwriting Agreement, the Hong Kong Public Offering or the Global Offering to be performed or implemented as envisaged; or
 - (3) has or will or may have a material adverse effect on the level of applications under the Hong Kong Public Offering or the level of interest under the International Offering; or
 - (4) make, will or may make it impracticable, inadvisable or inexpedient to proceed with the Hong Kong Public Offering and/or the Global Offering, to market the Global Offering or the delivery of H Shares on the Listing Date; or
 - (5) has or will or may reasonably expected to have the effect of making any material part of the Hong Kong Underwriting Agreement (including underwriting) incapable of performance in accordance with its terms or preventing the processing of applications and/or payments pursuant to the Global Offering or pursuant to the underwriting thereof; or
- (b) there has come to the notice of any the Joint Sponsors, the Joint Global Coordinators or the Hong Kong Underwriters as at or after the date of the Hong Kong Underwriting Agreement:
- (i) that any statement (excluding any information relating to the Underwriters, namely the marketing name, legal name, logo and address of such Underwriters) contained in any of the offering documents and/or any notices, announcements, advertisements or other documents issued or used by or on behalf of the Company in connection with the Hong Kong Public Offering (including any supplement or amendment thereto) was, when it was issued, or has become untrue, incorrect, inaccurate in any material respect or misleading in any respect; or
 - (ii) that any estimate, forecast, expression of opinion, intention or expectation contained in any of the offering documents and/or any notices, announcements, advertisements or other documents issued or used by or on behalf of the Company in connection with the Hong Kong Public Offering (including any supplement or amendment thereto) was, when it was issued, or has become unfair or misleading in any material respect or based on materially untrue, dishonest or unreasonable assumptions or given in bad faith; or
 - (iii) that any matter has arisen or has been discovered which would, had it arisen or been discovered immediately before the date of the Prospectus, would, if the offering documents and/or any notices, announcements, advertisements or other documents issued or used by or on behalf of the Company in connection with the Hong Kong Public Offering (including any supplement or amendment thereto) were issued at that time, constitute a material omission therefrom; or

UNDERWRITING

- (iv) any material breach of, or any event rendering untrue or incorrect in any material respect, any of the warranties given by the Company and the Controlling Shareholder in the Hong Kong Underwriting Agreement; or
- (v) any material breach of any of the obligations of any party (other than the Joint Sponsors, the Joint Global Coordinators, the Joint Bookrunners, the Joint Lead Managers or the Hong Kong Underwriters) to the Hong Kong Underwriting Agreement, the Cornerstone Investment Agreements or the International Underwriting Agreement; or
- (vi) that (a) any Director or member of senior management of the Company named in the Prospectus is removed from office whether or not for cause, (b) any certificate given by the Company or any of its respective officers to the Joint Global Coordinators under or in connection with the Hong Kong Underwriting Agreement or the Global Offering is false or misleading in any material respect or (c) any Director or any member of senior management of the Company named in the Prospectus is being charged with an indictable offence or prohibited by operation of law or otherwise disqualified from taking part in the management of a company; or
- (vii) the Company withdraws the Prospectus (and/or any other documents used in connection with the subscription or sale of any of the Offer Shares pursuant to the Global Offering) or the Global Offering; or
- (viii) that the approval by the Listing Committee of the listing of, and permission to deal in, the H Shares is refused or not granted, other than subject to customary conditions, on or before the Listing Date, or if granted, the approval is subsequently withdrawn, qualified (other than by customary conditions) or withheld; or
- (ix) any prohibition on the Company for whatever reason from offering, allotting, issuing or selling any of the Offer Shares pursuant to the terms of the Global Offering; or
- (x) any person (other than the Joint Sponsors) has withdrawn or is subject to withdrawing its consent to being named in any of the offering documents or to the issue of any of the offering documents; or
- (xi) that any portion of the orders for Offer Shares placed or confirmed in the bookbuilding process has been withdrawn, terminated, cancelled or not fully settled by the relevant investor(s), and the relevant portion of Offer Shares under such withdrawn, terminated, cancelled or not settled orders is not fully subscribed for and settled by any other investor(s) following the completion of due diligence to the satisfaction of the Joint Global Coordinators before 8 a.m. of the Listing Date, resulting in the International Offering not being fully subscribed for.

Undertakings to the Stock Exchange pursuant to the Listing Rules

Undertakings by our Company

Pursuant to Rule 10.08 of the Listing Rules, our Company has undertaken to the Stock Exchange that it will not issue any further Shares, or securities convertible into equity securities of our Company (whether or not of a class already listed) or enter into any agreement to such an issue within six months from the Listing Date (whether or not such issue of Shares or securities will be completed within six months from the Listing Date), except (a) pursuant to the Global Offering and the Over-allotment Option or (b) under any of the circumstances provided under Rule 10.08 of the Listing Rules.

UNDERWRITING

Undertakings by the Controlling Shareholder

Pursuant to Rule 10.07(1) of the Listing Rules, the Controlling Shareholder has irrevocably and unconditionally undertaken to the Stock Exchange and our Company that, except in compliance with the requirements of the Listing Rules, he shall not and shall procure that the relevant registered holder(s) will not:

- (a) either directly or indirectly in the period commencing on the date by reference to which disclosure of his shareholding in our Company is made in this prospectus and ending on the date which is six months from the Listing Date (the “**First Six-Month Period**”), dispose of, nor enter into any agreement to dispose of or otherwise create any options, rights, interests or encumbrances in respect of any of the securities of our Company in respect of which he is shown in this prospectus to be the beneficial owner(s); or
- (b) in the period of six months commencing on the date on which the period referred to in paragraph (a) above expires (the “**Second Six-Month Period**”), dispose of, or enter into any agreement to dispose of or otherwise create any options, rights, interests or encumbrances in respect of, any of the shares referred to in paragraph (a) above if, immediately following such disposal or upon the exercise or enforcement of such options, rights, interests or encumbrances, he would cease to be a controlling shareholder of the Company.

Pursuant to Note (3) to Rule 10.07(2) of the Listing Rules, the Controlling Shareholder has irrevocably and unconditionally undertaken to the Stock Exchange and our Company that, within the period commencing on the date by reference to which disclosure of his shareholding in our Company is made in this prospectus and ending on the date which is 12 months from the Listing Date, he shall and shall procure that the relevant registered holder(s) will:

- (a) when he pledges or charges any securities of our Company beneficially owned by him in favor of an authorized institution (as defined in the Banking Ordinance (Chapter 155 of the Laws of Hong Kong)) pursuant to Note (2) to Rule 10.07(2) of the Listing Rules, immediately inform our Company of such pledge/charge together with the number of the securities so pledged or charged; and
- (b) when he receives any indication, either verbal or written, from the pledgee or chargee that any of the pledged/charged securities will be disposed of, immediately inform our Company of such indications.

Our Company will inform the Stock Exchange as soon as it has been informed of the matters referred to in paragraph (a) and (b) above (if any) by the Controlling Shareholder and subject to the then requirements of the Listing Rules disclose such matters by way of an announcement which is published in accordance with Rule 2.07C of the Listing Rules as soon as possible.

Undertakings pursuant to the Hong Kong Underwriting Agreement

Undertakings by our Company and the Controlling Shareholder in respect of our Company

Pursuant to the Hong Kong Underwriting Agreement, our Company has undertaken to each of the Joint Sponsors, the Joint Global Coordinators, the Joint Bookrunners and the Hong Kong Underwriters not to, and to procure each other member of the Group not to, without the prior written consent of the Joint Sponsors and the Joint Global Coordinators (for themselves and on behalf of the Hong Kong Underwriters) and unless in compliance with the requirements of the Listing Rules (and only after the consent of the relevant PRC authority (if required) has been obtained), except for the offer, allotment and issue of the

UNDERWRITING

Offer Shares pursuant to the Global Offering (including pursuant to any exercise of the Over-allotment Option), at any time during the period commencing on the date of the Hong Kong Underwriting Agreement and ending on and including the date that is six months after the Listing Date (the “**First Six-Month Period**”):

- (a) offer, allot, issue, sell, accept subscription for, offer to allot, issue or sell, contract or agree to allot, issue or sell, grant or sell any option, warrant, contract or right to subscribe for or purchase, grant or purchase any option, warrant, contract or right to allot, issue or sell, or otherwise transfer or dispose of, or contract or agree to transfer or dispose of, in each case either directly or indirectly, conditionally or unconditionally, any H Shares or other equity securities of our Company, or any interest in any of the foregoing (including, without limitation, any securities convertible into or exchangeable or exercisable for, or that represent the right to receive, or any warrants or other rights to subscribe for or purchase, any H Shares or other securities of our Company or any interest in any of the foregoing); or
- (b) enter into any swap or other arrangement that transfers to another, in whole or in part, any of the economic consequences of ownership of any H Shares or other equity securities of our Company or any interest in any of the foregoing (including, without limitation, any securities convertible into or exchangeable or exercisable for, or that represent the right to receive, or any warrants or other rights to purchase, any H Shares or other equity securities of our Company or any interest in any of the foregoing, as applicable); or
- (c) enter into any transaction with the same economic effect as any transaction specified in (a) and (b) above; or
- (d) offer to or agree to or announce any intention to effect any transaction specified in (a), (b) and (c) above,

in each case, whether any of the transactions specified in (a), (b) or (c) above is to be settled by delivery of H Shares or other equity securities of our Company in cash or otherwise (whether or not the issue of such H Shares or other securities convertible into equity securities will be completed within the First Six-Month Period).

At any time during the period of six months commencing on the date on which the First Six-Month Period expires (the “**Second Six-Month Period**”), our Company shall not enter into any of the transactions specified in (a), (b) or (c) above or offer to or agree to or announce any intention to effect any such transaction such that the Controlling Shareholder, directly or indirectly, would cease to be the Controlling Shareholder of our Company. In the event that, our Company enters into any of the transactions specified in (a), (b) or (c) above or offers to or agrees to or announces any intention to effect any such transaction during the Second Six-Month Period, our Company shall take all reasonable steps to ensure that it will not create a disorderly or false market in the securities of our Company.

The Controlling Shareholder has undertaken to each of the Joint Sponsors, the Joint Global Coordinators, the Joint Bookrunners and the Hong Kong Underwriters to procure our Company to comply with the above undertakings.

Our Company has agreed and undertaken that it will not, and the Controlling Shareholder has further undertaken to procure that our Company will not, effect any purchase of H Shares, or agree to do so, which may reduce the holdings of H Shares held by the public (as defined in Rule 8.24 of the Listing Rules) below the minimum public float requirements specified in the Listing Rules or any waiver granted and not revoked by the Stock Exchange on or before the date falling six months after the Listing Date without first having obtained the prior written consent of the Joint Sponsors and the Joint Global Coordinators (for themselves and on behalf of the Hong Kong Underwriters).

UNDERWRITING

Undertakings by the Controlling Shareholder in respect of himself

The Controlling Shareholder has undertaken to each of our Company, the Joint Sponsors, the Joint Global Coordinators, the Joint Bookrunners and the Hong Kong Underwriters that, without the prior written consent of the Joint Sponsors and the Joint Global Coordinators (for themselves and on behalf of the Hong Kong Underwriters) and unless in compliance with the requirements of the Listing Rules and the applicable PRC law, he:

- (a) will not, at any time during the First Six-Month Period and the Second Six-Month Period:
 - (i) sell, offer to sell, contract or agree to sell, mortgage, charge, pledge, hypothecate, lend, grant or sell any option, warrant, contract or right to purchase, grant or purchase any option, warrant, contract or right to sell, or otherwise transfer or dispose of or create an encumbrance over, or agree to transfer or dispose of or create an encumbrance over, in each case, either directly or indirectly, conditionally or unconditionally, any H Shares or other equity securities of our Company or any interest therein (including, without limitation, any securities convertible into or exchangeable or exercisable for or that represent the right to receive, or any warrants or other rights to purchase, any Shares or any such other equity securities of our Company), or
 - (ii) enter into any swap or other arrangement that transfers to another, in whole or in part, any of the economic consequences of ownership of any H Shares or other securities of our Company or any interest therein, or
 - (iii) enter into any transaction with the same economic effect as any transaction specified in (i) or (ii) above, or
 - (iv) offer to or agree to or announce any intention to effect any transaction specified in (i), (ii) or (iii) above.

in each case, whether any of the transactions specified in (i), (ii) or (iii) above is to be settled by delivery of H Shares or other securities of our Company, in cash or otherwise (whether or not the transaction in relation to such H Shares or other securities will be completed within the First Six-Month Period); and

- (b) until the expiry of the Second Six-Month Period, in the event that he enters into any of the transactions specified in (a)(i), (a)(ii) or (a)(iii) above or offers to or agrees to or announces any intention to effect any such transaction, he will take all reasonable steps to ensure that it will not create a disorderly or false market in the securities of our Company.

UNDERWRITING

Hong Kong Underwriters' Interests in our Company

Save for their respective obligations under the Hong Kong Underwriting Agreement, as of the Latest Practicable Date, none of the Hong Kong Underwriters was interested, legally or beneficially, directly or indirectly, in any Shares or any securities of any member of the Group or had any right or option (whether legally enforceable or not) to subscribe for or purchase, or to nominate persons to subscribe for or purchase, any Shares or any securities of any member of the Group.

Following the completion of the Global Offering, the Hong Kong Underwriters and their affiliated companies may hold a certain portion of the H Shares as a result of fulfilling their respective obligations under the Hong Kong Underwriting Agreement.

International Offering

International Underwriting Agreement

In connection with the International Offering, our Company and the Controlling Shareholder expect to enter into the International Underwriting Agreement with the International Underwriters on or around September 28, 2022. Under the International Underwriting Agreement and subject to the Over-allotment Option, the International Underwriters would, subject to certain conditions set out therein, agree severally but not jointly to procure subscribers for, or themselves to subscribe for, their respective applicable proportions of the International Offer Shares initially being offered pursuant to the International Offering. It is expected that the International Underwriting Agreement may be terminated on similar grounds as the Hong Kong Underwriting Agreement. Potential investors should note that in the event that the International Underwriting Agreement is not entered into or is terminated, the Global Offering will not proceed. See the section headed “Structure of the Global Offering—The International Offering” in this prospectus.

Over-allotment Option

Our Company is expected to grant to the International Underwriters the Over-allotment Option, exercisable by the Joint Global Coordinators on behalf of the International Underwriters at any time from the Listing Date until 30 days after the last day for lodging applications under the Hong Kong Public Offering, pursuant to which our Company may be required to issue up to an aggregate of 1,457,000 H Shares, representing not more than 15% of the number of Offer Shares initially available under the Global Offering, at the Offer Price, to cover over-allocations (if any) in the International Offering. See the section headed “Structure of the Global Offering—Over-allotment Option” in this prospectus.

Commissions and Expenses

The Underwriters will receive an underwriting commission of 4.0% of the aggregate Offer Price of all the Offer Shares (including any Offer Shares to be issued pursuant to the exercise of the Over-allotment Option), out of which they will pay any sub-underwriting commissions and other fees.

The Underwriters may receive a discretionary incentive fee of up to 1.0% of the aggregate Offer Price of all the Offer Shares (including any Offer Shares to be issued pursuant to the exercise of the Over-allotment Option).

For any unsubscribed Hong Kong Offer Shares reallocated to the International Offering, the underwriting commission will not be paid to the Hong Kong Underwriters but will instead be paid, at the rate applicable to the International Offering, to the relevant International Underwriters.

UNDERWRITING

The aggregate underwriting commissions payable to the Underwriters in relation to the Global Offering (assuming an Offer Price of HK\$16.16 per Offer Share, the full payment of the discretionary incentive fee and the exercise of the Over-allotment Option in full) will be approximately HK\$9.0 million.

The aggregate underwriting commissions and fees together with the Stock Exchange listing fees, the FRC transaction levy, the SFC transaction levy and the Stock Exchange trading fee, legal and other professional fees and printing and all other expenses relating to the Global Offering are estimated to be approximately HK\$87.2 million (assuming an Offer Price of HK\$16.16 per Offer Share, the full payment of the discretionary incentive fee and the exercise of the Over-allotment Option in full), which will be made by our Company.

Indemnity

Each of our Company and the Controlling Shareholder has agreed to indemnify the Hong Kong Underwriters for certain losses which they may suffer or incur, including losses arising from the performance of their obligations under the Hong Kong Underwriting Agreement and any breach by any of our Company and the Controlling Shareholder of the Hong Kong Underwriting Agreement.

ACTIVITIES BY SYNDICATE MEMBERS

The underwriters of the Hong Kong Public Offering and the International Offering (together, the “**Syndicate Members**”) and their affiliates may each individually undertake a variety of activities (as further described below) which do not form part of the underwriting or stabilizing process.

The Syndicate Members and their affiliates are diversified financial institutions with relationships in countries around the world. These entities engage in a wide range of commercial and investment banking, brokerage, funds management, trading, hedging, investing and other activities for their own account and for the account of others. In the ordinary course of their various business activities, the Syndicate Members and their respective affiliates may purchase, sell or hold a broad array of investments and actively trade securities, derivatives, loans, commodities, currencies, credit default swaps and other financial instruments for their own account and for the accounts of their customers. Such investment and trading activities may involve or relate to assets, securities and/or instruments of our Company and/or persons and entities with relationships with our Company and may also include swaps and other financial instruments entered into for hedging purposes in connection with the Group’s loans and other debt.

In relation to the H Shares, the activities of the Syndicate Members and their affiliates could include acting as agent for buyers and sellers of the H Shares, entering into transactions with those buyers and sellers in a principal capacity, including as a lender to initial purchasers of the H Shares (which financing may be secured by the H Shares) in the Global Offering, proprietary trading in the H Shares, and entering into over the counter or listed derivative transactions or listed or unlisted securities transactions (including issuing securities such as derivative warrants listed on a stock exchange) which have as their underlying assets, assets including the H Shares. Such transactions may be carried out as bilateral agreements or trades with selected counterparties. Those activities may require hedging activity by those entities involving, directly or indirectly, the buying and selling of the H Shares, which may have a negative impact on the trading price of the H Shares. All such activities could occur in Hong Kong and elsewhere in the world and may result in the Syndicate Members and their affiliates holding long and/or short positions in the H Shares, in baskets of securities or indices including the H Shares, in units of funds that may purchase the H Shares, or in derivatives related to any of the foregoing.

UNDERWRITING

In relation to issues by Syndicate Members or their affiliates of any listed securities having the H Shares as their underlying securities, whether on the Stock Exchange or on any other stock exchange, the rules of the stock exchange may require the issuer of those securities (or one of its affiliates or agents) to act as a market maker or liquidity provider in the security, and this will also result in hedging activity in the H Shares in most cases.

All such activities may occur both during and after the end of the stabilizing period described in the section headed “Structure of the Global Offering” in this prospectus. Such activities may affect the market price or value of the H Shares, the liquidity or trading volume in the H Shares and the volatility of the price of the H Shares, and the extent to which this occurs from day to day cannot be estimated.

It should be noted that when engaging in any of these activities, the Syndicate Members will be subject to certain restrictions, including the following:

- (a) the Syndicate Members (other than the Stabilization Manager or its affiliates or any person acting for it) must not, in connection with the distribution of the Offer Shares, effect any transactions (including issuing or entering into any option or other derivative transactions relating to the Offer Shares), whether in the open market or otherwise, with a view to stabilizing or maintaining the market price of any of the Offer Shares at levels other than those which might otherwise prevail in the open market; and
- (b) the Syndicate Members must comply with all applicable laws and regulations, including the market misconduct provisions of the SFO, including the provisions prohibiting insider dealing, false trading, price rigging and stock market manipulation.

Certain of the Syndicate Members or their respective affiliates have provided from time to time, and expect to provide in the future, investment banking and other services to our Company and each of its affiliates for which such Syndicate Members or their respective affiliates have received or will receive customary fees and commissions.

In addition, the Syndicate Members or their respective affiliates may provide financing to investors to finance their subscriptions of Offer Shares in the Global Offering.

STRUCTURE OF THE GLOBAL OFFERING

THE GLOBAL OFFERING

This prospectus is published in connection with the Hong Kong Public Offering as part of the Global Offering. Goldman Sachs (Asia) L.L.C., China International Capital Corporation Hong Kong Securities Limited, China Securities (International) Corporate Finance Company Limited and Macquarie Capital Limited are the Joint Global Coordinators of the Global Offering.

The listing of the H Shares on the Stock Exchange is sponsored by the Joint Sponsors. The Joint Sponsors have made an application on behalf of our Company to the Listing Committee of the Stock Exchange for the listing of, and permission to deal in, the H Shares to be issued as mentioned in this prospectus.

9,714,000 Offer Shares will initially be made available under the Global Offering comprising:

- (a) the Hong Kong Public Offering of initially 971,600 H Shares (subject to reallocation) in Hong Kong as described in the sub-section “The Hong Kong Public Offering” in this section below; and
- (b) the International Offering of initially 8,742,400 H Shares (subject to reallocation and the Over-allotment Option) (i) in the United States solely to QIBs in reliance on Rule 144A or another exemption from, or in a transaction not subject to, the registration requirements of the U.S. Securities Act and (ii) outside the United States (including to professional and institutional investors within Hong Kong) in offshore transactions in reliance on Regulation S, as described in the sub-section headed “The International Offering” this section below.

Investors may either:

- (i) apply for Hong Kong Offer Shares under the Hong Kong Public Offering; or
- (ii) apply for or indicate an interest for International Offer Shares under the International Offering,

but may not do both.

The Offer Shares will represent approximately 0.8% of the total Shares in issue immediately following the completion of the Global Offering, assuming the Over-allotment Option is not exercised and the options under the Pre-IPO ESOP are not exercised. If the Over-allotment Option is exercised in full, the Offer Shares (including H Shares issued pursuant to the full exercise of the Over-allotment Option) will represent approximately 0.9% of the total Shares in issue immediately following the completion of the Global Offering and the issue of Offer Shares pursuant to the Over-Allotment Option.

If both Hong Kong Offer Shares and International Offer Shares are undersubscribed, the Global Offering would not proceed.

References in this prospectus to applications, **GREEN** Application Form, application monies or the procedure for applications relate solely to the Hong Kong Public Offering.

STRUCTURE OF THE GLOBAL OFFERING

THE HONG KONG PUBLIC OFFERING

Number of Offer Shares initially offered

Our Company is initially offering 971,600 H Shares (subject to reallocation) for subscription by the public in Hong Kong at the Offer Price, representing approximately 10% of the total number of Offer Shares initially available under the Global Offering. The number of Offer Shares initially offered under the Hong Kong Public Offering, subject to any reallocation of Offer Shares between the International Offering and the Hong Kong Public Offering, will represent approximately 0.08% of the total Shares in issue immediately following the completion of the Global Offering (assuming the Over-allotment Option is not exercised and the options under the Pre-IPO ESOP are not exercised).

The Hong Kong Public Offering is open to members of the public in Hong Kong as well as to institutional and professional investors. Professional investors generally include brokers, dealers, companies (including fund managers) whose ordinary business involves dealing in shares and other securities and corporate entities that regularly invest in shares and other securities.

Completion of the Hong Kong Public Offering is subject to the conditions set out in the sub-section headed “Conditions of the Global Offering” in this section.

Allocation

Allocation of Offer Shares to investors under the Hong Kong Public Offering will be based solely on the level of valid applications received under the Hong Kong Public Offering. The basis of allocation may vary, depending on the number of Hong Kong Offer Shares validly applied for by applicants. Such allocation could, where appropriate, consist of balloting, which could mean that some applicants may receive a higher allocation than others who have applied for the same number of Hong Kong Offer Shares, and those applicants who are not successful in the ballot may not receive any Hong Kong Offer Shares.

For allocation purposes only, the total number of Hong Kong Offer Shares available under the Hong Kong Public Offering (after taking into account any reallocation referred to below) will be divided equally into two pools (with any odd lots being allocated to pool A): pool A and pool B. The Hong Kong Offer Shares in pool A will be allocated on an equitable basis to applicants who have applied for Hong Kong Offer Shares with an aggregate price of HK\$5 million (excluding the brokerage, the FRC transaction levy, the SFC transaction levy and the Stock Exchange trading fee payable) or less. The Hong Kong Offer Shares in pool B will be allocated on an equitable basis to applicants who have applied for Hong Kong Offer Shares with an aggregate price of more than HK\$5 million (excluding the brokerage, the FRC transaction levy, the SFC transaction levy and the Stock Exchange trading fee payable) and up to the total value in pool B.

Investors should be aware that applications in pool A and applications in pool B may receive different allocation ratios. If any Hong Kong Offer Shares in one (but not both) of the pools are unsubscribed, such unsubscribed Hong Kong Offer Shares will be transferred to the other pool to satisfy demand in that other pool and be allocated accordingly. Applicants can only receive an allocation of Hong Kong Offer Shares from either pool A or pool B and not from both pools. Multiple or suspected multiple applications under the Hong Kong Public Offering and any application for more than 485,800 Hong Kong Offer Shares is liable to be rejected.

STRUCTURE OF THE GLOBAL OFFERING

Reallocation

The allocation of Offer Shares between the Hong Kong Public Offering and the International Offering is subject to reallocation under the Listing Rules. Paragraph 4.2 of Practice Note 18 of the Listing Rules requires a clawback mechanism to be put in place, which would have the effect of increasing the number of Hong Kong Offer Shares to certain percentages of the total number of Offer Shares to be offered under the Global Offering if certain prescribed total demand levels in the Hong Kong Public Offering are reached.

Assuming that the Over-allotment Option is not exercised, the allocation of the Offer Shares shall be subject to reallocation on the following basis (the “**Mandatory Reallocation**”):

- 971,600 Offer Shares are initially available in the Hong Kong Public Offering, representing approximately 10% of the Offer Shares initially available under the Global Offering;

in the event that the International Offer Shares are fully subscribed or over-subscribed:

- if the number of Offer Shares validly applied for under the Hong Kong Public Offering represents 15 times or more but less than 50 times the number of the Offer Shares initially available for subscription under the Hong Kong Public Offering, then Offer Shares will be reallocated to the Hong Kong Public Offering from the International Offering, so that the total number of Offer Shares available under the Hong Kong Public Offering will be 2,914,400 Offer Shares, representing approximately 30% of the Offer Shares initially available under the Global Offering;
- if the number of Offer Shares validly applied for under the Hong Kong Public Offering represents 50 times or more but less than 100 times the number of the Offer Shares initially available for subscription under the Hong Kong Public Offering, then Offer Shares will be reallocated to the Hong Kong Public Offering from the International Offering, so that the total number of Offer Shares available under the Hong Kong Public Offering will be 3,885,600 Offer Shares, representing 40% of the Offer Shares initially available under the Global Offering;
- if the number of Offer Shares validly applied for under the Hong Kong Public Offering represents 100 times or more than the number of the Offer Shares initially available for subscription under the Hong Kong Public Offering, then Offer Shares will be reallocated to the Hong Kong Public Offering from the International Offering, so that the total number of Offer Shares available under the Hong Kong Public Offering will be 4,857,200 Offer Shares, representing approximately 50% of the Offer Shares initially available under the Global Offering.

The Offer Shares to be offered in the Hong Kong Public Offering and the International Offering may, in certain circumstances, be reallocated as between these offerings at the discretion of the Joint Global Coordinators (for themselves and on behalf of the Underwriters). Subject to the foregoing paragraph, the Joint Global Coordinators may in their discretion reallocate Offer Shares from the International Offering to the Hong Kong Public Offering to satisfy valid applications under the Hong Kong Public Offering. In addition, if the Hong Kong Public Offering is not fully subscribed for, the Joint Global Coordinators (for themselves and on behalf of the Underwriters) have the authority to reallocate all or any unsubscribed Hong Kong Offer Shares to the International Offering, in such proportions as the Joint Global Coordinators deem appropriate.

STRUCTURE OF THE GLOBAL OFFERING

In addition, the Joint Global Coordinators (for themselves and on behalf of the Underwriters) may, at its discretion, reallocate Offer Shares initially allocated for the International Offering to the Hong Kong Public Offering to satisfy valid applications in pool A and pool B under the Hong Kong Public Offering.

In the event that (i) the International Offer Shares are undersubscribed and the Hong Kong Offer Shares are fully subscribed or oversubscribed irrespective of the number of times; or (ii) the International Offer Shares are fully subscribed or oversubscribed and the Hong Kong Offer Shares are fully subscribed or over-subscribed as to less than 15 times of the number of Hong Kong Offer Shares initially available under the Hong Kong Public Offering certain Offer Shares may be reallocated to the Hong Kong Public Offering from the International Offering, provided that, in accordance with the Guidance Letter HKEX-GL91-18 issued by the Stock Exchange, the total number of the Offer Shares available under the Hong Kong Public Offering should not exceed 1,943,200 Offer Shares, representing approximately 20% of the number of the Offer Shares initially available under the Global Offering (before any exercise of the Over-allotment Option).

Details of any reallocation of Offer Shares between the Hong Kong Public Offering and the International Offering will be disclosed in the results announcement of the Global Offering, which is expected to be published on Wednesday, October 5, 2022.

Applications

Each applicant under the Hong Kong Public Offering will be required to give an undertaking and confirmation in the application submitted by him/her/it that he/she/it and any person(s) for whose benefit he/her/it is making the application has not applied for or taken up, or indicated an interest for, and will not apply for or take up, or indicate an interest for, any International Offer Shares under the International Offering. Such applicant's application is liable to be rejected if such undertaking and/or confirmation is/are breached and/or untrue (as the case may be) or if he/she/it has been or will be placed or allocated International Offer Shares under the International Offering.

Applicants under the Hong Kong Public Offering are required to pay, on application, the Offer Price of HK\$16.16 per Offer Share in addition to the brokerage, the FRC transaction levy, the SFC transaction levy and the Stock Exchange trading fee payable on each Offer Share, amounting to a total of HK\$3,264.57 for one board lot of 200 H Shares. Further details are set out in the section headed "How to Apply for Hong Kong Offer Shares" in this prospectus.

THE INTERNATIONAL OFFERING

Number of Offer Shares initially offered

The International Offering will consist of an initial offering of 8,742,400 H Shares, representing approximately 90% of the total number of Offer Shares initially available under the Global Offering (subject to reallocation and the Over-allotment Option). The number of Offer Shares initially offered under the International Offering, subject to any reallocation of Offer Shares between the International Offering and the Hong Kong Public Offering, will represent approximately 0.72% of the total Shares in issue immediately following the completion of the Global Offering (assuming the Over-allotment Option is not exercised and the options under the Pre-IPO ESOP are not exercised).

STRUCTURE OF THE GLOBAL OFFERING

Allocation

The International Offering will include selective marketing of Offer Shares to QIBs in the United States in accordance with Rule 144A as well as institutional and professional investors and other investors anticipated to have a sizeable demand for such Offer Shares in Hong Kong and other jurisdictions outside the United States in reliance on Regulation S. Professional investors generally include brokers, dealers, companies (including fund managers) whose ordinary business involves dealing in shares and other securities and corporate entities that regularly invest in shares and other securities. Allocation of Offer Shares pursuant to the International Offering will be effected in accordance with the “book-building” process described in sub-section headed “Pricing and Allocation” in this section and based on a number of factors, including the level and timing of demand, the total size of the relevant investor’s invested assets or equity assets in the relevant sector and whether or not it is expected that the relevant investor is likely to buy further H Shares and/or hold or sell its H Shares after the Listing. Such allocation is intended to result in a distribution of the H Shares on a basis which would lead to the establishment of a solid professional and institutional shareholder base to the benefit of the Group and the Shareholders as a whole.

The Joint Global Coordinators (on behalf of the Underwriters) may require any investor who has been offered Offer Shares under the International Offering and who has made an application under the Hong Kong Public Offering to provide sufficient information to the Joint Global Coordinators so as to allow them to identify the relevant applications under the Hong Kong Public Offering and to ensure that they are excluded from any allocation of Offer Shares under the Hong Kong Public Offering.

Reallocation

The total number of Offer Shares to be issued or sold pursuant to the International Offering may change as a result of the clawback arrangement described in the subsection “The Hong Kong Public Offering—Reallocation” in this section above, the exercise of the Over-allotment Option in whole or in part and/or any reallocation of unsubscribed Offer Shares originally included in the Hong Kong Public Offering.

OVER-ALLOTMENT OPTION

In connection with the Global Offering, our Company is expected to grant the Over-allotment Option to the International Underwriters, exercisable by the Joint Global Coordinators (on behalf of the International Underwriters).

Pursuant to the Over-allotment Option, the International Underwriters will have the right, exercisable by the Joint Global Coordinators (on behalf of the International Underwriters) at any time from the Listing Date until 30 days after the last day for lodging applications under the Hong Kong Public Offering, to require our Company to issue up to an aggregate of 1,457,000 additional H Shares, representing not more than 15% of the total number of Offer Shares initially available under the Global Offering, at the Offer Price under the International Offering to, cover over-allocations (if any) in the International Offering.

If the Over-allotment Option is exercised in full, the additional Offer Shares to be issued pursuant thereto will represent approximately 0.12% of the total Shares in issue immediately following the completion of the Global Offering and the issue of Offer Shares pursuant to the Over-allotment Option. If the Over-allotment Option is exercised, an announcement will be made.

STRUCTURE OF THE GLOBAL OFFERING

STABILIZATION

Stabilization is a practice used by underwriters in some markets to facilitate the distribution of securities. To stabilize, the underwriters may bid for, or purchase, the securities in the secondary market during a specified period of time, to retard and, if possible, prevent a decline in the initial public market price of the securities below the offer price. Such transactions may be effected in all jurisdictions where it is permissible to do so, in each case in compliance with all applicable laws and regulatory requirements, including those of Hong Kong. In Hong Kong, the price at which stabilization is effected is not permitted to exceed the offer price.

In connection with the Global Offering, the Stabilization Manager (or its affiliates or any person acting for it), on behalf of the Underwriters, may over-allocate or effect transactions with a view to stabilizing or supporting the market price of the H Shares at a level higher than that which might otherwise prevail for a limited period after the Listing Date. However, there is no obligation on the Stabilization Manager (or its affiliates or any person acting for it) to conduct any such stabilizing action. Such stabilizing action, if taken, (a) will be conducted at the absolute discretion of the Stabilization Manager (or its affiliates or any person acting for it) and in what the Stabilization Manager reasonably regards as the best interest of our Company, (b) may be discontinued at any time and (c) is required to be brought to an end within 30 days of the last day for lodging applications under the Hong Kong Public Offering.

Stabilizing action permitted in Hong Kong pursuant to the Securities and Futures (Price Stabilizing) Rules of the SFO includes (a) over-allocation for the purpose of preventing or minimizing any reduction in the market price of the H Shares, (b) selling or agreeing to sell the H Shares so as to establish a short position in them for the purpose of preventing or minimizing any reduction in the market price of the H Shares, (c) purchasing, or agreeing to purchase, the H Shares pursuant to the Over-allotment Option in order to close out any position established under paragraph (a) or (b) above, (d) purchasing, or agreeing to purchase, any of the H Shares for the sole purpose of preventing or minimizing any reduction in the market price of the H Shares, (e) selling or agreeing to sell any H Shares in order to liquidate any position established as a result of those purchases and (f) offering or attempting to do anything as described in paragraph (b), (c), (d) or (e) above.

Specifically, prospective applicants for and investors in the Offer Shares should note that:

- (a) the Stabilization Manager (or its affiliates or any person acting for it) may, in connection with the stabilizing action, maintain a long position in the H Shares;
- (b) there is no certainty as to the extent to which and the time or period for which the Stabilization Manager (or its affiliates or any person acting for it) will maintain such a long position;
- (c) liquidation of any such long position by the Stabilization Manager (or its affiliates or any person acting for it) and selling in the open market may have an adverse impact on the market price of the H Shares;
- (d) no stabilizing action can be taken to support the price of the H Shares for longer than the stabilization period, which will begin on the Listing Date, and is expected to expire on the 30th day after the last day for lodging applications under the Hong Kong Public Offering. After this date, when no further stabilizing action may be taken, demand for the H Shares, and therefore the price of the H Shares, could fall;
- (e) the price of the H Shares cannot be assured to stay at or above the Offer Price by the taking of any stabilizing action; and
- (f) stabilizing bids or transactions effected in the course of the stabilizing action may be made at any price at or below the Offer Price and can, therefore, be done at a price below the price paid by applicants for, or investors in, the Offer Shares.

STRUCTURE OF THE GLOBAL OFFERING

Our Company will ensure or procure that an announcement in compliance with the Securities and Futures (Price Stabilizing) Rules of the SFO will be made within seven days of the expiration of the stabilization period.

Over-Allocation

Following any over-allocation of H Shares in connection with the Global Offering, the Stabilization Manager (or its affiliates or any person acting for it) may cover such over-allocations by exercising the Over-allotment Option in full or in part, by using H Shares purchased by the Stabilization Manager (or its affiliates or any person acting for it) in the secondary market at prices that do not exceed the Offer Price, or by a combination of these methods.

PRICING AND ALLOCATION

The Offer Price will be HK\$16.16 per Offer Share unless otherwise announced, as further explained below. Applicants under the Hong Kong Public Offering are required to pay, on application, the Offer Price of HK\$16.16 for each Hong Kong Offer Share together with brokerage of 1%, a Hong Kong Stock Exchange trading fee of 0.005%, a SFC transaction levy of 0.0027% and a FRC transaction levy of 0.00015%.

The International Underwriters will be soliciting from prospective investors indications of interest in acquiring Offer Shares in the International Offering. Prospective professional and institutional investors will be required to specify the number of Offer Shares under the International Offering they would be prepared to acquire either at different prices or at a particular price. This process, known as “book-building,” is expected to continue up to, and to cease on or about, the last day for lodging applications under the Hong Kong Public Offering.

The Joint Global Coordinators (on behalf of the Underwriters) may, where they deem appropriate, based on the level of interest expressed by prospective investors during the book-building process in respect of the International Offering, and with the consent of our Company, reduce the number of Offer Shares offered and/or the Offer Price below that stated in this prospectus at any time on or prior to the morning of the last day for lodging applications under the Hong Kong Public Offering. In such a case, our Company will issue a supplemental prospectus and extend the offering period, and the applicants would be required to confirm whether to proceed with the applications, otherwise, the applications would be regarded as being withdrawn. In addition, our Company will, as soon as practicable following the decision to make such reduction, and in any event not later than the morning of the last day for lodging applications under the Hong Kong Public Offering, cause to be published on the websites of our Company and the Stock Exchange at www.aimbio.com and www.hkexnews.hk, respectively, notices of the reduction. Upon the issue of such a notice, the revised number of Offer Shares and/or the Offer Price will be final and conclusive.

Before submitting applications for the Hong Kong Offer Shares, applicants should have regard to the possibility that any announcement of a reduction in the number of Offer Shares and/or the Offer Price may not be made until the last day for lodging applications under the Hong Kong Public Offering. Such notice will also include confirmation or revision, as appropriate, of the working capital statement and the Global Offering statistics as currently set out in this prospectus, and any other financial information which may change as a result of any such reduction. In the absence of any such notice so published, the number of Offer Shares will not be reduced and/or the Offer Price will under no circumstances be set at a price that is not the Offer Price stated in this prospectus.

STRUCTURE OF THE GLOBAL OFFERING

The level of indications of interest in the International Offering, the level of applications in the Hong Kong Public Offering, the basis of allocations of the Hong Kong Offer Shares and the results of allocations in the Hong Kong Public Offering are expected to be made available through a variety of channels in the manner described in the section headed “How to Apply for Hong Kong Offer Shares—(D) Publication of Results” in this prospectus.

UNDERWRITING

The Hong Kong Public Offering is fully underwritten by the Hong Kong Underwriters under the terms and conditions of the Hong Kong Underwriting Agreement.

Our Company expects to enter into the International Underwriting Agreement relating to the International Offering on or around September 28, 2022.

These underwriting arrangements, including the Underwriting Agreements, are summarized in the section headed “Underwriting” in this prospectus.

CONDITIONS OF THE GLOBAL OFFERING

Acceptance of all applications for Offer Shares will be conditional on:

- (a) the Listing Committee granting approval for the listing of, and permission to deal in, the H Shares to be issued pursuant to the Global Offering (including any additional H Shares that may be issued pursuant to the exercise of the Over-allotment Option) and the H Shares to be converted from 481,111,111 Domestic Shares on the Main Board of the Stock Exchange and such approval and permission not subsequently having been withdrawn or revoked prior to the Listing Date;
- (b) the execution and delivery of the International Underwriting Agreement on or about September 28, 2022; and
- (c) the obligations of the Hong Kong Underwriters under the Hong Kong Underwriting Agreement and the obligations of the International Underwriters under the International Underwriting Agreement becoming and remaining unconditional and not having been terminated in accordance with the terms of the respective agreements,

in each case on or before the dates and times specified in the respective Underwriting Agreements (unless and to the extent such conditions are validly waived on or before such dates and times) and, in any event, not later than the date which is 30 days after the date of this prospectus.

The consummation of each of the Hong Kong Public Offering and the International Offering is conditional upon, among other things, the other offering becoming unconditional and not having been terminated in accordance with its terms.

If the above conditions are not fulfilled or waived prior to the dates and times specified, the Global Offering will lapse and the Stock Exchange will be notified immediately. Notice of the lapse of the Hong Kong Public Offering will be published by our Company on the websites of our Company and the Stock Exchange at www.aimbio.com and www.hkexnews.hk, respectively, on the next day following such lapse. In such a situation, all application monies will be returned, without interest, on the terms set out in the section headed “How to Apply for Hong Kong Offer Shares—(F) Refund of Application Monies” in this prospectus. In the meantime, all application monies will be held in separate bank account(s) with the receiving banks or other bank(s) in Hong Kong licensed under the Banking Ordinance (Chapter 155 of the Laws of Hong Kong).

STRUCTURE OF THE GLOBAL OFFERING

H Share certificates for the Offer Shares will only become valid at 8:00 a.m. on Thursday, October 6, 2022, provided that the Global Offering has become unconditional in all respects at or before that time.

DEALINGS IN THE H SHARES

Assuming that the Hong Kong Public Offering becomes unconditional at or before 8:00 a.m. in Hong Kong on Thursday, October 6, 2022, it is expected that dealings in the H Shares on the Stock Exchange will commence at 9:00 a.m. on Thursday, October 6, 2022.

The H Shares will be traded in board lots of 200 H Shares each and the stock code of the H Shares will be 6660.

HOW TO APPLY FOR HONG KONG OFFER SHARES

IMPORTANT NOTICE TO INVESTORS:

Fully Electronic Application Process

We have adopted a fully electronic application process for the Hong Kong Public Offering. We will not provide any printed copies of the Prospectus or any printed copies of any application forms for use by the public.

The Prospectus is available at the website of the Stock Exchange at www.hkexnews.hk under the “HKEXnews > New Listings > New Listing Information” section, and our website at www.aimbio.com. If you require a printed copy of the Prospectus, you may download and print from the website addresses above.

The contents of the electronic version of the Prospectus are identical to the printed prospectus as registered with the Registrar of Companies in Hong Kong pursuant to Section 342C of the Companies (Winding Up and Miscellaneous Provisions) Ordinance.

Set out below are procedures through which you can apply for the Hong Kong Offer Shares electronically. We will not provide any physical channels to accept any application for the Hong Kong Offer Shares by the public. If you are an intermediary, broker or agent, please remind your customers, clients or principals, as applicable, that the Prospectus is available online at the website addresses above.

(A) APPLICATIONS FOR HONG KONG OFFER SHARES

1. How to Apply

We will not provide any printed application forms for use by the public.

If you apply for Hong Kong Offer Shares, then you may not apply for or indicate an interest for International Offer Shares.

To apply for Hong Kong Offer Shares, you may:

- (1) apply online via the **HK eIPO White Form** service in the **IPO App** (which can be downloaded by searching “**IPO App**” in App Store or Google Play or downloaded at www.hkeipo.hk/IPOApp or www.tricorglobal.com/IPOApp) or at www.hkeipo.hk; or
- (2) apply through the **CCASS EIPO** service to electronically cause HKSCC Nominees to apply on your behalf, including by:
 - (i) instructing your broker or custodian who is a CCASS Clearing Participant or a CCASS Custodian Participant to give **electronic application instructions** via CCASS terminals to apply for the Hong Kong Offer Shares on your behalf; or
 - (ii) (if you are an existing CCASS Investor Participant) giving **electronic application instructions** through the CCASS Internet System (<https://ip.ccass.com>) or through the CCASS Phone System by calling +852 2979 7888 (using the procedures in HKSCC’s “An Operating Guide for Investor Participants” in effect from time to time). HKSCC can also input **electronic application instructions** for CCASS Investor Participants through HKSCC’s Customer Service Centre at 1/F, One & Two Exchange Square, 8 Connaught Place, Central, Hong Kong by completing an input request.

HOW TO APPLY FOR HONG KONG OFFER SHARES

If you apply through channel (1) above, the Hong Kong Offer Shares successfully applied for will be issued in your own name.

If you apply through channels (2)(i) or (2)(ii) above, the Hong Kong Offer Shares successfully applied for will be issued in the name of HKSCC Nominees and deposited directly into CCASS to be credited to your or a designated CCASS Participant's stock account.

None of you or your joint applicant(s) may make more than one application, except where you are a nominee and provide the required information in your application.

Our Company, the Joint Global Coordinators, the **HK eIPO White Form** Service Provider and their respective agents may reject or accept any application, in full or in part, for any reason at their discretion.

2. Who Can Apply

Eligibility for the Application

You can apply for Hong Kong Offer Shares if you or any person(s) for whose benefit you are applying:

- are 18 years of age or older; and
- are outside the United States (within the meaning of Regulation S) or are a person described in paragraph (h)(3) of Rule 902 of Regulation S.

If you are a firm, the application must be in the individual members' names.

The number of joint applicants may not exceed four.

Unless permitted by the Listing Rules, you cannot apply for any Hong Kong Offer Shares if:

- you are an existing beneficial owner of Shares and/or a substantial shareholder of any of our Company's subsidiaries;
- you are a director, supervisor or chief executive of our Company and/or any of our Company's subsidiaries;
- you are a close associate of any of the above persons;
- you have been allocated or have applied for any International Offer Shares or otherwise participate in the International Offering.

HOW TO APPLY FOR HONG KONG OFFER SHARES

Items Required for the Application

If you apply for Hong Kong Offer Shares online through the **HK eIPO White Form** service, in addition to the above, you must also:

- have a valid Hong Kong identity card number/passport number (for individual applicant) or Hong Kong business registration number /certificate of incorporation number (for body corporate applicant);
- have a Hong Kong address; and
- provide a valid e-mail address and a contact telephone number.

If you are applying for the Hong Kong Offer Shares online by instructing your broker or custodian who is a CCASS Clearing Participant or a CCASS Custodian Participant to give **electronic application instructions** via CCASS terminals, please contact them for the items required for the application.

3. Terms and Conditions of an Application

By applying through the application channels specified in the Prospectus, among other things, you:

- (a) undertake to execute all relevant documents and instruct and authorize our Company and/or the Joint Global Coordinators (or their agents or nominees), as agents of our Company, to execute any documents for you and to do on your behalf all things necessary to register any Hong Kong Offer Shares allocated to you in your name or in the name of HKSCC Nominees as required by the Articles of Association;
- (b) agree to comply with the Articles of Association, Companies (Winding Up and Miscellaneous Provisions) Ordinance and PRC Company Law and the Special Regulations;
- (c) confirm that you have read the terms and conditions and application procedures set out in the Prospectus and agree to be bound by them;
- (d) confirm that you have received and read the Prospectus and have relied only on the information and representations in the Prospectus in making your application and will not rely on any other information or representations, except those in any supplement to the Prospectus;
- (e) confirm that you are aware of the restrictions on the Global Offering set out in the Prospectus;
- (f) agree that none of our Company, the Joint Sponsors, the Joint Global Coordinators, the Joint Bookrunners, the Underwriters, any of their or our Company's respective directors, officers, employees, agents or representatives and any other parties involved in the Global Offering (the "**Relevant Persons**") and the **HK eIPO White Form** Service Provider is or will be liable for any information and representations not in the Prospectus (and any supplement to the Prospectus);
- (g) undertake and confirm that you or the person(s) for whose benefit you have made the application have not applied for or taken up, or indicated an interest for, and will not apply for or take up, or indicate an interest for, any International Offer Shares nor participated in the International Offering;

HOW TO APPLY FOR HONG KONG OFFER SHARES

- (h) agree to disclose to our Company, the H Share Registrar, the receiving bank and the Relevant Persons any personal data which any of them may require about you and the person(s) for whose benefit you have made the application;
- (i) if the laws of any place outside Hong Kong apply to your application, agree and warrant that you have complied with all such laws and neither our Company nor the Relevant Persons will breach any laws outside Hong Kong as a result of the acceptance of your offer to purchase, or any action arising from your rights and obligations under the terms and conditions in the Prospectus;
- (j) agree that once your application has been accepted, you may not rescind it because of an innocent misrepresentation;
- (k) agree that your application will be governed by the laws of Hong Kong;
- (l) represent, warrant and undertake that (i) you understand that the Hong Kong Offer Shares have not been and will not be registered under the U.S. Securities Act and (ii) you and any person for whose benefit you are applying for the Hong Kong Offer Shares are outside the United States (within the meaning of Regulation S) or are a person described in paragraph (h)(3) of Rule 902 of Regulation S;
- (m) warrant that the information you have provided is true and accurate;
- (n) agree to accept the Hong Kong Offer Shares applied for, or any lesser number allocated to you under the application;
- (o) authorize (i) our Company to place your name(s) or the name of HKSCC Nominees on the register of members of our Company as the holder(s) of any Hong Kong Offer Shares allocated to you and such other registers as required under the Articles of Association and (ii) our Company and/or its agents to send any H Share certificate(s) and/or any e-Auto Refund payment instructions and/or any refund check(s) to you or the first-named applicant for joint applications by ordinary post at your own risk to the address stated on the application, unless you have fulfilled the criteria mentioned in “—Personal Collection” below to collect the H Share certificate(s) and/or refund check(s) in person;
- (p) declare and represent that this is the only application made and the only application intended by you to be made to benefit you or the person for whose benefit you are applying;
- (q) understand that the Joint Global Coordinators may reallocate Offer Shares from the International Offering to the Hong Kong Public Offering to satisfy valid applications under the Hong Kong Public Offering and in accordance with Guidance Letter HKEX-GL91-18 issued by the Stock Exchange, if such reallocation is done other than pursuant to Practice Note 18 of the Listing Rules, the maximum total number of Offer Shares that may be reallocated to the Hong Kong Public Offering following such reallocation shall be not more than double the initial allocation to the Hong Kong Public Offering (i.e. 1,943,200 Offer Shares). Further details of the reallocation are stated in the paragraph headed “Structure of the Global Offering” in the Prospectus;
- (r) understand that our Company, the Directors and the Joint Global Coordinators will rely on your declarations and representations in deciding whether or not to allocate any of the Hong Kong Offer Shares to you and that you may be prosecuted for making a false declaration;
- (s) (if the application is made for your own benefit) warrant that no other application has been or will be made for your benefit by giving **electronic application instructions** to HKSCC or through the **HK eIPO White Form** service by you or by any one as your agent or by any other person; and

HOW TO APPLY FOR HONG KONG OFFER SHARES

- (t) (if you are making the application as an agent for the benefit of another person) warrant that (i) no other application has been or will be made by you as agent for or for the benefit of that person or by that person or by any other person as agent for that person by giving **electronic application instructions** to HKSCC or to the **HK eIPO White Form** Service Provider and (ii) you have due authority to give **electronic application instructions** on behalf of that other person as its agent.

4. Minimum Application Amount and Permitted Numbers

Your application through the **HK eIPO White Form** service or the **CCASS EIPO** service must be for a minimum of 200 Hong Kong Offer Shares and in one of the numbers set out in the table below. You are required to pay the amount next to the number you select.

No. of Hong Kong Offer Shares applied for	Amount payable on application	No. of Hong Kong Offer Shares applied for	Amount payable on application	No. of Hong Kong Offer Shares applied for	Amount payable on application	No. of Hong Kong Offer Shares applied for	Amount payable on application
	HK\$		HK\$		HK\$		HK\$
200	3,264.57	4,000	65,291.48	60,000	979,372.11	240,000	3,917,488.46
400	6,529.14	5,000	81,614.34	70,000	1,142,600.80	260,000	4,243,945.82
600	9,793.71	6,000	97,937.22	80,000	1,305,829.49	280,000	4,570,403.20
800	13,058.30	7,000	114,260.08	90,000	1,469,058.17	300,000	4,896,860.57
1,000	16,322.87	8,000	130,582.94	100,000	1,632,286.85	350,000	5,713,003.99
1,200	19,587.44	9,000	146,905.82	120,000	1,958,744.23	400,000	6,529,147.43
1,400	22,852.01	10,000	163,228.68	140,000	2,285,201.59	485,800 ⁽¹⁾	7,929,649.55
1,600	26,116.59	20,000	326,457.37	160,000	2,611,658.97		
1,800	29,381.16	30,000	489,686.06	180,000	2,938,116.34		
2,000	32,645.74	40,000	652,914.74	200,000	3,264,573.71		
3,000	48,968.60	50,000	816,143.43	220,000	3,591,031.08		

(1) Maximum number of Hong Kong Offer Shares you may apply for.

No application for any other number of the Hong Kong Offer Shares will be considered and any such application is liable to be rejected.

5. Applying Through the HK eIPO White Form Service

General

Applicants who meet the criteria in “—(A) Applications for Hong Kong Offer Shares—2. Who Can Apply” above may apply through the **HK eIPO White Form** service for the Offer Shares to be allocated and registered in their own names through the **IPO App** or the designated website at www.hkeipo.hk.

Detailed instructions for application through the **HK eIPO White Form** service are set out in the **IPO App** or on the designated website. If you do not follow the instructions, your application may be rejected and may not be submitted to our Company. If you apply through the **IPO App** or the designated website, you authorize the **HK eIPO White Form** Service Provider to apply on the terms and conditions in the Prospectus, as supplemented and amended by the terms and conditions of the **HK eIPO White Form** service.

HOW TO APPLY FOR HONG KONG OFFER SHARES

Time for Submitting Applications under the HK eIPO White Form Service

You may submit your application through the **HK eIPO White Form** service in the **IPO App** or on the designated website at www.hkeipo.hk (24 hours daily, except on the last day for applications) from 9:00 a.m. on Friday, September 23, 2022 until 11:30 a.m. on Wednesday, September 28, 2022 and the latest time for completing full payment of application monies in respect of such applications will be 12:00 noon on Wednesday, September 28, 2022, the last day for applications, or such later time as described in the paragraph headed “—(C) Effect of Bad Weather and/or Extreme Conditions on the Opening and Closing of the Application Lists” in this section below.

No Multiple Applications

If you apply by means of the **HK eIPO White Form** service, once you complete payment in respect of any **electronic application instruction** given by you or for your benefit through the **HK eIPO White Form** service to make an application for Hong Kong Offer Shares, an actual application will be deemed to have been made. For the avoidance of doubt, giving an **electronic application instruction** under the **HK eIPO White Form** service more than once and obtaining different application reference numbers without effecting full payment in respect of a particular reference number will not constitute an actual application.

Only one application may be made for the benefit of any person. If you are suspected of submitting more than one application through the **HK eIPO White Form** service or by any other means, all of your applications are liable to be rejected.

Section 40 of the Companies (Winding Up and Miscellaneous Provisions) Ordinance

For the avoidance of doubt, our Company and all other parties involved in the preparation of the Prospectus acknowledge that each applicant who gives or causes to give **electronic application instructions** is a person who may be entitled to compensation under Section 40 of the Companies (Winding Up and Miscellaneous Provisions) Ordinance (as applied by Section 342E of the Companies (Winding Up and Miscellaneous Provisions) Ordinance).

6. Applying Through the CCASS EIPO Service

General

CCASS Participants may give **electronic application instructions** to apply for the Hong Kong Offer Shares and to arrange payment of the money due on application and payment of refunds under their participant agreements with HKSCC and the General Rules of CCASS and the CCASS Operational Procedures.

If you are a CCASS Investor Participant, you may give these **electronic application instructions** through the CCASS Phone System by calling +852 2979 7888 or through the CCASS Internet System (<https://ip.ccass.com>) (using the procedures in HKSCC’s “An Operating Guide for Investor Participants” in effect from time to time).

HKSCC can also input **electronic application instructions** for you if you go to:

Hong Kong Securities Clearing Company Limited
Customer Service Center
1/F, One & Two Exchange Square
8 Connaught Place, Central
Hong Kong

HOW TO APPLY FOR HONG KONG OFFER SHARES

and complete an input request form.

If you are not a CCASS Investor Participant, you may instruct your broker or custodian who is a CCASS Clearing Participant or a CCASS Custodian Participant to give **electronic application instructions** via CCASS terminals to apply for the Hong Kong Offer Shares on your behalf.

You will be deemed to have authorized HKSCC and/or HKSCC Nominees to transfer the details of your application to our Company, the Joint Global Coordinators and the H Share Registrar.

Applying through the CCASS EIPO Service

Where you have applied through the **CCASS EIPO** service (either indirectly through a broker or custodian or directly) and an application is made by HKSCC Nominees on your behalf:

- (a) HKSCC Nominees will only be acting as a nominee for you and is not liable for any breach of the terms and conditions of the Prospectus; and
- (b) HKSCC Nominees will do the following things on your behalf:
 - agree that the Hong Kong Offer Shares to be allocated shall be registered in the name of HKSCC Nominees and deposited directly into CCASS for the credit of the CCASS Participant's stock account on your behalf or your CCASS Investor Participant's stock account;
 - agree to accept the Hong Kong Offer Shares applied for or any lesser number allocated;
 - undertake and confirm that you have not applied for or taken up, or indicated an interest for, and will not apply for or take up, or indicate an interest for, any International Offer Shares nor participated in the International Offering;
 - (if the **electronic application instructions** are given for your benefit) declare that only one set of **electronic application instructions** has been given for your benefit;
 - (if you are an agent for another person) declare that you have only given one set of **electronic application instructions** for the other person's benefit and are duly authorized to give those instructions as its agent;
 - confirm that you understand that our Company, the Directors and the Joint Global Coordinators will rely on your declarations and representations in deciding whether or not to allocate any of the Hong Kong Offer Shares to you and that you may be prosecuted for making a false declaration;
 - authorize our Company to place HKSCC Nominees' name on the H Share register of our Company as the holder of the Hong Kong Offer Shares allocated to you and such other registers as required under the Articles of Association, and dispatch H Share certificate(s) and/or refund monies in accordance with the arrangements separately agreed between our Company and HKSCC;
 - confirm that you have read the terms and conditions and application procedures set out in the Prospectus and agree to be bound by them;
 - confirm that you have received and read a copy of the Prospectus and have relied only on the information and representations in the Prospectus in causing the application to be made and will not rely on any other information or representations, except those in any supplement to the Prospectus;

HOW TO APPLY FOR HONG KONG OFFER SHARES

- agree that neither our Company nor the Relevant Persons is or will be liable for any information and representations not in the Prospectus (and any supplement to the Prospectus);
- agree to disclose to our Company, the H Share Registrar, the receiving bank and the Relevant Persons any personal data which they may require about you;
- agree (without prejudice to any other rights which you may have) that once HKSCC Nominees' application has been accepted, it cannot be rescinded for innocent misrepresentation;
- agree that any application made by HKSCC Nominees on your behalf is irrevocable on or before the fifth day after the time of the opening of the application lists (excluding for this purpose any day which is a Saturday, Sunday or public holiday in Hong Kong), such agreement to take effect as a collateral contract with our Company, and to become binding when you give the instructions and such collateral contract to be in consideration of our Company agreeing that it will not offer any Hong Kong Offer Shares to any person on or before the fifth day after the time of the opening of the application lists (excluding for this purpose any day which is a Saturday, Sunday or public holiday in Hong Kong), except by means of one of the procedures referred to in the Prospectus. However, HKSCC Nominees may revoke the application on or before the fifth day after the time of the opening of the application lists (excluding for this purpose any day which is a Saturday, Sunday or public holiday in Hong Kong) if a person responsible for the Prospectus under Section 40 of the Companies (Winding Up and Miscellaneous Provisions) Ordinance (as applied by Section 342E of the Companies (Winding Up and Miscellaneous Provisions) Ordinance) gives a public notice under that section which excludes or limits that person's responsibility for the Prospectus;
- agree that once HKSCC Nominees' application is accepted, neither that application nor your **electronic application instructions** can be revoked, and that acceptance of that application will be evidenced by the announcement of the results of the Hong Kong Public Offering by our Company;
- agree to the arrangements, undertakings and warranties under the participant agreement between you and HKSCC, read with the General Rules of CCASS and the CCASS Operational Procedures, for giving **electronic application instructions** to apply for Hong Kong Offer Shares;
- agree with our Company, for itself and for the benefit of each Shareholder (and so that our Company will be deemed by its acceptance in whole or in part of the application by HKSCC Nominees to have agreed, for our Company and on behalf of each Shareholder, with each CCASS Participant giving **electronic application instructions**) to observe and comply with the Articles of Association, the Companies (Winding Up and Miscellaneous Provisions) Ordinance, the PRC Company Law and the Special Regulations;

HOW TO APPLY FOR HONG KONG OFFER SHARES

- agree with our Company, for itself and for the benefit of each Shareholder and each Director, supervisor, manager and other senior officer of our Company (and so that our Company will be deemed by its acceptance in whole or in part of this application to have agreed, for itself and on behalf of each Shareholder and each Director, supervisor, manager and other senior officer of our Company, with each CCASS Participant giving **electronic application instructions**):
 - (a) to refer all differences and claims arising from the Articles of Association or any rights or obligations conferred or imposed by the PRC Company Law or other relevant laws and administrative regulations concerning the affairs of our Company to arbitration in accordance with the Articles of Association;
 - (b) that any award made in such arbitration shall be final and conclusive; and
 - (c) that the arbitration tribunal may conduct hearings in open sessions and publish its award;
- agree with our Company (for our Company itself and for the benefit of each Shareholder) that H Shares in our Company are freely transferable by their holders;
- authorise our Company to enter into a contract on its behalf with each Director and officer of our Company whereby each such Director and officer undertakes to observe and comply with his obligations to shareholders stipulated in the Articles of Association; and
- agree that your application, any acceptance of it and the resulting contract will be governed by and construed in accordance with the laws of Hong Kong.

Effect of Applying through the CCASS EIPO Service

By applying through the **CCASS EIPO** service, you (and, if you are joint applicants, each of you jointly and severally) are deemed to have done the following things. Neither HKSCC nor HKSCC Nominees will be liable to our Company or any other person in respect of the things mentioned below:

- instructed and authorized HKSCC to cause HKSCC Nominees (acting as nominee for the relevant CCASS Participants) to apply for the Hong Kong Offer Shares on your behalf;
- instructed and authorized HKSCC to arrange payment of the Offer Price, brokerage, FRC transaction levy, SFC transaction levy and Stock Exchange trading fee by debiting your designated bank account and, in the case of a wholly or partially unsuccessful application refund of the application monies (including brokerage, FRC transaction levy, SFC transaction levy and Stock Exchange trading fee) by crediting your designated bank account; and
- instructed and authorized HKSCC to cause HKSCC Nominees to do on your behalf all the things stated in the Prospectus.

HOW TO APPLY FOR HONG KONG OFFER SHARES

Time for Inputting Electronic Application Instructions⁽¹⁾

CCASS Clearing/Custodian Participants can input **electronic application instructions** at the following times on the following dates:

- Friday, September 23, 2022 — 9:00 a.m. to 8:30 p.m.
- Saturday, September 24, 2022 — 8:00 a.m. to 1:00 p.m.
- Monday, September 26, 2022 — 8:00 a.m. to 8:30 p.m.
- Tuesday, September 27, 2022 — 8:00 a.m. to 8:30 p.m.
- Wednesday, September 28, 2022 — 8:00 a.m. to 12:00 noon

CCASS Investor Participants can input **electronic application instructions** from 9:00 a.m. on Friday, September 23, 2022 until 12:00 noon on Wednesday, September 28, 2022 (24 hours daily, except on Wednesday, September 28, 2022, the last day for applications).

The latest time for inputting your **electronic application instructions** will be 12:00 noon on Wednesday, September 28, 2022, the last day for applications or such later time as described in “—(C) Effect of Bad Weather and/or Extreme Conditions on the Opening and Closing of the Application Lists” in this section below.

Note:

- (1) The times in this sub-section are subject to change as HKSCC may determine from time to time with prior notification to CCASS Clearing/Custodian Participants and/or CCASS Investor Participants.

No Multiple Applications

If you are suspected of having made multiple applications or if more than one application is made for your benefit, the number of Hong Kong Offer Shares applied for by HKSCC Nominees will be automatically reduced by the number of Hong Kong Offer Shares for which you have given such instructions and/or for which such instructions have been given for your benefit. Any **electronic application instructions** to make an application for the Hong Kong Offer Shares given by you or for your benefit to HKSCC will be deemed to be an actual application for the purposes of considering whether multiple applications have been made.

The H Share Registrar would record all applications into its system and identify suspected multiple applications with identical names, identification document numbers and reference numbers according to the Best Practice Note on Treatment of Multiple/Suspected Multiple Applications (“Best Practice Note”) issued by the Federation of Share Registrars Limited.

With regard to the announcement of results of allocations, the list of identification document number(s) may not be a complete list of successful applicants, only successful applicants whose identification document numbers are provided to HKSCC by CCASS Participants are disclosed. Applicants who applied for the Offer Shares through their brokers can consult their brokers to enquire about their application results.

Since applications are subject to personal information collection statements, beneficial owner identification codes displayed are redacted. Applicants with beneficial names only but not identification document numbers are not disclosed due to personal privacy issue.

HOW TO APPLY FOR HONG KONG OFFER SHARES

Section 40 of the Companies (Winding Up and Miscellaneous Provisions) Ordinance

For the avoidance of doubt, our Company and all other parties involved in the preparation of the Prospectus acknowledge that each CCASS Participant who gives or causes to give **electronic application instructions** is a person who may be entitled to compensation under Section 40 of the Companies (Winding Up and Miscellaneous Provisions) Ordinance (as applied by Section 342E of the Companies (Winding Up and Miscellaneous Provisions) Ordinance).

Personal Data

The following Personal Information Collection Statement) applies to any personal data held by the Company, the H Share Registrar, the receiving bank, the Joint Global Coordinators, the Underwriters and any of their respective advisors and agents about you in the same way as it applies to personal data about applicants other than HKSCC Nominees. By applying through the **CCASS EIPO** service or the **HK eIPO White Form** service, you agree to all of the terms of the Personal Information Collection Statement below.

Personal Information Collection Statement

This Personal Information Collection Statement informs applicant for, and holder of, the Hong Kong Offer Shares, of the policies and practices of the Company and its H Share Registrar in relation to personal data and the Personal Data (Privacy) Ordinance (Chapter 486 of the Laws of Hong Kong).

Reasons for the Collection of Your Personal Data

It is necessary for applicants and registered holders of the Hong Kong Offer Shares to supply correct personal data to the Company or its agents and the H Share Registrar when applying for the Hong Kong Offer Shares or transferring the Hong Kong Offer Shares into or out of their names or in procuring the services of the H Share Registrar.

Failure to supply the requested data may result in your application for the Hong Kong Offer Shares being rejected, or in delay or the inability of the Company or its H Share Registrar to effect transfers or otherwise render their services. It may also prevent or delay registration or transfers of the Hong Kong Offer Shares which you have successfully applied for and/or the dispatch of H Share certificate(s) to which you are entitled.

It is important that the holders of the Hong Kong Offer Shares inform the Company and the H Share Registrar immediately of any inaccuracies in the personal data supplied.

Purposes

Your personal data may be used, held, processed, and/or stored (by whatever means) for the following purposes:

- processing your application and refund check or e-Auto Refund payment instruction, where applicable, verification of compliance with the terms and application procedures set out in the Prospectus and announcing results of allocation of the Hong Kong Offer Shares;
- compliance with applicable laws and regulations in Hong Kong and elsewhere;

HOW TO APPLY FOR HONG KONG OFFER SHARES

- registering new issues or transfers into or out of the names of the holders of the Company's Shares including, where applicable, HKSCC Nominees;
- maintaining or updating the Company's Register of Members;
- verifying identities of the holders of the Company's Shares;
- establishing benefit entitlements of holders of the Company's Shares, such as dividends, rights issues, bonus issues, etc.;
- distributing communications from the Company and its subsidiaries;
- compiling statistical information and profiles of the holder of the Company's Shares;
- disclosing relevant information to facilitate claims on entitlements; and
- any other incidental or associated purposes relating to the above and/or to enable the Company and the H Share Registrar to discharge their obligations to holders of the Company's H Shares and/or regulators and/or any other purposes to which the securities' holders may from time to time agree.

Transfer of Personal Data

Personal data held by the Company and its H Share Registrar relating to the holders of the Hong Kong Offer Shares will be kept confidential but the Company and its H Share Registrar may, to the extent necessary for achieving any of the above purposes, disclose, obtain or transfer (whether within or outside Hong Kong) the personal data to, from or with any of the following:

- the Company's appointed agents such as financial advisers, receiving bankers and overseas principal share registrar;
- where applicants for the Hong Kong Offer Shares request a deposit into CCASS, HKSCC or HKSCC Nominees, who will use the personal data for the purposes of operating CCASS;
- any agents, contractors or third-party service providers who offer administrative, telecommunications, computer, payment or other services to the Company or the H Share Registrar in connection with their respective business operation;
- the Hong Kong Stock Exchange, the SFC and any other statutory regulatory or governmental bodies or otherwise as required by laws, rules or regulations; and
- any persons or institutions with which the holders of the Hong Kong Offer Shares have or propose to have dealings, such as their bankers, solicitors, accountants or stockbrokers etc..

Retention of Personal Data

The Company and its H Share Registrar will keep the personal data of the applicants and holders of the Hong Kong Offer Shares for as long as necessary to fulfil the purposes for which the personal data were collected. Personal data which is no longer required will be destroyed or dealt with in accordance with the Personal Data (Privacy) Ordinance (Chapter 486 of the Laws of Hong Kong).

HOW TO APPLY FOR HONG KONG OFFER SHARES

Access to and Correction of Personal Data

Holders of the Hong Kong Offer Shares have the right to ascertain whether the Company or the H Share Registrar hold their personal data, to obtain a copy of that data, and to correct any data that is inaccurate. The Company and the H Share Registrar have the right to charge a reasonable fee for the processing of such requests. All requests for access to data or correction of data should be addressed to the Company, at the Company's registered address disclosed in the section headed "Corporate Information" in the Prospectus or as notified from time to time, for the attention of the secretary, or the Company's H Share Registrar for the attention of the privacy compliance officer.

7. Warning for Electronic Applications

The application for Hong Kong Offer Shares through the **CCASS EIPO** service (directly or indirectly through your broker or custodian) is only a facility provided to CCASS Participants. Similarly, the application for Hong Kong Offer Shares through the **HK eIPO White Form** service is only a facility provided by the **HK eIPO White Form** Service Provider to public investors. Such facilities are subject to capacity limitations and potential service interruptions and you are advised not to wait until the last day for applications to make your electronic application. Our Company, the Relevant Persons and the **HK eIPO White Form** Service Provider take no responsibility for such applications and provide no assurance that any CCASS Participant applying through the **CCASS EIPO** service or person applying through the **HK eIPO White Form** service will be allocated any Hong Kong Offer Shares.

To ensure that CCASS Investor Participants can give their **electronic application instructions**, they are advised not to wait until the last minute to input their instructions to the systems. In the event that CCASS Investor Participants have problems connecting to the CCASS Phone System or the CCASS Internet System for submission of their **electronic application instructions**, they should go to HKSCC's Customer Service Centre to complete an input request form for **electronic application instructions** before 12:00 noon on Wednesday, September 28, 2022, the last day for applications, or such later time as described in the paragraph headed "—(C) Effect of Bad Weather and/or Extreme Conditions on the Opening and Closing of the Application Lists" in this section below.

8. How Many Applications Can You Make

Multiple applications for the Hong Kong Offer Shares are not allowed except by nominees. If you are a nominee and apply through the **HK eIPO White Form** service, in the box marked "For Nominees", you must include an account number or some other identification code for each beneficial owner or, in the case of joint beneficial owners, for each joint beneficial owner when you fill in the application details. If you do not include this information, the application will be treated as being made for your own benefit.

All of your applications will be rejected if more than one application through the **CCASS EIPO** service (directly or indirectly through your broker or custodian) or through the **HK eIPO White Form** service is made for your benefit (including the part of the application made by HKSCC Nominees acting on **electronic application instructions**).

If an application is made by an unlisted company and:

- the principal business of that company is dealing in securities; and
- you exercise statutory control over that company,

then the application will be treated as being made for your benefit.

"Unlisted company" means a company with no equity securities listed on the Stock Exchange.

HOW TO APPLY FOR HONG KONG OFFER SHARES

“Statutory control” means you:

- control the composition of the board of directors of the company;
- control more than half of the voting power of the company; or
- hold more than half of the issued registered capital of the company (not counting any part of it which carries no right to participate beyond a specified amount in a distribution of either profits or capital).

(B) HOW MUCH ARE THE HONG KONG OFFER SHARES

The Offer Price is HK\$16.16 per Offer Share unless otherwise announced. You must also pay brokerage of 1.0%, FRC transaction levy of 0.00015%, SFC transaction levy of 0.0027% and Stock Exchange trading fee of 0.005%. This means that for one board lot of 200 Hong Kong Offer Shares, you will pay HK\$3,264.57.

You must pay the Offer Price, together with brokerage, FRC transaction levy, SFC transaction levy and Stock Exchange trading fee, in full upon application for Hong Kong Offer Shares.

You may submit an application through the **HK eIPO White Form** service or the **CCASS EIPO** service in respect of a minimum of 200 Hong Kong Offer Shares. Each application or **electronic application instruction** in respect of more than 200 Hong Kong Offer Shares must be in one of the numbers set out in the table in “4. Minimum Application Amount and Permitted Numbers” in this section, or as otherwise specified in the **IPO App** or on the designated website at www.hkeipo.hk.

If your application is successful, brokerage will be paid to the Exchange Participants (as defined in the Listing Rules), and the FRC transaction levy, the SFC transaction levy and the Stock Exchange trading fee will be paid to the Stock Exchange (in the case of the FRC transaction levy and the SFC transaction levy, collected by the Stock Exchange on behalf of the FRC and the SFC respectively).

For further details on the Offer Price, see the section headed “Structure of the Global Offering—Pricing and Allocation” in the Prospectus.

(C) EFFECT OF BAD WEATHER AND/OR EXTREME CONDITIONS ON THE OPENING AND CLOSING OF THE APPLICATION LISTS

The application lists will not open or close if there is/are:

- a tropical cyclone warning signal number 8 or above;
- a “black” rainstorm warning; and/or
- Extreme Conditions,

in force in Hong Kong at any time between 9:00 a.m. and 12:00 noon on Wednesday, September 28, 2022. Instead they will open between 11:45 a.m. and 12:00 noon on the next business day which does not have any of those warnings and/or Extreme Conditions in force in Hong Kong at any time between 9:00 a.m. and 12:00 noon.

If the application lists do not open and close on Wednesday, September 28, 2022 or if there is/are a tropical cyclone warning signal number 8 or above, a “black” rainstorm warning signal and/or Extreme Conditions in force in Hong Kong that may affect the dates mentioned in the section headed “Expected Timetable” in the Prospectus, an announcement will be made.

HOW TO APPLY FOR HONG KONG OFFER SHARES

(D) PUBLICATION OF RESULTS

Our Company expects to announce the level of indications of interest in the International Offering, the level of applications in the Hong Kong Public Offering and the basis of allocations of the Hong Kong Offer Shares on Wednesday, October 5, 2022 on the websites of our Company at www.aimbio.com and the Stock Exchange at www.hkexnews.hk.

The results of allocations and the Hong Kong identity card/passport/Hong Kong business registration/certificate of incorporation numbers of successful applicants under the Hong Kong Public Offering will be available at the times and dates and in the manner set out below:

- in the announcement to be posted on the websites of our Company and the Stock Exchange at www.aimbio.com and www.hkexnews.hk, respectively, by no later than 9:00 a.m. on Wednesday, October 5, 2022;
- from the “IPO Results” function in the **IPO App** or the designated results of allocations website at www.tricor.com.hk/ipo/result or www.hkeipo.hk/IPOResult with a “search by ID function” on a 24 hour basis from 8:00 a.m. on Wednesday, October 5, 2022 to 12:00 midnight on Tuesday, October 11, 2022; and
- from the allocation results telephone enquiry line by calling +852 3691 8488 between 9:00 a.m. and 6:00 p.m. from Wednesday, October 5, 2022, to Monday, October 10, 2022 (excluding Saturday, Sunday and public holiday in Hong Kong).

If our Company accepts your offer to purchase (in whole or in part), which it may do by announcing the basis of allocations and/or making available the results of allocations publicly, there will be a binding contract under which you will be required to purchase the Hong Kong Offer Shares if the conditions of the Global Offering are satisfied and the Global Offering is not otherwise terminated. Further details are set out in the section “Structure of the Global Offering” in the Prospectus.

You will not be entitled to exercise any remedy of rescission for innocent misrepresentation at any time after acceptance of your application. This does not affect any other right you may have.

(E) CIRCUMSTANCES IN WHICH YOU WILL NOT BE ALLOCATED HONG KONG OFFER SHARES

You should note the following situations in which the Hong Kong Offer Shares will not be allocated to you:

- (a) If your application is revoked:

By applying through the **CCASS EIPO** service or the **HK eIPO White Form** service, you agree that your application or the application made by HKSCC Nominees on your behalf cannot be revoked on or before the fifth day after the time of the opening of the application lists (excluding for this purpose any day which is a Saturday, Sunday or public holiday in Hong Kong). This agreement will take effect as a collateral contract with our Company.

HOW TO APPLY FOR HONG KONG OFFER SHARES

Your application or the application made by HKSCC Nominees on your behalf may only be revoked on or before the fifth day after the time of the opening of the application lists (excluding for this purpose any day which is a Saturday, Sunday or public holiday in Hong Kong) in the following circumstances:

- (i) if a person responsible for the Prospectus under Section 40 of the Companies (Winding Up and Miscellaneous Provisions) Ordinance (as applied by Section 342E of the Companies (Winding Up and Miscellaneous Provisions) Ordinance) gives a public notice under that section which excludes or limits that person's responsibility for the Prospectus; or
- (ii) if any supplement to the Prospectus is issued, in which case applicants who have already submitted an application will be notified that they are required to confirm their applications. If applicants have been so notified but have not confirmed their applications in accordance with the procedure to be notified, all unconfirmed applications will be deemed revoked.

If your application or the application made by HKSCC Nominees on your behalf has been accepted, it cannot be revoked. For this purpose, acceptance of applications which are not rejected will be constituted by notification in the press of the results of allocation, and where such basis of allocation is subject to certain conditions or provides for allocation by ballot, such acceptance will be subject to the satisfaction of such conditions or results of the ballot, respectively.

- (b) If our Company or its agents exercise their discretion to reject your application:

Our Company, the Joint Global Coordinators, the **HK eIPO White Form** Service Provider and their respective agents or nominees have full discretion to reject or accept any application, or to accept only part of any application, without giving any reasons.

- (c) If the allocation of Hong Kong Offer Shares is void:

The allocation of Hong Kong Offer Shares will be void if the Listing Committee does not grant permission to list the H Shares either:

- within three weeks from the closing date of the applications lists; or
- within a longer period of up to six weeks if the Listing Committee notifies our Company of that longer period within three weeks of the closing date of the application lists.

- (d) If:

- you make multiple applications or are suspected of making multiple applications;
- you or the person for whose benefit you apply for, have applied for or taken up, or indicated an interest for, or have been or will be placed or allocated (including conditionally and/or provisionally) Hong Kong Offer Shares and International Offer Shares;
- your payment is not made correctly;
- your **electronic application instructions** through the **HK eIPO White Form** service are not completed in accordance with the instructions, terms and conditions in the **IPO App** or on the designated website at www.hkeipo.hk;

HOW TO APPLY FOR HONG KONG OFFER SHARES

- you apply for more than 485,800 Hong Kong Offer Shares, being 50% of the 971,600 Hong Kong Offer Shares initially available under the Hong Kong Public Offering;
- our Company or the Joint Global Coordinators believe that by accepting your application, they would violate applicable securities or other laws, rules or regulations; or
- the Underwriting Agreements do not become unconditional or are terminated.

(F) REFUND OF APPLICATION MONIES

If an application is rejected, not accepted or accepted in part only, or if the conditions of the Global Offering as set out in the section headed “Structure of the Global Offering—Conditions of the Global Offering” in the Prospectus are not satisfied or if any application is revoked, the application monies, or the appropriate portion thereof, together with the related brokerage, FRC transaction levy, SFC transaction levy and Stock Exchange trading fee, will be refunded, without interest.

Any refund of your application monies will be made on or before Wednesday, October 5, 2022.

(G) DISPATCH/COLLECTION OF H SHARE CERTIFICATES/e-AUTO REFUND PAYMENT INSTRUCTIONS/REFUND CHECKS

You will receive one H Share certificate for all Hong Kong Offer Shares allocated to you under the Hong Kong Public Offering (except pursuant to applications made through the **CCASS EIPO** service where the H Share certificates will be deposited into CCASS as described below).

No temporary document of title will be issued in respect of the Offer Shares. No receipt will be issued for sums paid on application.

Subject to arrangement on dispatch/collection of H Share certificates and refund checks as mentioned below, any refund checks and H Share certificate(s) are expected to be posted on or before Wednesday, October 5, 2022. The right is reserved to retain any H Share certificate(s) and any surplus application monies pending clearance of check(s) or banker’s cashier order(s).

H Share certificates will only become valid at 8:00 a.m. on Thursday, October 6, 2022, provided that the Global Offering has become unconditional in all respects at or before that time. Investors who trade H Shares on the basis of publicly available allocation details or prior to the receipt of H Share certificates or prior to the H Share certificates becoming valid do so entirely at their own risk.

Personal Collection

(a) If you apply through the HK eIPO White Form service:

- If you apply for 350,000 Hong Kong Offer Shares or more through the **HK eIPO White Form** service and your application is wholly or partially successful, you may collect your H Share certificate(s) (where applicable) in person from the H Share Registrar, Tricor Investor Services Limited, at 17/F, Far East Finance Centre, 16 Harcourt Road, Hong Kong, from 9:00 a.m. to 1:00 p.m. on Wednesday, October 5, 2022, or any other place or date notified by our Company.

HOW TO APPLY FOR HONG KONG OFFER SHARES

- If you are an individual who is eligible for personal collection, you must not authorize any other person to collect for you. If you are a corporate applicant which is eligible for personal collection, your authorized representative must bear a letter of authorization from your corporation stamped with your corporation's chop. Both individuals and authorized representatives must produce, at the time of collection, evidence of identity acceptable to the H Share Registrar.
- If you do not personally collect your H Share certificate(s) within the time specified for collection, they will be sent to the address specified in your application instructions by ordinary post and at your own risk.
- If you apply for less than 350,000 Hong Kong Offer Shares through the **HK eIPO White Form** service, your H Share certificate(s) (where applicable) will be sent to the address specified in your application instructions on or before Wednesday, October 5, 2022 by ordinary post and at your own risk.
- If you apply and pay the application monies from a single bank account, any refund monies will be dispatched to that bank account in the form of e-Auto Refund payment instructions. If you apply and pay the application monies from multiple bank accounts, any refund monies will be dispatched to the address as specified in your application instructions in the form of refund check(s) in favour of the applicant (or, in the case of joint applications, the first-named applicant) by ordinary post and at your own risk.

(b) If you apply through the CCASS EIPO service:

Allocation of Hong Kong Offer Shares

- For the purposes of allocating Hong Kong Offer Shares, HKSCC Nominees will not be treated as an applicant. Instead, each CCASS Participant who gives **electronic application instructions** or each person for whose benefit instructions are given will be treated as an applicant.

Deposit of H Share Certificates into CCASS and Refund of Application Monies

- If your application is wholly or partially successful, your H Share certificate(s) will be issued in the name of HKSCC Nominees and deposited into CCASS for the credit of your designated CCASS Participant's stock account or your CCASS Investor Participant stock account on Wednesday, October 5, 2022, or, on any other date determined by HKSCC or HKSCC Nominees.
- Our Company expects to publish the application results of CCASS Participants (and where the CCASS Participant is a broker or custodian, our Company will include information relating to the relevant beneficial owner), your Hong Kong identity card/passport/Hong Kong business registration number or other identification code (Hong Kong business registration number for corporations) and the basis of allocations of the Hong Kong Offer Shares in the manner as described in "—D. Publication of Results" above on Wednesday, October 5, 2022. You should check the announcement published by our Company and report any discrepancies to HKSCC before 5:00 p.m. on Wednesday, October 5, 2022 or such other date as determined by HKSCC or HKSCC Nominees.
- If you have instructed your broker or custodian to give **electronic application instructions** on your behalf, you can also check the number of Hong Kong Offer Shares allocated to you and the amount of refund monies (if any) payable to you with that broker or custodian.

HOW TO APPLY FOR HONG KONG OFFER SHARES

- If you have applied as a CCASS Investor Participant, you can also check the number of Hong Kong Offer Shares allocated to you and the amount of refund monies (if any) payable to you via the CCASS Phone System and the CCASS Internet System (under the procedures contained in HKSCC's "An Operating Guide for Investor Participants" in effect from time to time) on Wednesday, October 5, 2022. Immediately following the credit of the Hong Kong Offer Shares to your stock account and the credit of the refund monies to your bank account, HKSCC will also make available to you an activity statement showing the number of Hong Kong Offer Shares credited to your CCASS Investor Participant stock account and the amount of refund monies (if any) credited to your designated bank account.
- Refund of your application monies (if any) in respect of wholly and partially unsuccessful applications will be credited to your designated bank account or the designated bank account of your broker or custodian on Wednesday, October 5, 2022.

(H) ADMISSION OF THE H SHARES INTO CCASS

If the Stock Exchange grants the listing of, and permission to deal in, the H Shares and our Company complies with the stock admission requirements of HKSCC, the H Shares will be accepted as eligible securities by HKSCC for deposit, clearance and settlement in CCASS with effect from the date of commencement of dealings in the H Shares on the Stock Exchange or any other date HKSCC chooses. Settlement of transactions between Exchange Participants (as defined in the Listing Rules) is required to take place in CCASS on the second settlement day after any trading day.

All activities under CCASS are subject to the General Rules of CCASS and CCASS Operational Procedures in effect from time to time.

Investors should seek the advice of their stockbroker or other professional advisor for details of the settlement arrangements as such arrangements may affect their rights and interests.

All necessary arrangements have been made to enable the H Shares to be admitted into CCASS.

The following is the text of a report, prepared for the purpose of incorporation in this Document, received from the Company's Reporting Accountants, Ernst & Young, Certified Public Accountants, Hong Kong.



Ernst & Young
27/F, One Taikoo Place
979 King's Road
Quarry Bay, Hong Kong

安永會計師事務所
香港鰂魚涌英皇道 979 號
太古坊一座 27 樓

Tel 電話: +852 2846 9888
Fax 傳真: +852 2868 4432
ey.com

ACCOUNTANTS' REPORT ON HISTORICAL FINANCIAL INFORMATION TO THE DIRECTORS OF AIM VACCINE CO., LTD., GOLDMAN SACHS (ASIA) L.L.C., CHINA INTERNATIONAL CAPITAL CORPORATION HONG KONG SECURITIES LIMITED, CHINA SECURITIES (INTERNATIONAL) CORPORATE FINANCE COMPANY LIMITED AND MACQUARIE CAPITAL LIMITED

Introduction

We report on the historical financial information of AIM Vaccine Co., Ltd. (the "Company") and its subsidiaries (together, the "Group") set out on pages I-3 to I-82, which comprises the consolidated statements of profit or loss and other comprehensive income, statements of changes in equity and statements of cash flows of the Group for each of the years ended 31 December 2019, 2020 and 2021, and the four months ended 30 April 2022 (the "Relevant Periods"), and the consolidated statements of financial position of the Group and the statements of financial position of the Company as at 31 December 2019, 2020 and 2021 and 30 April 2022 and a summary of significant accounting policies and other explanatory information (together, the "Historical Financial Information"). The Historical Financial Information set out on pages I-3 to I-82 forms an integral part of this report, which has been prepared for inclusion in the prospectus of the Company dated 23 September 2022 (the "Prospectus") in connection with the initial listing of the shares of the Company on the Main Board of The Stock Exchange of Hong Kong Limited (the "Stock Exchange").

Directors' responsibility for the Historical Financial Information

The directors of the Company are responsible for the preparation of the Historical Financial Information that gives a true and fair view in accordance with the basis of preparation set out in note 2.1 to the Historical Financial Information, and for such internal control as the directors determine is necessary to enable the preparation of the Historical Financial Information that is free from material misstatement, whether due to fraud or error.

Reporting accountants' responsibility

Our responsibility is to express an opinion on the Historical Financial Information and to report our opinion to you. We conducted our work in accordance with Hong Kong Standard on Investment Circular Reporting Engagements 200 *Accountants' Reports on Historical Financial Information in Investment Circulars* issued by the Hong Kong Institute of Certified Public Accountants ("HKICPA"). This standard requires that we comply with ethical standards and plan and perform our work to obtain reasonable assurance about whether the Historical Financial Information is free from material misstatement.

Our work involved performing procedures to obtain evidence about the amounts and disclosures in the Historical Financial Information. The procedures selected depend on the reporting accountants' judgement, including the assessment of risks of material misstatement of the Historical Financial Information, whether due to fraud or error. In making those risk assessments, the reporting accountants consider internal control relevant to the entity's preparation of the Historical Financial Information that gives a true and fair view in accordance with the basis of preparation set out in note 2.1 to the Historical Financial Information in order to design procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. Our work also included evaluating the appropriateness of accounting policies used and the reasonableness of accounting estimates made by the directors, as well as evaluating the overall presentation of the Historical Financial Information.

We believe that the evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Opinion

In our opinion, the Historical Financial Information gives, for the purposes of the accountants' report, a true and fair view of the financial position of the Group and the Company as at 31 December 2019, 2020 and 2021 and 30 April 2022 and of the financial performance and cash flows of the Group for each of the Relevant Periods in accordance with the basis of preparation set out in note 2.1 to the Historical Financial Information.

Review of interim comparative financial information

We have reviewed the interim comparative financial information of the Group which comprises the consolidated statement of profit or loss and other comprehensive income, statement of changes in equity and statement of cash flows for the four months ended 30 April 2021 and other explanatory information (the "Interim Comparative Financial Information"). The directors of the Company are responsible for the preparation of the Interim Comparative Financial Information in accordance with the basis of preparation set out in note 2.1 to the Historical Financial Information. Our responsibility is to express a conclusion on the Interim Comparative Financial Information based on our review. We conducted our review in accordance with Hong Kong Standard on Review Engagements 2410 *Review of Interim Financial Information Performed by the Independent Auditor of the Entity* issued by the HKICPA. A review consists of making inquiries, primarily of persons responsible for financial and accounting matters, and applying analytical and other review procedures. A review is substantially less in scope than an audit conducted in accordance with Hong Kong Standards on Auditing and consequently does not enable us to obtain assurance that we would become aware of all significant matters that might be identified in an audit. Accordingly, we do not express an audit opinion. Based on our review, nothing has come to our attention that causes us to believe that the Interim Comparative Financial Information, for the purposes of the accountants' report, is not prepared, in all material respects, in accordance with the basis of preparation set out in note 2.1 to the Historical Financial Information.

Report on matters under the Rules Governing the Listing of Securities on the Stock Exchange and the Companies (Winding Up and Miscellaneous Provisions) Ordinance**Adjustments**

In preparing the Historical Financial Information, no adjustments to the Underlying Financial Statements as defined on page I-3 have been made.

Dividends

We refer to note 12 to the Historical Financial Information which states that no dividends have been paid by the Company in respect of the Relevant Periods.

Ernst & Young

Certified Public Accountants

Hong Kong

23 September 2022

I HISTORICAL FINANCIAL INFORMATION**Preparation of Historical Financial Information**

Set out below is the Historical Financial Information which forms an integral part of this accountants' report.

The financial statements of the Group for the Relevant Periods, on which the Historical Financial Information is based, were audited by Ernst & Young in accordance with Hong Kong Standards on Auditing issued by the HKICPA (the "Underlying Financial Statements").

The Historical Financial Information is presented in Renminbi ("RMB") and all values are rounded to the nearest thousand (RMB'000) except when otherwise indicated.

CONSOLIDATED STATEMENTS OF PROFIT OR LOSS AND OTHER COMPREHENSIVE INCOME

	Notes	Year ended 31 December			Four months ended 30 April	
		2019	2020	2021	2021	2022
		RMB'000	RMB'000	RMB'000	RMB'000	RMB'000
					(unaudited)	
REVENUE	6	951,648	1,637,970	1,570,129	464,926	275,255
Cost of sales		(218,803)	(283,882)	(275,429)	(80,858)	(55,280)
Gross profit		732,845	1,354,088	1,294,700	384,068	219,975
Other income and gains	6	26,163	40,714	53,622	21,256	8,314
Selling and distribution expenses		(330,009)	(533,249)	(460,114)	(156,778)	(117,944)
Administrative expenses		(157,181)	(198,697)	(1,167,979)	(79,160)	(85,023)
Research and development costs		(98,886)	(157,761)	(307,353)	(81,894)	(113,620)
Impairment losses on financial assets, net		2,103	(826)	(7,981)	(2,008)	(4,915)
Other expenses		(7,493)	(2,642)	(895)	(47)	(3,322)
Finance costs	7	(10,781)	(15,741)	(10,703)	(3,154)	(6,269)
PROFIT/(LOSS) BEFORE TAX	8	156,761	485,886	(606,703)	82,283	(102,804)
Income tax expense	11	(36,947)	(85,472)	(69,170)	(24,606)	7,000
PROFIT/(LOSS) FOR THE YEAR/PERIOD		119,814	400,414	(675,873)	57,677	(95,804)
TOTAL COMPREHENSIVE INCOME/(LOSS) FOR THE YEAR/PERIOD		119,814	400,414	(675,873)	57,677	(95,804)
Profit/(Loss) attributable to:						
Owners of the parent		117,406	379,287	(692,774)	57,677	(93,832)
Non-controlling interests		2,408	21,127	16,901	–	(1,972)
		119,814	400,414	(675,873)	57,677	(95,804)
Total comprehensive income/(loss) attributable to:						
Owners of the parent		117,406	379,287	(692,774)	57,677	(93,832)
Non-controlling interests		2,408	21,127	16,901	–	(1,972)
		119,814	400,414	(675,873)	57,677	(95,804)
EARNINGS/(LOSS) PER SHARE ATTRIBUTABLE TO ORDINARY EQUITY HOLDERS OF THE PARENT:	13					
Basic						
– For profit/(loss) for the year/period (RMB)		0.14	0.39	(0.60)	0.05	(0.08)
Diluted						
– For profit/(loss) for the year/period (RMB)		0.14	0.39	(0.60)	0.05	(0.08)

CONSOLIDATED STATEMENTS OF FINANCIAL POSITION

		As at 31 December			As at 30 April
	Notes	2019	2020	2021	2022
		RMB'000	RMB'000	RMB'000	RMB'000
NON-CURRENT ASSETS					
Property, plant and equipment	14	683,139	1,318,874	2,655,133	2,886,057
Right-of-use assets	15	184,519	208,562	215,467	206,908
Goodwill	16	234,572	234,572	482,897	482,897
Other intangible assets	17	390,757	356,856	2,192,693	2,211,664
Prepayments for equipment	18	95,180	107,795	149,565	228,428
Deferred tax assets	29	—	1,464	—	—
Other non-current assets	19	16,247	21,372	17,914	4,969
Total non-current assets		1,604,414	2,249,495	5,713,669	6,020,923
CURRENT ASSETS					
Inventories	20	228,816	252,713	367,397	441,816
Trade and bills receivables	21	444,838	869,864	1,063,653	1,018,035
Prepayments, other receivables and other assets	22	101,739	112,072	148,572	173,075
Financial assets at fair value through profit or loss	23	50,000	—	100,000	—
Due from related parties	40	146,556	76,573	10,000	—
Restricted cash	24	55,720	24,406	22,320	21,159
Cash and cash equivalents	24	318,639	1,102,830	646,742	690,484
Prepaid income tax		—	—	—	91
Total current assets		1,346,308	2,438,458	2,358,684	2,344,660
CURRENT LIABILITIES					
Trade payables	25	42,925	37,972	51,762	75,377
Other payables and accruals	26	722,051	829,356	1,003,384	985,549
Contract liabilities	27	30,839	14,658	41,074	46,382
Interest-bearing bank borrowings . . .	28	256,190	173,725	407,364	733,418
Lease liabilities	15	7,351	14,627	16,904	17,300
Tax payable		15,739	51,124	40,893	10,849
Deferred government grants	30	3,196	3,796	4,571	4,359
Due to related parties	40	109,691	151	—	—
Provisions		2,987	5,560	4,090	4,038
Total current liabilities		1,190,969	1,130,969	1,570,042	1,877,272
NET CURRENT ASSETS		155,339	1,307,489	788,642	467,388
TOTAL ASSETS LESS CURRENT LIABILITIES		1,759,753	3,556,984	6,502,311	6,488,311
NON-CURRENT LIABILITIES					
Interest-bearing bank borrowings . . .	28	27,440	—	184,334	199,832
Lease liabilities	15	23,462	46,685	41,829	39,101
Deferred tax liabilities	29	41,189	37,010	491,828	481,487
Deferred government grants	30	49,538	51,664	85,030	131,106
Total non-current liabilities		141,629	135,359	803,021	851,526
Net assets		1,618,124	3,421,625	5,699,290	5,636,785
EQUITY					
Equity attributable to owners of the parent					
Paid-in capital/Share capital	31	850,734	1,110,000	1,200,000	1,200,000
Reserves	33	688,593	2,311,625	3,692,595	3,627,062
		1,539,327	3,421,625	4,892,595	4,827,062
Non-controlling interests		78,797	—	806,695	809,723
Total equity		1,618,124	3,421,625	5,699,290	5,636,785

Year ended 31 December 2019

Notes	Attributable to owners of the parent							Non-controlling interests	Total equity
	Paid-in capital	Capital reserve	Merger reserve	Statutory reserve	Share-based compensation reserves	Accumulated losses	Total		
	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000
At 1 January 2019	812,339	896,227	(30,763)	25,372	—	(389,804)	1,313,371	403,664	1,717,035
Profit for the year	—	—	—	—	—	117,406	117,406	2,408	119,814
Total comprehensive income for the year	—	—	—	—	—	117,406	117,406	2,408	119,814
Acquisition of non-controlling interests	—	(167,225)	—	—	—	—	(167,225)	(265,775)	(433,000)
Dividends paid to non-controlling shareholders	—	—	—	—	—	—	—	(86,000)	(86,000)
Contribution from shareholders	38,395	229,605	—	—	—	—	268,000	24,500	292,500
Equity-settled share-based compensation	—	—	—	—	7,775	—	7,775	—	7,775
Transfer from retained profits	—	—	—	34,359	—	(34,359)	—	—	—
At 31 December 2019 . . .	850,734	958,607*	(30,763)*	59,731*	7,775*	(306,757)*	1,539,327	78,797	1,618,124

Year ended 31 December 2020

	Notes	Attributable to owners of the parent								
		Paid-in Share capital	Capital reserve	Merger reserve	Statutory reserve	Share-based compensation reserves	(Accumulated losses)/ Retained profits	Total	Non- controlling interests	Total equity
		RMB'000	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000
At 1 January 2020		850,734	958,607	(30,763)	59,731	7,775	(306,757)	1,539,327	78,797	1,618,124
Profit for the year		—	—	—	—	—	379,287	379,287	21,127	400,414
Total comprehensive income for the year		—	—	—	—	—	379,287	379,287	21,127	400,414
Contribution from shareholders	31	174,256	1,200,181	—	—	—	—	1,374,437	—	1,374,437
Conversion into a joint stock company	31	—	(547,434)	—	—	—	547,434	—	—	—
Issue of shares	31	85,010	1,153,645	—	—	—	—	1,238,655	—	1,238,655
Share issue expenses	31	—	(2,068)	—	—	—	—	(2,068)	—	(2,068)
Acquisition of non- controlling interests	36(a), 40(c)	—	(1,131,489)	—	—	—	—	(1,131,489)	(99,924)	(1,231,413)
Equity-settled share-based compensation	32	—	—	—	—	23,476	—	23,476	—	23,476
Transfer from retained profits		—	—	—	13,470	—	(13,470)	—	—	—
At 31 December 2020		1,110,000	1,631,442*	(30,763)*	73,201*	31,251*	606,494*	3,421,625	—	3,421,625

Year ended 31 December 2021

	Attributable to owners of the parent						
Notes	Share capital	Capital reserve	Merger reserve	Statutory reserve	Share-based compensation reserves	Retained profits/ losses/ accumulated	Total equity
	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000	losses)	
At 1 January 2021	1,110,000	1,631,442	(30,763)	73,201	31,251	606,494	RMB'000 3,421,625
Loss for the year	-	-	-	-	-	(692,774)	- 16,901
Total comprehensive loss for the year	-	-	-	-	-	(692,774)	RMB'000 3,421,625
Issue of shares	90,000	1,121,175	-	-	-	-	- 1,211,175
Acquisition of a subsidiary	-	-	-	-	-	(692,774)	16,901 (675,873)
Equity-settled share-based compensation	-	-	-	-	952,569	-	- 789,794
Transfer from retained profits	-	-	-	19,998	-	(19,998)	- 952,569
At 31 December 2021 . . .	1,200,000	2,752,617*	(30,763)*	93,199*	983,820*	(106,278)*	4,892,595 5,699,290

Four months ended 30 April 2021

	Note	Attributable to owners of the parent						Total equity RMB'000
		Share capital RMB'000	Capital reserve RMB'000	Merger reserve RMB'000	Statutory reserve RMB'000	Share-based compensation reserves RMB'000	Retained profits RMB'000	
At 1 January 2021		1,110,000	1,631,442	(30,763)	73,201	31,251	606,494	3,421,625
Profit for the period (unaudited)		–	–	–	–	–	57,677	57,677
Total comprehensive profit for the period (unaudited)		–	–	–	–	–	57,677	57,677
Equity-settled share-based compensation (unaudited)	32	–	–	–	–	30,470	–	30,470
At 30 April 2021 (unaudited)		1,110,000	1,631,442	(30,763)	73,201	61,721	664,171	3,509,772

Four months ended 30 April 2022

Note	Attributable to owners of the parent							Non-controlling interests	Total equity
	Share capital	Capital reserve	Merger reserve	Statutory reserve	Share-based compensation reserves	Accumulated losses	Total		
	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000
At 1 January 2022	1,200,000	2,752,617	(30,763)	93,199	983,820	(106,278)	4,892,595	806,695	5,699,290
Loss for the period	—	—	—	—	—	(93,832)	(93,832)	(1,972)	(95,804)
Total comprehensive loss for the period	—	—	—	—	—	(93,832)	(93,832)	(1,972)	(95,804)
Capital contribution from a non-controlling shareholder	—	—	—	—	—	—	—	5,000	5,000
Equity-settled share-based compensation	—	—	—	—	28,299	—	28,299	—	28,299
At 30 April 2022	1,200,000	2,752,617*	(30,763)*	93,199*	1,012,119*	(200,110)*	4,827,062	809,723	5,636,785

* These reserve accounts comprise the consolidated reserves of RMB688,593,000, RMB2,311,625,000, RMB3,692,595,000 and RMB3,627,062,000 in the consolidated statements of financial position as of 31 December 2019, 2020 and 2021 and 30 April 2022, respectively.

CONSOLIDATED STATEMENTS OF CASH FLOWS

Notes	Year ended 31 December			Four months ended 30 April	
	2019	2020	2021	2021	2022
	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000
CASH FLOWS FROM OPERATING ACTIVITIES					
Profit/(loss) before tax	156,761	485,886	(606,703)	82,283	(102,804)
Adjustments for:					
Finance costs	7 10,781	15,741	10,703	3,154	6,269
Interest income	6 (3,667)	(10,736)	(10,777)	(4,076)	(1,527)
Gain on disposal of wealth investment products	–	(1,312)	(1,673)	(376)	(3,074)
Equity-settled share-based compensation expense	7,775	23,476	952,128	30,470	27,658
Amortisation of deferred government grants	30 (2,104)	(3,399)	(4,934)	(1,258)	(1,453)
Amortisation of other intangible assets	17 33,832	33,896	33,790	11,258	11,283
Provision for inventories	5,531	6,588	21,671	7,227	8,611
Loss on disposal of items of property, plant and equipment	5,009	2,010	208	29	37
(Reversal of)/Provision for impairment of trade and bills receivables	21 (2,216)	176	7,984	2,008	4,915
Provision for/(Reversal of) impairment of prepayments, other receivables and other assets	113	650	(3)	–	–
Impairment of property, plant and equipment	14 –	3,555	–	–	–
Exchange losses/(gains), net	1,929	(6,123)	(2,032)	(787)	3,286
Depreciation of property, plant and equipment	14 63,437	72,506	87,430	27,812	32,194
Depreciation of right-of-use assets	15 12,171	21,940	23,071	7,069	8,559
	289,352	644,854	510,863	164,813	(6,046)
Increase in inventories	(56,407)	(30,485)	(136,355)	(54,431)	(83,030)
Decrease/(increase) in trade and bills receivables	191,965	(425,202)	(201,773)	(138,399)	40,703
Decrease/(increase) in prepayments, other receivables and other assets	22,500	(11,381)	8,536	(20,967)	(16,306)
(Increase)/decrease in amounts due from related parties	(7,575)	69,983	66,573	(1,041)	–
Increase in other non-current assets	(859)	–	–	–	–
(Increase)/decrease in restricted cash	(1,766)	40,132	2,223	6,657	1,161
Increase/(decrease) in trade payables	26,419	(4,953)	13,790	12,814	23,615
Increase/(decrease) in amounts due to related parties	2,500	(9,540)	(151)	(151)	–
(Decrease)/increase in contract liabilities	(18,837)	(16,181)	(28,914)	10,915	5,308
(Decrease)/increase in other payables and accruals	(62,800)	48,436	(51,366)	(1,278)	(55,899)
Cash generated from/(used in) operating activities	384,492	305,663	183,426	(21,068)	(90,494)
Income tax paid	(57,480)	(55,332)	(90,028)	(70,240)	(32,835)
Net cash flows generated from/(used in) operating activities	327,012	250,331	93,398	(91,308)	(123,329)

Notes	Year ended 31 December			Four months ended 30 April	
	2019	2020	2021	2021	2022
	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000
CASH FLOWS FROM INVESTING ACTIVITIES					
(Unaudited)					
Interest received	3,667	10,736	10,777	4,076	1,527
Gain on disposal of wealth investment products	–	1,312	1,673	376	3,074
(Increase)/decrease in financial assets at fair value through profit or loss	(50,000)	50,000	4,229	–	100,000
Purchase of items of property, plant and equipment	(314,781)	(666,683)	(1,125,381)	(302,194)	(313,219)
Acquisition of a subsidiary	35	–	(250,377)	–	–
Purchase of right-of-use assets	(30,866)	(296)	(16,122)	–	–
Purchase of other intangible assets	(483)	(36)	(225)	–	(16,472)
Receipt of government grants for property, plant and equipment	30	44,853	6,125	38,035	4
Increase in restricted cash	–	(8,818)	(137)	–	–
Proceeds from disposal of other intangible assets	–	41	–	–	–
Proceeds from disposal of property, plant and equipment	7,414	2,702	23	228	–
Net cash flows used in investing activities	(340,196)	(604,917)	(1,337,505)	(297,510)	(177,773)
CASH FLOWS FROM FINANCING ACTIVITIES					
New bank loans	293,602	270,500	537,825	86,599	380,846
Repayment of bank loans	(178,284)	(380,518)	(244,500)	(53,000)	(40,000)
Interest paid	(10,922)	(15,628)	(10,295)	(3,138)	(5,563)
Capital contribution from shareholders	268,000	1,374,437	–	–	–
Contribution from non-controlling interests	24,500	–	–	–	15,000
Proceeds from issue of shares	–	519,771	553,475	–	–
Share issue expenses	–	(2,068)	–	–	–
Payment of listing expenses	–	–	(31,948)	–	(3,107)
Principal portion of lease payment	(6,740)	(15,188)	(16,538)	(1,736)	(2,332)
Dividends paid	(86,000)	–	–	–	–
Acquisition of non-controlling interests	(434,603)	(512,529)	–	–	–
Return of prepaid proceeds from an investor	–	(100,000)	–	–	–
Net cash flows (used in)/generated from financing activities	(130,447)	1,138,777	788,019	28,725	344,844
NET (DECREASE)/INCREASE IN CASH AND CASH EQUIVALENTS	(143,631)	784,191	(456,088)	(360,093)	43,742
Cash and cash equivalents at beginning of year/period	462,270	318,639	1,102,830	1,102,830	646,742
CASH AND CASH EQUIVALENTS AT END OF YEAR/PERIOD	318,639	1,102,830	646,742	742,737	690,484
ANALYSIS OF BALANCES OF CASH AND CASH EQUIVALENTS					
Cash and cash equivalents as stated in the statement of financial position	24	318,639	1,102,830	646,742	742,737
Cash and cash equivalents as stated in the statement of cash flows		318,639	1,102,830	646,742	742,737

STATEMENTS OF FINANCIAL POSITION OF THE COMPANY

	Notes	As at 31 December			As at 30 April
		2019	2020	2021	2022
		RMB'000	RMB'000	RMB'000	RMB'000
NON-CURRENT ASSETS					
Property, plant and equipment	14	5,782	5,911	7,440	7,047
Right-of-use assets	15	8,397	40,507	53,061	47,597
Other intangible assets		1,843	1,623	1,403	1,330
Prepayments for equipment		—	—	61,728	61,728
Investments in subsidiaries		931,521	3,257,721	4,444,023	4,475,501
Due from related parties	40	905,494	481,484	481,484	481,484
Deferred tax assets		—	1,464	—	—
Other non-current assets		1,905	1,905	1,602	1,602
Total non-current assets		1,854,942	3,790,615	5,050,741	5,076,289
CURRENT ASSETS					
Prepayments, other receivables and other assets	22	2,643	3,423	34,638	50,173
Due from related parties	40	507,205	421,092	824,049	897,483
Cash and cash equivalents	24	33,883	624,546	163,285	60,701
Total current assets		543,731	1,049,061	1,021,972	1,008,357
CURRENT LIABILITIES					
Interest-bearing bank borrowings	28	160,098	—	—	—
Trade payables	25	193,477	321,969	299,064	295,012
Other payables and accruals	26	63,817	91,687	94,482	96,615
Due to related parties	40	255,617	344	—	—
Tax payables		24	6,725	8,223	8,721
Lease liabilities	15	4,568	11,597	12,302	12,790
Total current liabilities		677,601	432,322	414,071	413,138
NET CURRENT ASSETS		<u>(133,870)</u>	<u>616,739</u>	<u>607,901</u>	<u>595,219</u>
TOTAL ASSETS LESS CURRENT LIABILITIES		<u>1,721,072</u>	<u>4,407,354</u>	<u>5,658,642</u>	<u>5,671,508</u>
NON-CURRENT LIABILITIES					
Deferred tax liabilities		75	—	—	—
Lease liabilities	15	3,137	29,390	26,653	25,221
Total non-current liabilities		3,212	29,390	26,653	25,221
Net assets		<u>1,717,860</u>	<u>4,377,964</u>	<u>5,631,989</u>	<u>5,646,287</u>
EQUITY					
Paid-in capital/Share capital	31	850,734	1,110,000	1,200,000	1,200,000
Reserves	33	867,126	3,267,964	4,431,989	4,446,287
Total equity		<u>1,717,860</u>	<u>4,377,964</u>	<u>5,631,989</u>	<u>5,646,287</u>

II NOTES TO THE HISTORICAL FINANCIAL INFORMATION

1. CORPORATE AND GROUP INFORMATION

AIM Vaccine Co., Ltd. (the “Company”, formerly known as “Shenyang Wharton Biotechnology Co., Ltd.”) was incorporated as a limited liability company in the People’s Republic of China (the “PRC”) on 9 November 2011 by Mr. Lijun ZHANG (張立軍), Mr. Xunliang YAN (閆循良), Shenyang Shenlv Agricultural Technology Promotion Service Co., Ltd.* (瀋陽深綠農業技術推廣服務有限公司), Shenyang Mingdongtianxia Cultural Media Co., Ltd.* (瀋陽名動天下文化傳媒有限公司), Shenyang Fulinmen Investment Information Consulting Co., Ltd.* (瀋陽富臨門投資信息諮詢有限公司) and Beijing Taida Hongli Information Consulting Co., Ltd.* (北京泰達紅利信息諮詢有限公司). Upon approval by the shareholders’ general meeting held on 18 September 2020, the Company was converted into a joint stock company with limited liability under the Company Law of the PRC and changed its registered name from “Beijing AIM Biological Vaccine Technology Group Co., Ltd.* (北京艾美生物疫苗技術集團有限公司)” to “AIM Vaccine Co., Ltd.* (艾美疫苗股份有限公司)” on 23 September 2020. The registered office of the Company is located at Room 218, 2/F, Xinghai Building, 16 Yingshun Road, Yinghai Town, Daxing District, Beijing.

During the Relevant Periods, the Company and its subsidiaries (together, the “Group”) are principally engaged in the research and development, manufacturing and commercialisation of vaccine products for human use in the PRC.

As at the date of this report, the Company had direct and indirect interests in its subsidiaries, all of which are private limited liability companies, the particulars of which are set out below:

Name	Notes	Place of incorporation and date of registration	Registered share capital	Percentage of equity attributable to the Company		Principal activities
				Direct	Indirect	
AIM Innovative Biotechnology (Shanghai) Co., Ltd.* (“艾美創新生物技術(上海)有限公司”)	a	Shanghai 8 May 2019	RMB50,000,000	100%	–	Investment holding
AIM Explorer Biomedical R&D Co., Ltd.* (“艾美探索者生命科學研發有限公司”)	a	Shanghai 10 September 2018	RMB250,000,000	100%	–	Vaccine development
AIM Vaccine Research Institute (Jiangsu) Co., Ltd.* (“艾美疫苗研究院(江蘇)有限公司”)	a	Jiangsu 9 December 2013	RMB50,000,000	100%	–	Vaccine development
Shanghai Beibi Road Cultural Development Co., Ltd.* (“上海北壁之路文化發展有限公司”)	a	Shanghai 28 March 2017	RMB10,000,000	100%	–	Investment holding
AIM Weixin Biopharmaceutical (Zhejiang) Co., Ltd.* (“艾美衛信生物藥業(浙江)有限公司”) (“AIM Weixin”)	b	Ningbo 24 December 2002	RMB515,306,120	94.2534%	5.7466%	Vaccine development and sales
Ningbo Rong'an Biological Pharmaceutical Co., Ltd.* (“寧波榮安生物藥業有限公司”) (“Rong'an Bio”)	b	Ningbo 30 April 2001	RMB60,000,000	20%	80%	Vaccine development and sales
AIM Honesty Biopharmaceutical Co., Ltd.* (“艾美誠信生物製藥有限公司”) (“AIM Honesty”)	c	Liaoning 20 September 1993	RMB250,000,000	100%	–	Vaccine development and sales
AIM Kanghuai Biopharmaceutical (Jiangsu) Co., Ltd.* (“艾美康淮生物製藥(江蘇)有限公司”) (“AIM Kanghuai”)	b	Jiangsu 13 October 2011	RMB360,000,000	100%	–	Vaccine development and sales
AIM Jianchi Biopharmaceutical (Shanghai) Co., Ltd.* (“艾美堅持生物製品(上海)有限公司”)	d	Shanghai 17 May 2021	RMB50,000,000	90%	–	Vaccine development
Liverna Therapeutics Inc. (“珠海麗凡達生物技術有限公司”)	e	Guangdong 21 June 2019	RMB7,500,000	50.1546%	–	Research and development of drugs

- (a) No audited financial statements have been prepared for these entities for the years ended 31 December 2019, 2020 and 2021, as the entities were not subject to any statutory audit requirements under the relevant rules and regulations in their jurisdiction of incorporation.
 - (b) The statutory financial statements of these entities for the years ended 31 December 2019, 2020 and 2021 prepared in accordance with PRC accounting principles and regulations were audited by Zhonghui Certified Public Accountants, a certified public accounting firm registered in the PRC.
 - (c) The statutory financial statements of the entity for the years ended 31 December 2019, 2020 and 2021 prepared in accordance with PRC accounting principles and regulations were audited by Dalian Liaoquan Certified Public Accountants, a certified public accounting firm registered in the PRC.
 - (d) No audited financial statements have been prepared for the entity for the years ended 31 December 2019, 2020 and 2021, as the entity was incorporated on 17 May 2021, and the entity was not subject to any statutory audit requirements under the relevant rules and regulations in their jurisdiction of incorporation.
 - (e) The entity was acquired by the Group in May 2021, details of which are included in note 35. The statutory financial statements of this entity for the years ended 31 December 2019 and 2020 and 30 March 2021 prepared in accordance with PRC accounting principles and regulations were audited by Zhonghui Certified Public Accountants, a certified public accounting firm registered in the PRC. The statutory financial statements of this entity for the year ended 31 December 2021 prepared in accordance with PRC accounting principles and regulations were audited by Chengrui Certified Public Accountants, a certified public accounting firm registered in the PRC.
- * The English names of these subsidiaries registered in the PRC represent the translated names of these companies as no English names have been registered.

2.1 BASIS OF PREPARATION

The Historical Financial Information has been prepared in accordance with International Financial Reporting Standards (“IFRSs”), which comprise all standards and interpretations approved by the International Accounting Standards Board. All IFRSs effective for the accounting period commencing from 1 January 2022, together with the relevant transitional provisions, have been consistently applied by the Group in the preparation of the Historical Financial Information throughout the Relevant Periods and in the period covered by the Interim Comparative Financial Information. The Group also adopted the amendment to IFRS 16 *Covid-19-Related Rent Concessions* and *Covid-19-Related Rent Concessions beyond 30 June 2021* for rent concessions occurring as a direct consequence of the covid-19 pandemic during the Relevant Periods.

The Historical Financial Information has been prepared under the historical cost convention, except for wealth management products which have been measured at fair value.

Basis of consolidation

The Historical Financial Information include the financial statements of the Company and its subsidiaries (collectively referred to as the “Group”) for Relevant Periods. A subsidiary is an entity (including a structured entity), directly or indirectly, controlled by the Company. Control is achieved when the Group is exposed, or has rights, to variable returns from its involvement with the investee and has the ability to affect those returns through its power over the investee (i.e., existing rights that give the Group the current ability to direct the relevant activities of the investee).

When the Company has, directly or indirectly, less than a majority of the voting or similar rights of an investee, the Group considers all relevant facts and circumstances in assessing whether it has power over an investee, including:

- (a) the contractual arrangement with the other vote holders of the investee;
- (b) rights arising from other contractual arrangements; and
- (c) the Group’s voting rights and potential voting rights.

The financial statements of the subsidiaries are prepared for the same reporting period as the Company, using consistent accounting policies.

Profit or loss and each component of other comprehensive income are attributed to the owners of the parent of the Group and to the non-controlling interests, even if this results in the non-controlling interests having a deficit balance. All intra-group assets and liabilities, equity, income, expenses and cash flows relating to transactions between members of the Group are eliminated in full on consolidation.

The Group reassesses whether or not it controls an investee if facts and circumstances indicate that there are changes to one or more of the three elements of control described above. A change in the ownership interest of a subsidiary, without a loss of control, is accounted for as an equity transaction.

If the Group loses control over a subsidiary, it derecognises (i) the assets (including goodwill) and liabilities of the subsidiary, (ii) the carrying amount of any non-controlling interest and (iii) the cumulative translation differences recorded in equity; and recognises (i) the fair value of the consideration received, (ii) the fair value of any investment retained and (iii) any resulting surplus or deficit in profit or loss. The Group's share of components previously recognised in other comprehensive income is reclassified to profit or loss or retained profits, as appropriate, on the same basis as would be required if the Group had directly disposed of the related assets or liabilities.

2.2 ISSUED BUT NOT YET EFFECTIVE INTERNATIONAL FINANCIAL REPORTING STANDARDS

The Group has not applied the following new and revised IFRSs, that have been issued but are not yet effective, in the Historical Financial Information.

IFRS 17	<i>Insurance Contracts</i> ¹
Amendment to IFRS 17	<i>Initial Application of IFRS 17 and IFRS 9 – Comparative Information</i> ¹
Amendments to IFRS 17	<i>Insurance Contracts</i> ^{1, 4}
Amendments to IAS 1	<i>Classification of Liabilities as Current or Non-current</i> ^{1, 3}
Amendments to IAS 1 and IFRS Practice Statement 2	<i>Disclosure of Accounting Policies</i> ¹
Amendments to IAS 8	<i>Definition of Accounting Estimates</i> ¹
Amendments to IAS 12	<i>Deferred Tax related to Assets and Liabilities arising from a Single Transaction</i> ¹
Amendments to IFRS 10 and IAS 28	<i>Sale or Contribution of Assets between an Investor and its Associate or Joint Venture</i> ²

¹ Effective for annual periods beginning on or after 1 January 2023

² No mandatory effective date yet determined but available for adoption

³ On 15 July 2020, the IASB issued the Amendments to IAS 1 *Classification of Liabilities as Current or Non-current – Deferral of Effective Date*. The IASB provided entities with operational relief by deferring the effective date of amendments to IAS 1 by one year to annual reporting periods beginning on or after 1 January 2023

⁴ As a consequence of the amendments to IFRS 17 issued in June 2020, IFRS 4 was amended to extend the temporary exemption that permits insurers to apply IAS 39 rather than IFRS 9 for annual periods beginning before 1 January 2023

The Group is in the process of making an assessment of the impact of these new and revised IFRSs upon initial application. So far, the Group considers that these new and revised IFRSs may result in changes in accounting policies and are not expected to have a significant impact on the Group's results of operations and financial position.

3. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Business combinations and goodwill

Business combinations are accounted for using the acquisition method except for business combination under common control. The consideration transferred is measured at the acquisition date fair value which is the sum of the acquisition date fair values of assets transferred by the Group, liabilities assumed by the Group to the former owners of the acquiree and the equity interests issued by the Group in exchange for control of the acquiree. For each business combination, the Group elects whether to measure the non-controlling interests in the acquiree that are present ownership interests and entitle their holders to a proportionate share of net assets in the event of liquidation at fair value or at the proportionate share of the acquiree's identifiable net assets. All other components of non-controlling interests are measured at fair value. Acquisition-related costs are expensed as incurred.

The Group determines that it has acquired a business when the acquired set of activities and assets includes an input and a substantive process that together significantly contribute to the ability to create outputs.

When the Group acquires a business, it assesses the financial assets and liabilities assumed for appropriate classification and designation in accordance with the contractual terms, economic circumstances and pertinent conditions as at the acquisition date. This includes the separation of embedded derivatives in host contracts of the acquiree.

If the business combination is achieved in stages, the previously held equity interest is remeasured at its acquisition date fair value and any resulting gain or loss is recognised in profit or loss.

Any contingent consideration to be transferred by the acquirer is recognised at fair value at the acquisition date. Contingent consideration classified as an asset or liability is measured at fair value with changes in fair value recognised in profit or loss. Contingent consideration that is classified as equity is not remeasured and subsequent settlement is accounted for within equity.

An acquisition of a business which is a business combination under common control is accounted for in a manner similar to a uniting of interests whereby the assets and liabilities acquired are accounted for at carryover predecessor values to the other party to the business combination within all periods presented as if the operations of the Group and the business acquired had always been combined. The difference between the consideration paid by the Group and the net assets or liabilities of the business acquired is adjusted against equity.

Goodwill is initially measured at cost, being the excess of the aggregate of the consideration transferred, the amount recognised for non-controlling interests and any fair value of the Group's previously held equity interests in the acquiree over the identifiable net assets acquired and liabilities assumed. If the sum of this consideration and other items is lower than the fair value of the net assets acquired, the difference is, after reassessment, recognised in profit or loss as a gain on bargain purchase.

After initial recognition, goodwill is measured at cost less any accumulated impairment losses. Goodwill is tested for impairment annually or more frequently if events or changes in circumstances indicate that the carrying value may be impaired. The Group performs its annual impairment test of goodwill as at 31 December. For the purpose of impairment testing, goodwill acquired in a business combination is, from the acquisition date, allocated to the Group's cash-generating units, or groups of cash-generating units, that are expected to benefit from the synergies of the combination, irrespective of whether other assets or liabilities of the Group are assigned to those units or groups of units.

Impairment is determined by assessing the recoverable amount of the cash-generating unit (group of cash-generating units) to which the goodwill relates. Where the recoverable amount of the cash-generating unit (group of cash-generating units) is less than the carrying amount, an impairment loss is recognised. An impairment loss recognised for goodwill is not reversed in a subsequent period.

Where goodwill has been allocated to a cash-generating unit (or group of cash-generating units) and part of the operation within that unit is disposed of, the goodwill associated with the operation disposed of is included in the carrying amount of the operation when determining the gain or loss on the disposal. Goodwill disposed of in these circumstances is measured based on the relative value of the operation disposed of and the portion of the cash-generating unit retained.

Fair value measurement

The Group measures its financial assets at fair value through profit or loss at fair value at the end of each of the Relevant Periods. Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. The fair value measurement is based on the presumption that the transaction to sell the asset or transfer the liability takes place either in the principal market for the asset or liability, or in the absence of a principal market, in the most advantageous market for the asset or liability. The principal or the most advantageous market must be accessible by the Group. The fair value of an asset or a liability is measured using the assumptions that market participants would use when pricing the asset or liability, assuming that market participants act in their economic best interest.

A fair value measurement of a non-financial asset takes into account a market participant's ability to generate economic benefits by using the asset in its highest and best use or by selling it to another market participant that would use the asset in its highest and best use.

The Group uses valuation techniques that are appropriate in the circumstances and for which sufficient data are available to measure fair value, maximising the use of relevant observable inputs and minimising the use of unobservable inputs.

All assets and liabilities for which fair value is measured or disclosed in the Historical Financial Information are categorised within the fair value hierarchy, described as follows, based on the lowest level input that is significant to the fair value measurement as a whole:

Level 1 – based on quoted prices (unadjusted) in active markets for identical assets or liabilities

Level 2 – based on valuation techniques for which the lowest level input that is significant to the fair value measurement is observable, either directly or indirectly

Level 3 – based on valuation techniques for which the lowest level input that is significant to the fair value measurement is unobservable

For assets and liabilities that are recognised in the Historical Financial Information on a recurring basis, the Group determines whether transfers have occurred between levels in the hierarchy by reassessing categorisation (based on the lowest level input that is significant to the fair value measurement as a whole) at the end of each of the Relevant Periods.

Impairment of non-financial assets

Where an indication of impairment exists, or when annual impairment testing for an asset is required (other than inventories, deferred tax assets, financial assets and goodwill), the asset's recoverable amount is estimated. An asset's recoverable amount is the higher of the asset's or cash-generating unit's value in use and its fair value less costs of disposal, and is determined for an individual asset, unless the asset does not generate cash inflows that are largely independent of those from other assets or groups of assets, in which case the recoverable amount is determined for the cash-generating unit to which the asset belongs.

An impairment loss is recognised only if the carrying amount of an asset exceeds its recoverable amount. In assessing value in use, the estimated future cash flows are discounted to their present value using a pre-tax discount rate that reflects current market assessments of the time value of money and the risks specific to the asset. An impairment loss is charged to profit or loss in the period in which it arises in those expense categories consistent with the function of the impaired asset.

An assessment is made at the end of each reporting period as to whether there is an indication that previously recognised impairment losses may no longer exist or may have decreased. If such an indication exists, the recoverable amount is estimated. A previously recognised impairment loss of an asset other than goodwill is reversed only if there has been a change in the estimates used to determine the recoverable amount of that asset, but not to an amount higher than the carrying amount that would have been determined (net of any depreciation/amortisation) had no impairment loss been recognised for the asset in prior years. A reversal of such an impairment loss is credited to profit or loss in the period in which it arises, unless the asset is carried at a revalued amount, in which case the reversal of the impairment loss is accounted for in accordance with the relevant accounting policy for that revalued asset.

Related parties

A party is considered to be related to the Group if:

(a) the party is a person or a close member of that person's family and that person:

- (i) has control or joint control over the Group;
- (ii) has significant influence over the Group; or
- (iii) is a member of the key management personnel of the Group or of a parent of the Group;

or

(b) the party is an entity where any of the following conditions applies:

- (i) the entity and the Group are members of the same group;
- (ii) one entity is an associate or joint venture of the other entity (or of a parent, subsidiary or fellow subsidiary of the other entity);
- (iii) the entity and the Group are joint ventures of the same third party;
- (iv) one entity is a joint venture of a third entity and the other entity is an associate of the third entity;
- (v) the entity is a post-employment benefit plan for the benefit of employees of either the Group or an entity related to the Group;
- (vi) the entity is controlled or jointly controlled by a person identified in (a);
- (vii) a person identified in (a)(i) has significant influence over the entity or is a member of the key management personnel of the entity (or of a parent of the entity); and
- (viii) the entity, or any member of a group of which it is a part, provides key management personnel services to the Group or to the parent of the Group.

Property, plant and equipment and depreciation

Property, plant and equipment, other than construction in progress, are stated at cost less accumulated depreciation and any impairment losses. The cost of an item of property, plant and equipment comprises its purchase price and any directly attributable costs of bringing the asset to its working condition and location for its intended use.

Expenditure incurred after items of property, plant and equipment have been put into operation, such as repairs and maintenance, is normally charged to profit or loss in the period in which it is incurred. In situations where the recognition criteria are satisfied, the expenditure for a major inspection is capitalised in the carrying amount of the asset as a replacement. Where significant parts of property, plant and equipment are required to be replaced at intervals, the Group recognises such parts as individual assets with specific useful lives and depreciates them accordingly.

Depreciation is calculated on the straight-line basis to write off the cost of each item of property, plant and equipment to its residual value over its estimated useful life. The principal annual rates used for this purpose are as follows:

Buildings	3.17% to 31.67%
Leasehold improvements	20.00% to 50.00%
Plant and machinery	9.50% to 31.67%
Motor vehicles	9.50% to 23.75%
Equipment and others	9.50% to 31.67%

Where parts of an item of property, plant and equipment have different useful lives, the cost of that item is allocated on a reasonable basis among the parts and each part is depreciated separately. Residual values, useful lives and the depreciation method are reviewed, and adjusted if appropriate, at least at each financial year end.

An item of property, plant and equipment including any significant part initially recognised is derecognised upon disposal or when no future economic benefits are expected from its use or disposal. Any gain or loss on disposal or retirement recognised in profit or loss in the year the asset is derecognised is the difference between the net sales proceeds and the carrying amount of the relevant asset.

Construction in progress represents a building under construction, which is stated at cost less any impairment losses, and is not depreciated. Cost comprises the direct costs of construction and capitalised borrowing costs on related borrowed funds during the period of construction. Construction in progress is reclassified to the appropriate category of property, plant and equipment when completed and ready for use.

Intangible assets (other than goodwill)

Intangible assets acquired separately are measured on initial recognition at cost. The cost of intangible assets acquired in a business combination is the fair value at the date of acquisition. The useful lives of intangible assets are assessed to be either finite or indefinite. Intangible assets with finite lives are subsequently amortised over the useful economic life and assessed for impairment whenever there is an indication that the intangible asset may be impaired. The amortisation period and the amortisation method for an intangible asset with a finite useful life are reviewed at least at each financial year end.

Patents and proprietary know-how

Patents and proprietary know-how are stated at cost less any impairment losses and are amortised on the straight-line basis over their estimated useful lives of 16 to 18 years.

Brands

Brands are stated at cost less any impairment losses and are amortised on the straight-line basis over their estimated useful lives of 18 years.

The brands and patents and proprietary know-how of the Group were associated with different vaccine products arising from business combinations and acquisitions from third parties. The useful lives of brands and patents and proprietary know-how were estimated based on the remaining period of economic benefits to be derived from the respective vaccine products to be produced relying on the brands and patents and proprietary know-how. The Group estimated the period of economic benefits to be derived from the respective vaccine products based on the expected time period required for a vaccine product from its development to commercialization and other factors, including the patent protection period, the historical life of similar vaccine products, the characteristics of such technologies, their update frequency and market requirement and competition. Based on such assessment, the Group considered that the maximum economic useful life of brands and patents and proprietary know-how was 30 years. As the different vaccine products have different commercialization commencement dates, acquisition dates by the Group and the expected lifespan of economic benefits, the remaining useful live of the Group's brands and patents and proprietary know-how varies at a range of 18 years and 16 to 18 years, respectively.

Software

Software is stated at cost less any impairment losses and are amortised on the straight-line basis over their estimated useful lives of 2 to 10 years. The expected useful life of software is assessed by the Group after considering the contractual term, the current functionality equipped by the software, using plan and operation needs of the software. The software served as basement IT system is amortised over a longer period as 10 years. Other software served as fast updating applications and single application software is amortised over a shorter period as 2 to 5 years.

Research and development costs

All research costs are charged to the profit or loss as incurred.

Expenditure incurred on projects to develop new products is capitalised and deferred only when the Group can demonstrate the technical feasibility of completing the intangible asset so that it will be available for use or sale, its intention to complete and its ability to use or sell the asset, how the asset will generate future economic benefits, the availability of resources to complete the project and the ability to measure reliably the expenditure during the development. Product development expenditure which does not meet these criteria is expensed when incurred.

Deferred development costs are stated at cost less any impairment losses and are amortised using the straight-line basis over the commercial lives of the underlying products, commencing from the date when the products are put into commercial production.

Leases

The Group assesses at contract inception whether a contract is, or contains, a lease. A contract is, or contains, a lease if the contract conveys the right to control the use of an identified asset for a period of time in exchange for consideration.

Group as a lessee

The Group applies a single recognition and measurement approach for all leases, except for short-term leases and leases of low-value assets. The Group recognises lease liabilities to make lease payments and right-of-use assets representing the right to use the underlying assets.

(a) Right-of-use assets

Right-of-use assets are recognised at the commencement date of the lease (that is the date the underlying asset is available for use). Right-of-use assets are measured at cost, less any accumulated depreciation and any impairment losses, and adjusted for any remeasurement of lease liabilities. The cost of right-of-use assets includes the amount of lease liabilities recognised, initial direct costs incurred, and lease payments made at or before the commencement date less any lease incentives received. Right-of-use assets are depreciated on a straight-line basis over the shorter of the lease terms and the estimated useful lives of the assets as follows:

Leasehold land	20 to 50 years
Buildings	2 to 8 years
Motor vehicles	5 years

If ownership of the leased asset transfers to the Group by the end of the lease term or the cost reflects the exercise of a purchase option, depreciation is calculated using the estimated useful life of the asset.

(b) Lease liabilities

Lease liabilities are recognised at the commencement date of the lease at the present value of lease payments to be made over the lease term. The lease payments include fixed payments (including in-substance fixed payments) less any lease incentives receivable, variable lease payments that depend on an index or a rate, and amounts expected to be paid under residual value guarantees. The lease payments also include the exercise price of a purchase option reasonably certain to be exercised by the Group and payments of penalties for termination of a lease, if the lease term reflects the Group exercising the option to terminate the lease. The variable lease payments that do not depend on an index or a rate are recognised as an expense in the period in which the event or condition that triggers the payment occurs.

In calculating the present value of lease payments, the Group uses its incremental borrowing rate at the lease commencement date because the interest rate implicit in the lease is not readily determinable. After the commencement date, the amount of lease liabilities is increased to reflect the accretion of interest and reduced for the lease payments made. In addition, the carrying amount of lease liabilities is remeasured if there is a modification, a change in the lease term, a change in lease payments (e.g., a change to future lease payments resulting from a change in an index or rate) or a change in assessment of an option to purchase the underlying asset.

(c) Short-term leases and leases of low-value assets

The Group applies the short-term lease recognition exemption to its short-term leases of machinery and equipment and offices (i.e., those leases that have a lease term of 12 months or less from the commencement date and do not contain a purchase option). It also applies the lease of low-value asset recognition exemption to leases of plant that is considered to be of low value.

Lease payments on short-term leases and leases of low-value assets are recognised as an expense on a straight-line basis over the lease term.

Group as a lessor

When the Group acts as a lessor, it classifies at lease inception (or when there is a lease modification) each of its leases as either an operating lease or a finance lease.

Leases in which the Group does not transfer substantially all the risks and rewards incidental to ownership of an asset are classified as operating leases. When a contract contains lease and non-lease components, the Group allocates the consideration in the contract to each component on a relative stand-alone selling price basis. Rental income is accounted for on a straight-line basis over the lease terms and is included in revenue in profit or loss due to its operating nature. Initial direct costs incurred in negotiating and arranging an operating lease are added to the carrying amount of the leased asset and recognised over the lease term on the same basis as rental income. Contingent rents are recognised as revenue in the period in which they are earned.

Leases that transfer substantially all the risks and rewards incidental to ownership of an underlying asset to the lessee are accounted for as finance leases.

Investments and other financial assets***Initial recognition and measurement***

Financial assets are classified, at initial recognition, as subsequently measured at amortised cost and fair value through profit or loss.

The classification of financial assets at initial recognition depends on the financial asset's contractual cash flow characteristics and the Group's business model for managing them. With the exception of trade receivables that do not contain a significant financing component or for which the Group has applied the practical expedient of not adjusting the effect of a significant financing component, the Group initially measures a financial asset at its fair value, plus in the case of a financial asset not at fair value through profit or loss, transaction costs. Trade receivables that do not contain a significant financing component or for which the Group has applied the practical expedient are measured at the transaction price determined under IFRS 15 in accordance with the policies set out for "Revenue recognition" below.

In order for a financial asset to be classified and measured at amortised cost or fair value through other comprehensive income, it needs to give rise to cash flows that are solely payments of principal and interest ("SPPI") on the principal amount outstanding. Financial assets with cash flows that are not SPPI are classified and measured at fair value through profit or loss, irrespective of the business model.

The Group's business model for managing financial assets refers to how it manages its financial assets in order to generate cash flows. The business model determines whether cash flows will result from collecting contractual cash flows, selling the financial assets, or both. Financial assets classified and measured at amortised cost are held within a business model with the objective to hold financial assets in order to collect contractual cash flows, while financial assets classified and measured at fair value through other comprehensive income are held within a business model with the objective of both holding to collect contractual cash flows and selling. Financial assets which are not held within the aforementioned business models are classified and measured at fair value through profit or loss.

All regular way purchases and sales of financial assets are recognised on the trade date, that is, the date that the Group commits to purchase or sell the asset. Regular way purchases or sales are purchases or sales of financial assets that require delivery of assets within the period generally established by regulation or convention in the marketplace.

Subsequent measurement

The subsequent measurement of financial assets depends on their classification as follows:

Financial assets at amortised cost (debt instruments)

Financial assets at amortised cost are subsequently measured using the effective interest method and are subject to impairment. Gains and losses are recognised in profit or loss when the asset is derecognised, modified or impaired.

Financial assets at fair value through profit or loss

Financial assets at fair value through profit or loss are carried in the statement of financial position at fair value with net changes in fair value recognised in profit or loss.

Derecognition of financial assets

A financial asset (or, where applicable, a part of a financial asset or part of a group of similar financial assets) is primarily derecognised (i.e., removed from the Group's consolidated statement of financial position) when:

- the rights to receive cash flows from the asset have expired; or
- the Group has transferred its rights to receive cash flows from the asset or has assumed an obligation to pay the received cash flows in full without material delay to a third party under a "pass-through" arrangement; and either (a) the Group has transferred substantially all the risks and rewards of the asset, or (b) the Group has neither transferred nor retained substantially all the risks and rewards of the asset, but has transferred control of the asset.

When the Group has transferred its rights to receive cash flows from an asset or has entered into a pass-through arrangement, it evaluates if, and to what extent, it has retained the risk and rewards of ownership of the asset. When it has neither transferred nor retained substantially all the risks and rewards of the asset nor transferred control of the asset, the Group continues to recognise the transferred asset to the extent of the Group's continuing involvement. In that case, the Group also recognises an associated liability. The transferred asset and the associated liability are measured on a basis that reflects the rights and obligations that the Group has retained.

Continuing involvement that takes the form of a guarantee over the transferred asset is measured at the lower of the original carrying amount of the asset and the maximum amount of consideration that the Group could be required to repay.

Impairment of financial assets

The Group recognises an allowance for expected credit losses ("ECLs") for all debt instruments not held at fair value through profit or loss. ECLs are based on the difference between the contractual cash flows due in accordance with the contract and all the cash flows that the Group expects to receive, discounted at an approximation of the original effective interest rate. The expected cash flows will include cash flows from the sale of collateral held or other credit enhancements that are integral to the contractual terms.

General approach

ECLs are recognised in two stages. For credit exposures for which there has not been a significant increase in credit risk since initial recognition, ECLs are provided for credit losses that result from default events that are possible within the next 12 months (a 12-month ECL). For those credit exposures for which there has been a significant increase in credit risk since initial recognition, a loss allowance is required for credit losses expected over the remaining life of the exposure, irrespective of the timing of the default (a lifetime ECL).

At the end of each of the Relevant Periods, the Group assesses whether the credit risk on a financial instrument has increased significantly since initial recognition. When making the assessment, the Group compares the risk of a default occurring on the financial instrument as at the reporting date with the risk of a default occurring on the financial instrument as at the date of initial recognition and considers reasonable and supportable information that is available without undue cost or effort, including historical and forward-looking information.

The Group may consider a financial asset to be in default when internal or external information indicates that the Group is unlikely to receive the outstanding contractual amounts in full before taking into account any credit enhancements held by the Group. A financial asset is written off when there is no reasonable expectation of recovering the contractual cash flows.

Financial assets at amortised cost are subject to impairment under the general approach and they are classified within the following stages for measurement of ECLs except for trade receivables which apply the simplified approach as detailed below.

- Stage 1 – Financial instruments for which credit risk has not increased significantly since initial recognition and for which the loss allowance is measured at an amount equal to 12-month ECLs
- Stage 2 – Financial instruments for which credit risk has increased significantly since initial recognition but that are not credit-impaired financial assets and for which the loss allowance is measured at an amount equal to lifetime ECLs
- Stage 3 – Financial assets that are credit-impaired at the reporting date (but that are not purchased or originated credit-impaired) and for which the loss allowance is measured at an amount equal to lifetime ECLs

Simplified approach

For trade receivables that do not contain a significant financing component or when the Group applies the practical expedient of not adjusting the effect of a significant financing component, the Group applies the simplified approach in calculating ECLs. Under the simplified approach, the Group does not track changes in credit risk, but instead recognises a loss allowance based on lifetime ECLs at each reporting date. The Group has established a provision matrix that is based on its historical credit loss experience, adjusted for forward-looking factors specific to the debtors and the economic environment.

Financial liabilities***Initial recognition and measurement***

Financial liabilities are classified, at initial recognition, as loans and borrowings and payables.

All financial liabilities are recognised initially at fair value and, in the case of loans and borrowings, net of directly attributable transaction costs.

The Group's financial liabilities include interest-bearing bank borrowings, lease liabilities, trade payables, due to related parties, and other payables.

Subsequent measurement

The subsequent measurement of financial liabilities depends on their classification as follows:

Financial liabilities at amortised cost (loans and borrowings)

After initial recognition, interest-bearing loans and borrowings are subsequently measured at amortised cost, using the effective interest rate method unless the effect of discounting would be immaterial, in which case they are stated at cost. Gains and losses are recognised in profit or loss when the liabilities are derecognised as well as through the effective interest rate amortisation process.

Amortised cost is calculated by taking into account any discount or premium on acquisition and fees or costs that are an integral part of the effective interest rate. The effective interest rate amortisation is included in finance costs in profit or loss.

Derecognition of financial liabilities

A financial liability is derecognised when the obligation under the liability is discharged or cancelled, or expires.

When an existing financial liability is replaced by another from the same lender on substantially different terms, or the terms of an existing liability are substantially modified, such an exchange or modification is treated as a derecognition of the original liability and a recognition of a new liability, and the difference between the respective carrying amounts is recognised in profit or loss.

Offsetting of financial instruments

Financial assets and financial liabilities are offset and the net amount is reported in the statement of financial position if there is a currently enforceable legal right to offset the recognised amounts and there is an intention to settle on a net basis, or to realise the assets and settle the liabilities simultaneously.

Inventories

Inventories are stated at the lower of cost and net realisable value. Cost is determined on the weighted average basis. Net realisable value is based on estimated selling prices less any estimated costs to be incurred to completion and disposal.

Cash and cash equivalents

For the purpose of the consolidated statements of cash flows, cash and cash equivalents comprise cash on hand and demand deposits, and short-term highly liquid investments that are readily convertible into known amounts of cash, are subject to an insignificant risk of changes in value, and have a short maturity of generally within three months when acquired, less bank overdrafts which are repayable on demand and form an integral part of the Group's cash management.

For the purpose of the consolidated statements of financial position, cash and cash equivalents comprise cash on hand and at banks, including term deposits, and assets similar in nature to cash, which are not restricted as to use.

Provisions

A provision is recognised when a present obligation (legal or constructive) has arisen as a result of a past event and it is probable that a future outflow of resources will be required to settle the obligation, provided that a reliable estimate can be made of the amount of the obligation.

When the effect of discounting is material, the amount recognised for a provision is the present value at the end of the reporting period of the future expenditures expected to be required to settle the obligation. The increase in the discounted present value amount arising from the passage of time is included in finance costs in profit or loss.

Income tax

Income tax mainly comprises current tax and deferred tax. Income tax relating to items recognised outside profit or loss is recognised outside profit or loss, either in other comprehensive income or directly in equity.

Current tax assets and liabilities for the current and prior periods are measured at the amount expected to be recovered from or paid to the taxation authorities, based on tax rates (and tax laws) that have been enacted or substantively enacted by the end of each reporting period, taking into consideration interpretations and practices prevailing in the countries in which the Group operates.

Deferred tax is provided, using the liability method, on all temporary differences at the end of the reporting period between the tax bases of assets and liabilities and their carrying amounts for financial reporting purposes.

Deferred tax liabilities are recognised for all taxable temporary differences, except:

- when the deferred tax liability arises from the initial recognition of goodwill or an asset or liability in a transaction that is not a business combination and, at the time of the transaction, affects neither the accounting profit nor taxable profit or loss; and
- in respect of taxable temporary differences associated with investments in subsidiaries, associates and joint ventures, when the timing of the reversal of the temporary differences can be controlled and it is probable that the temporary differences will not reverse in the foreseeable future.

Deferred tax assets are recognised for all deductible temporary differences, and the carryforward of unused tax credits and any unused tax losses. Deferred tax assets are recognised to the extent that it is probable that taxable profit will be available against which the deductible temporary differences, and the carryforward of unused tax credits and unused tax losses can be utilised, except:

- when the deferred tax asset relating to the deductible temporary differences arises from the initial recognition of an asset or liability in a transaction that is not a business combination and, at the time of the transaction, affects neither the accounting profit nor taxable profit or loss; and
- in respect of deductible temporary differences associated with investments in subsidiaries, associates and joint ventures, deferred tax assets are only recognised to the extent that it is probable that the temporary differences will reverse in the foreseeable future and taxable profit will be available against which the temporary differences can be utilised.

The carrying amount of deferred tax assets is reviewed at the end of each reporting period and reduced to the extent that it is no longer probable that sufficient taxable profit will be available to allow all or part of the deferred tax asset to be utilised. Unrecognised deferred tax assets are reassessed at the end of each reporting period and are recognised to the extent that it has become probable that sufficient taxable profit will be available to allow all or part of the deferred tax asset to be recovered.

Deferred tax assets and liabilities are measured at the tax rates that are expected to apply to the period when the asset is realised or the liability is settled, based on tax rates (and tax laws) that have been enacted or substantively enacted by the end of the reporting period.

Deferred tax assets and deferred tax liabilities are offset if and only if the Group has a legally enforceable right to set off current tax assets and current tax liabilities and the deferred tax assets and deferred tax liabilities relate to income taxes levied by the same taxation authority on either the same taxable entity or different taxable entities which intend either to settle current tax liabilities and assets on a net basis, or to realise the assets and settle the liabilities simultaneously, in each future period in which significant amounts of deferred tax liabilities or assets are expected to be settled or recovered.

Government grants

Government grants are recognised at their fair value where there is reasonable assurance that the grant will be received and all attaching conditions will be complied with. When the grant relates to an expense item, it is recognised as income on a systematic basis over the periods that the costs, for which it is intended to compensate, are expensed.

Revenue recognition***Revenue from contracts with customers***

Revenue from contracts with customers is recognised when control of goods or services is transferred to the customers at an amount that reflects the consideration to which the Group expects to be entitled in exchange for those goods or services.

When the consideration in a contract includes a variable amount, the amount of consideration is estimated to which the Group will be entitled in exchange for transferring the goods or services to the customer. The variable consideration is estimated at contract inception and constrained until it is highly probable that a significant revenue reversal in the amount of cumulative revenue recognised will not occur when the associated uncertainty with the variable consideration is subsequently resolved.

(a) Sale of vaccine

Revenue from the sale of vaccine is recognised at the point in time when control of the goods is transferred, being when the goods are delivered to the customers, and the customers have accepted the goods in accordance with the sales contracts.

(b) Research and development services

Revenue from research and development services was recognised only when it satisfied a performance obligation by rendering the service or transferring the control of the result of research and development and there is no unfulfilled obligation that could affect the buyer's acceptance of the result. Before that, the counterparty had no right to receive and consume the benefits of the research and development services.

Revenue from other sources

Rental income is recognised on a time proportion basis over the lease terms. Variable lease payments that do not depend on an index or a rate are recognised as income in the accounting period in which they are incurred.

Other income

Interest income is recognised on an accrual basis using the effective interest rate method by applying the rate that exactly discounts the estimated future cash receipts over the expected life of the financial instrument or a shorter period, when appropriate, to the net carrying amount of the financial asset.

Contract liabilities

A contract liability is recognised when a payment is received or a payment is due (whichever is earlier) from a customer before the Group transfers the related goods or services. Contract liabilities are recognised as revenue when the Group performs under the contract (i.e., transfers control of the related goods or services to the customer).

Share-based payments

The Company operates employee share plans for the purpose of providing incentives and rewards to eligible participants who contribute to the success of the Group's operations. Employees (including directors) of the Group receive remuneration in the form of share-based payments, whereby employees render services as consideration for equity instruments ("equity-settled transactions").

The cost of equity-settled transactions with employees is measured by reference to the fair value at the date at which they are granted. Further details are given in note 32 to the financial statements.

The cost of equity-settled transactions is recognised in employee benefit expense, together with a corresponding increase in equity, over the period in which the performance and/or service conditions are fulfilled. The cumulative expense recognised for equity-settled transactions at the end of each reporting period until the vesting date reflects the extent to which the vesting period has expired and the Group's best estimate of the number of equity instruments that will ultimately vest. The charge or credit to profit or loss for a period represents the movement in the cumulative expense recognised as at the beginning and end of that period.

Service and non-market performance conditions are not taken into account when determining the grant date fair value of awards, but the likelihood of the conditions being met is assessed as part of the Group's best estimate of the number of equity instruments that will ultimately vest. Market performance conditions are reflected within the grant date fair value. Any other conditions attached to an award, but without an associated service requirement, are considered to be non-vesting conditions. Non-vesting conditions are reflected in the fair value of an award and lead to an immediate expensing of an award unless there are also service and/or performance conditions.

For awards that do not ultimately vest because non-market performance and/or service conditions have not been met, no expense is recognised. Where awards include a market or non-vesting condition, the transactions are treated as vesting irrespective of whether the market or non-vesting condition is satisfied, provided that all other performance and/or service conditions are satisfied.

Where the terms of an equity-settled award are modified, as a minimum an expense is recognised as if the terms had not been modified, if the original terms of the award are met. In addition, an expense is recognised for any modification that increases the total fair value of the share-based payments, or is otherwise beneficial to the employee as measured at the date of modification.

Where an equity-settled award is cancelled, it is treated as if it had vested on the date of cancellation, and any expense not yet recognised for the award is recognised immediately. This includes any award where non-vesting conditions within the control of either the Group or the employee are not met. However, if a new award is substituted for the cancelled award, and is designated as a replacement award on the date that it is granted, the cancelled and new awards are treated as if they were a modification of the original award, as described in the previous paragraph.

The dilutive effect of outstanding options is reflected as additional share dilution in the computation of earnings per share.

Other employee benefits***Social pension plans***

The Group has social pension plans for its employees arranged by local government labour and security authorities. The Group makes contributions on a monthly basis to the social pension plans. The contributions are charged to profit or loss as they become payable in accordance with the rules of the social pension plans. The Group's liability in respect of these funds is limited to the contributions payable in each period.

Housing fund and other social insurances

The Group has participated in defined social security contribution schemes for its employees pursuant to the relevant laws and regulations of the PRC. These include housing fund, basic medical insurance, unemployment insurance, injury insurance and maternity insurance. The Group makes monthly contributions to the housing fund and other social insurances. The contributions are charged to profit or loss on an accrual basis. The Group's liability in respect of these funds is limited to the contributions payable in each period.

Borrowing costs

Borrowing costs directly attributable to the acquisition, construction or production of qualifying assets, i.e., assets that necessarily take a substantial period of time to get ready for their intended use or sale, are capitalised as part of the cost of those assets. The capitalisation of such borrowing costs ceases when the assets are substantially ready for their intended use or sale. Investment income earned on the temporary investment of specific borrowings pending their expenditure on qualifying assets is deducted from the borrowing costs capitalised. All other borrowing costs are expensed in the period in which they are incurred. Borrowing costs consist of interest and other costs that an entity incurs in connection with the borrowing of funds.

Dividends

Final dividends are recognised as a liability when they are approved by the shareholders in a general meeting. Proposed final dividends are disclosed in the note 12 to the Historical Financial Information.

Foreign currencies

These financial statements are presented in RMB, which is the Group's functional currency. Each entity in the Group determines its own functional currency and items included in the financial statements of each entity are measured using that functional currency. Foreign currency transactions recorded by the entities in the Group are initially recorded using their respective functional currency rates prevailing at the dates of the transactions. Monetary assets and liabilities denominated in foreign currencies are translated at the functional currency rates of exchange ruling at the end of the reporting period. Differences arising on settlement or translation of monetary items are recognised in profit or loss. Non-monetary items that are measured in terms of historical cost in a foreign currency are translated using the exchange rates at the dates of the initial transactions. Non-monetary items measured at fair value in a foreign currency are translated using the exchange rates at the date when the fair value was measured. The gain or loss arising on translation of a non-monetary item measured at fair value is treated in line with the recognition of the gain or loss on change in fair value of the item (i.e., translation difference on the item whose fair value gain or loss is recognised in other comprehensive income or profit or loss is also recognised in other comprehensive income or profit or loss, respectively).

In determining the exchange rate on initial recognition of the related asset, expense or income on the derecognition of a non-monetary asset or non-monetary liability relating to an advance consideration, the date of initial transaction is the date on which the Group initially recognises the non-monetary asset or non-monetary liability arising from the advance consideration. If there are multiple payments or receipts in advance, the Group determines the transaction date for each payment or receipt of the advance consideration.

4. SIGNIFICANT ACCOUNTING JUDGEMENTS AND ESTIMATES

The preparation of the Group's financial statements requires management to make judgements, estimates and assumptions that affect the reported amounts of revenues, expenses, assets and liabilities, and their accompanying disclosures, and the disclosure of contingent liabilities. Uncertainty about these assumptions and estimates could result in outcomes that could require a material adjustment to the carrying amounts of the assets or liabilities affected in the future.

Judgements

In the process of applying the Group's accounting policies, management has made the following judgements, apart from those involving estimations, which have the most significant effect on the amounts recognised in the financial statements:

Research and development expenses

All research expenses are charged to the profit or loss as incurred. Expenses incurred on each pipeline to develop new products are capitalised and deferred in accordance with the accounting policy for research and development expenses in note 3 to the Historical Financial Information. Determining the amounts to be capitalised requires management to make judgements on the technical feasibility of existing pipelines to be successfully commercialised and bring economic benefits to the Group.

Significant judgement in determining the lease term of contracts with renewal options

The Group has several lease contracts that include extension options. The Group applies judgement in evaluating whether or not to exercise the option to renew the lease. That is, it considers all relevant factors that create an economic incentive for it to exercise either the renewal. After the commencement date, the Group reassesses the lease term if there is a significant event or change in circumstances that is within its control and affects its ability to exercise or not to exercise the option to renew the lease (e.g., construction of significant leasehold improvements or significant customisation to the leased asset).

Estimation uncertainty

The key assumptions concerning the future and other key sources of estimation uncertainty at the end of the reporting period, that have a significant risk of causing a material adjustment to the carrying amounts of assets and liabilities within the next financial year, are described below.

Impairment of goodwill

The Group determines whether goodwill is impaired at least on an annual basis. This requires an estimation of the value in use of the cash-generating units to which the goodwill is allocated. Estimating the value in use requires the Group to make an estimate of the expected future cash flows from the cash-generating units and also to choose a suitable discount rate in order to calculate the present value of those cash flows. The carrying amounts of goodwill at 31 December 2019, 2020 and 2021 and 30 April 2022 were RMB234,572,000, RMB234,572,000, RMB482,897,000 and RMB482,897,000, respectively. Further details are given in note 16.

Impairment testing of acquired deferred development costs

The Group is required to test acquired deferred development costs not available for use on an annual basis. Intangible assets are tested whenever events or changes in circumstances indicate that the carrying amount of those assets exceeds their recoverable amount. The recoverable amount is determined based on the higher of fair value less cost to sell and value in use. The carrying amounts of acquired deferred development costs not available for use at 31 December 2019, 2020 and 2021 and 30 April 2022 were nil, nil, RMB1,869,400,000 and RMB1,869,400,000, respectively.

Determination of the value in use is an area involving management judgement in order to assess whether the carrying value of the intangible assets not available for use can be supported by the net present value of future cash flows. In calculating the net present value of the future cash flows, certain assumptions are required to be made in respect of highly uncertain matters including management's expectations of (i) timing of commercialisation, productivity and market size; (ii) revenue compound growth rate; (iii) costs and operating expenses; and (iv) the selection of discount rates to reflect the risks involved.

Provision for expected credit losses on trade receivables

The Group uses a provision matrix to calculate ECLs for trade receivables. The provision rates are based on ageing analysis of customers that have similar loss patterns.

The provision matrix is initially based on the Group's historical observed default rates. The Group will calibrate the matrix to adjust the historical credit loss experience with forward-looking information. For instance, if forecast economic conditions (i.e., gross domestic product) are expected to deteriorate over the next year which can lead to an increased number of defaults in the distribution sector, the historical default rates are adjusted. At each reporting date, the historical observed default rates are updated and changes in the forward-looking estimates are analysed.

The assessment of the correlation among historical observed default rates, forecast economic conditions and ECLs is a significant estimate. The amount of ECLs is sensitive to changes in circumstances and forecast economic conditions. The Group's historical credit loss experience and forecast of economic conditions may also not be representative of a customer's actual default in the future. The information about the ECLs on the Group's trade receivables is disclosed in note 21 to the Historical Financial Information.

Leases – Estimating the incremental borrowing rate

The Group cannot readily determine the interest rate implicit in a lease, and therefore, it uses an incremental borrowing rate ("IBR") to measure lease liabilities. The IBR is the rate of interest that the Group would have to pay to borrow over a similar term, and with a similar security, the funds necessary to obtain an asset of a similar value to the right-of-use asset in a similar economic environment. The IBR therefore reflects what the Group "would have to pay", which requires estimation when no observable rates are available (such as for subsidiaries that do not enter into financing transactions) or when it needs to be adjusted to reflect the terms and conditions of the lease (for example, when leases are not in the subsidiary's functional currency). The Group estimates the IBR using observable inputs (such as market interest rates) when available and is required to make certain entity-specific estimates (such as the subsidiary's stand-alone credit rating).

Impairment of non-financial assets (other than goodwill)

The Group assesses whether there are any indicators of impairment for all non-financial assets (including the right-of-use assets) at the end of each reporting period. Other non-financial assets are tested for impairment when there are indicators that the carrying amounts may not be recoverable. An impairment exists when the carrying value of an asset or a cash-generating unit exceeds its recoverable amount, which is the higher of its fair value less costs of disposal and its value in use. The calculation of the fair value less costs of disposal is based on available data from binding sales transactions in an arm's length transaction of similar assets or observable market prices less incremental costs for disposing of the asset. When value-in-use calculations are undertaken, management must estimate the expected future cash flows from the asset or cash-generating unit and choose a suitable discount rate in order to calculate the present value of those cash flows. The carrying amounts of impairment of non-financial assets at 31 December 2019, 2020 and 2021 and 30 April 2022 were RMB81,915,000, RMB85,470,000, RMB85,275,000 and RMB85,275,000, respectively.

Deferred tax assets

Deferred tax assets are recognised for unused tax losses to the extent that it is probable that taxable profit will be available against which the losses can be utilised. Significant management judgement is required to determine the amount of deferred tax assets that can be recognised, based upon the likely timing and level of future taxable profits together with future tax planning strategies. The carrying values of deferred tax assets relating to recognised tax losses at 31 December 2019, 2020 and 2021 and 30 April 2022 were RMB3,998,000, RMB3,843,000, RMB3,810,000 and RMB6,983,000, respectively. The amounts of unrecognised tax losses at 31 December 2019, 2020 and 2021 and 30 April 2022 were RMB278,648,000, RMB302,716,000, RMB597,375,000 and RMB97,632,000, respectively. Further details are contained in note 29 to the financial statements.

Write-down of inventories

The Group's inventories are stated at the lower of cost and net realisable value. The Group writes down its inventories based on estimates of the realisable value with reference to the ageing and conditions of the inventories, together with the economic circumstances on the marketability of such inventories. Inventories will be reviewed annually for write-down, if appropriate.

Useful lives and residual values of items of property, plant and equipment

In determining the useful lives and residual values of items of property, plant and equipment, the Group has to consider various factors, such as technical or commercial obsolescence arising from changes or improvements in the production and provision of services, or from a change in the market demand for the product or service output of the asset, expected usage of the asset, expected physical wear and tear, care and maintenance of the asset, and legal or similar limits on the use of the asset. The estimation of the useful life of the asset is based on the experience of the Group with similar assets that are used in a similar way. Additional depreciation is made if the estimated useful lives and/or residual values of items of property, plant and equipment are different from previous estimation. Useful lives and residual values are reviewed at the end of each of the years based on changes in circumstances. Further details of the property, plant and equipment are set out in note 14 to the Historical Financial Information.

Useful lives of items of intangible assets

The Group determines the estimated useful lives and related amortisation charges for its intangible assets. The useful lives of intangible assets are assessed to be finite. Intangible assets with finite lives are amortised over the useful economic lives and assessed for impairment whenever there is an indication that the intangible asset may be impaired. The amortisation period and the amortisation method for an intangible asset with a finite useful life are reviewed at least at the end of each of the Relevant Periods. Further details of the intangible assets are set out in note 17 to the Historical Financial Information.

5. OPERATING SEGMENT INFORMATION

For management purposes, the Group is organised into one single business unit that is the sale of vaccine and research and development services. Management reviews the overall results and financial position of the Group as a whole based on the same accounting policies set out in note 3. Accordingly, the Group has only a single operating segment and no further analysis of the single segment is presented.

Geographical information

As the Group generates all of its revenues in the PRC and its non-current assets are located in PRC during the Relevant Periods, no geographical information is presented.

Information about major customers

No revenue amounting to 10 percent or more of the Group's total revenue was derived from sales to a single customer during the Relevant Periods.

6. REVENUE, OTHER INCOME AND GAINS

An analysis of revenue is as follows:

	Year ended 31 December			Four months ended 30 April	
	2019	2020	2021	2021	2022
	RMB'000	RMB'000	RMB'000	RMB'000 (Unaudited)	RMB'000
Revenue from contracts with customers	951,648	1,637,970	1,570,129	464,926	275,255

Revenue from contracts with customers

(i) Disaggregated revenue information

	Year ended 31 December			Four months ended 30 April	
	2019	2020	2021	2021	2022
	RMB'000	RMB'000	RMB'000	RMB'000 (Unaudited)	RMB'000
Types of goods or services					
Sales of vaccine	951,648	1,637,970	1,567,282	464,926	275,227
Research and development services	–	–	2,847	–	28
	951,648	1,637,970	1,570,129	464,926	275,255
Timing of revenue recognition					
Goods or services transferred at a point in time	951,648	1,637,970	1,570,129	464,926	275,255

The following table shows the amounts of revenue recognised in each of the Relevant Periods that were included in the contract liabilities at the beginning of the respective periods:

	Year ended 31 December			Four months ended 30 April	
	2019	2020	2021	2021	2022
	RMB'000	RMB'000	RMB'000	RMB'000 (Unaudited)	RMB'000
Sales of vaccine	45,884	26,350	9,852	2,554	1,760

(ii) Performance obligations

Information about the Group's performance obligations is summarised below:

Sales of vaccine

The performance obligation is satisfied upon the acceptance of the products by the customers and the payment is generally due within 180 days from delivery.

Research and development services

Based on the terms of the contract, the performance obligation is satisfied at the point in time as the services are completed and accepted and payment is billed based on the milestone achieved.

An analysis of other income and gains is as follows:

	Year ended 31 December			Four months ended 30 April	
	2019	2020	2021	2021	2022
	RMB'000	RMB'000	RMB'000	RMB'000 (Unaudited)	RMB'000
Other income and gains					
Government grants related to					
– Assets (i)	2,104	3,399	3,894	1,258	1,453
– Income	18,780	17,407	33,390	13,567	1,886
Bank interest income	3,667	10,736	10,777	4,076	1,527
Gain on disposal of wealth investment products	–	1,312	1,673	376	3,074
Foreign exchange gains, net	–	6,123	2,032	787	–
Others	1,612	1,737	1,856	1,192	374
	<u>26,163</u>	<u>40,714</u>	<u>53,622</u>	<u>21,256</u>	<u>8,314</u>

- (i) The Group has received certain government grants related to assets for investment in laboratory equipment and plant. The grants related to assets were recognised in profit or loss over the useful lives of the relevant assets. Details of these grants related to assets are set out in note 30.

7. FINANCE COSTS

An analysis of finance costs is as follows:

	Year ended 31 December			Four months ended 30 April	
	2019	2020	2021	2021	2022
	RMB'000	RMB'000	RMB'000	RMB'000 (Unaudited)	RMB'000
Interest on bank loans	9,316	12,951	13,654	2,560	11,426
Interest on lease liabilities	1,465	2,790	2,376	774	723
Less: Interest capitalised	–	–	5,327	180	5,880
	<u>10,781</u>	<u>15,741</u>	<u>10,703</u>	<u>3,154</u>	<u>6,269</u>

8. PROFIT/(LOSS) BEFORE TAX

The Group's profit/(loss) before tax is arrived at after charging/(crediting):

	Notes	Year ended 31 December			Four months ended 30 April	
		2019	2020	2021	2021	2022
		RMB'000	RMB'000	RMB'000	RMB'000 (Unaudited)	RMB'000
Cost of inventories sold		218,803	283,882	275,237	80,858	55,280
Cost of services provided		—	—	192	—	—
Depreciation of property, plant and equipment	14	63,437	72,506	87,430	27,812	32,194
Depreciation of right-of-use assets	15	12,171	21,940	23,071	7,069	8,559
Amortisation of other intangible assets	17	33,832	33,896	33,790	11,258	11,283
Lease payments not included in the measurement of lease liabilities	15(c)	11,121	2,906	2,881	952	1,291
Auditors' remuneration		625	1,170	685	160	318
Employee benefit expenses (including directors' and chief executive's remuneration (note 9))						
Wages and salaries		163,363	233,220	303,087	99,167	109,656
Equity-settled share-based compensation expenses		7,775	23,476	952,128	30,470	27,658
Pension scheme contributions		33,887	24,039	56,355	17,324	22,412
		205,025	280,735	1,311,570	146,961	159,726
Foreign exchange differences, net		1,929	(6,123)	(2,032)	(787)	3,286
(Reversal of)/Provision for impairment of trade receivables		(2,216)	176	7,984	2,008	4,915
Provision for/(reversal of) impairment of prepayments, other receivables and other assets		113	650	(3)	—	—
Write-down of inventories to net realisable value		5,531	6,588	21,671	7,227	8,611
Impairment of property, plant and equipment		—	3,555	—	—	—
Loss on disposal of property, plant and equipment		5,009	2,010	208	29	37
Interest income		(3,667)	(10,736)	(10,777)	(4,076)	(1,527)
Gain on disposal of wealth investment products		—	(1,312)	(1,673)	(376)	(3,074)

9. DIRECTORS' AND SUPERVISORS' REMUNERATION

Directors' and chief executive's remuneration for the Relevant Periods and the four months ended 30 April 2021, disclosed pursuant to the Listing Rules, section 383(1)(a), (b), (c) and (f) of the Hong Kong Companies Ordinance and Part 2 of the Companies (Disclosure of Information about Benefits of Directors) Regulation, is as follows:

	Year ended 31 December			Four months ended 30 April	
	2019	2020	2021	2021	2022
	RMB'000	RMB'000	RMB'000	RMB'000 (Unaudited)	RMB'000
Fees	—	255	1,160	358	400
Other emoluments:					
Salaries, allowances and benefits in kind	4,211	3,532	3,530	1,122	1,228
Performance related bonuses	1,411	1,242	1,130	376	413
Pension scheme contributions	729	320	416	117	153
Equity-settled share-based compensation expenses	63	17	896,940	—	422
	6,414	5,111	902,016	1,615	2,216
	6,414	5,366	903,176	1,973	2,616

During the years ended 31 December 2019 and 2020, certain supervisors were granted restricted share rewards, in respect of their services to the Group, further details of which are set out in note 32 to the Historical Financial Information. The fair value of such award shares, which has been recognised in profit or loss, was determined as at the date of grant and the amount included in the Historical Financial Information for the years ended 31 December 2019 and 2020 is included in the above directors' and supervisors' remuneration disclosures.

During the year ended 31 December 2021, one director was granted award shares to reward his contributions to the Group, further details of which are set out in note 32 to the Historical Financial Information. All the award shares have been vested and settled without subject to further conditions. The fair value of such award shares, which has been recognised in profit or loss, was determined as at the date of grant and the amount included in the Historical Financial Information for the year 2021 is included in the above directors' and supervisors' remuneration disclosures.

During the four months ended 30 April 2022, one director was granted restricted share rewards, in respect of their services to the Group, further details of which are set out in note 32 to the Historical Financial Information. The fair value of such award shares, which has been recognised in profit or loss, was determined as at the date of grant and the amount included in the Historical Financial Information for the four months ended 30 April 2022 is included in the above directors' and supervisors' remuneration disclosures.

(a) Independent non-executive directors

The fees paid to independent non-executive directors during the Relevant Periods and four months ended 30 April 2021 were as follows:

	Year ended 31 December			Four months ended 30 April	
	2019	2020	2021	2021	2022
	RMB'000	RMB'000	RMB'000	RMB'000 (Unaudited)	RMB'000
Mr. Ker Wei PEI	–	85	300	100	100
Mr. Liming LI	–	85	124	100	–
Mr. Jianwen LIAO	–	85	124	100	–
Ms. Jie WEN	–	–	177	–	100
Mr. Hui OUYANG	–	–	177	–	100
Mr. Xiaoguang GUO	–	–	258	58	100
	–	255	1,160	358	400

The Board announced that Mr. Ker Wei PEI, Mr. Liming LI and Mr. Jianwen LIAO have been appointed as independent non-executive directors, with effect from 19 September 2020.

The Board announced that Mr. Xiaoguang GUO has been appointed as an independent non-executive director, with effect from 18 February 2021.

Mr. Liming LI and Mr. Jianwen LIAO have tendered their resignation as independent non-executive directors, with effect from 28 May 2021.

The Board announced that Ms. Jie WEN and Mr. Hui OUYANG have been appointed as independent non-executive directors, with effect from 28 May 2021.

There were no other emoluments payable to the independent non-executive directors during the Relevant Periods and the four months ended 30 April 2021.

(b) Directors and supervisors

2019

	Fees	Salaries, allowances and benefits in kind	Performance related bonuses	Pension scheme contributions	Equity-settled share-based compensation expense	Total
	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000
Directors:						
Mr. Yan ZHOU*	—	1,201	420	162	—	1,783
Mr. Jie ZHOU	—	903	420	145	—	1,468
Mr. Xin ZHOU	—	903	420	142	—	1,465
Mr. Shaojun JIA	—	—	—	—	—	—
Mr. Wen GUAN	—	—	—	—	—	—
Ms. Aijun WANG	—	—	—	—	—	—
Mr. Zhaoxing WANG	—	—	—	—	—	—
	—	3,007	1,260	449	—	4,716
Supervisors:						
Mr. Lun MA	—	—	—	—	—	—
Mr. Yuheng SONG	—	609	78	86	—	773
Mr. Zhigang BO	—	279	34	72	56	441
Mr. Xinggang LI	—	113	14	44	—	171
Mr. Yu ZHANG (i)	—	16	—	7	7	30
Mr. Zihang CHENG (ii)	—	187	25	71	—	283
	—	1,204	151	280	63	1,698
	—	4,211	1,411	729	63	6,414

2020

	Fees	Salaries, allowances and benefits in kind	Performance related bonuses	Pension scheme contributions	Equity-settled share-based compensation expense	Total
	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000
Directors:						
Mr. Yan ZHOU*	—	1,200	478	87	—	1,765
Mr. Jie ZHOU	—	903	359	83	—	1,345
Mr. Xin ZHOU	—	903	359	83	—	1,345
Mr. Shaojun JIA	—	—	—	—	—	—
Mr. Wen GUAN (iii)	—	—	—	—	—	—
Ms. Aijun WANG	—	—	—	—	—	—
Mr. Zhaoxing WANG (iii)	—	—	—	—	—	—
Mr. Jichen ZHAO (iv)	—	—	—	—	—	—
	—	3,006	1,196	253	—	4,455
Supervisors:						
Mr. Lun MA	—	—	—	—	—	—
Mr. Yuheng SONG (v)	—	220	—	16	—	236
Mr. Zhigang BO (v)	—	113	—	11	17	141
Mr. Xinggang LI (v)	—	40	—	8	—	48
Mr. Zihang CHENG (v)	—	64	—	13	—	77
Mr. Wen GUAN (vi)	—	—	—	—	—	—
Mr. Jiashuai SONG (vi)	—	89	46	19	—	154
	—	526	46	67	17	656
	—	3,532	1,242	320	17	5,111

2021

	Fees	Salaries, allowances and benefits in kind	Performance related bonuses	Pension scheme contributions	Equity-settled share-based compensation expense	Total
	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000
Directors:						
Mr. Yan ZHOU*	–	1,255	466	130	896,940	898,791
Mr. Jie ZHOU	–	85	–	11	–	96
Mr. Xin ZHOU	–	85	–	11	–	96
Mr. Shaojun JIA	–	838	300	93	–	1,231
Mr. Wen GUAN (vii)	–	838	300	104	–	1,242
Ms. Aijun WANG	–	–	–	–	–	–
Mr. Jichen ZHAO	–	–	–	–	–	–
	–	3,101	1,066	349	896,940	901,456
Supervisors:						
Mr. Lun MA	–	–	–	–	–	–
Mr. Wen GUAN (vii)	–	–	–	–	–	–
Mr. Jiashuai SONG	–	171	64	67	–	302
Mr. Tingfeng SONG (viii)	–	258	–	–	–	258
	–	429	64	67	–	560
	–	3,530	1,130	416	896,940	902,016

Four months ended 30 April 2021 (unaudited)

	Fees	Salaries, allowances and benefits in kind	Performance related bonuses	Pension scheme contributions	Equity-settled share-based compensation expense	Total
	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000
Directors:						
Mr. Yan ZHOU*	–	427	155	43	–	625
Mr. Jie ZHOU	–	85	–	11	–	96
Mr. Xin ZHOU	–	85	–	11	–	96
Mr. Shaojun JIA	–	205	100	10	–	315
Mr. Wen GUAN (vii)	–	205	100	21	–	326
Ms. Aijun WANG	–	–	–	–	–	–
Mr. Jichen ZHAO	–	–	–	–	–	–
	–	1,007	355	96	–	1,458
Supervisors:						
Mr. Lun MA	–	–	–	–	–	–
Mr. Wen GUAN (vii)	–	–	–	–	–	–
Mr. Jiashuai SONG	–	57	21	21	–	99
Mr. Tingfeng SONG (viii)	–	58	–	–	–	58
	–	115	21	21	–	157
	–	1,122	376	117	–	1,615

Four months ended 30 April 2022

	Fees	Salaries, allowances and benefits in kind	Performance related bonuses	Pension scheme contributions	Equity-settled share-based compensation expense	Total
	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000
Directors:						
Mr. Yan ZHOU*	—	414	155	44	—	613
Mr. Jie ZHOU	—	—	—	—	—	—
Mr. Xin ZHOU	—	—	—	—	—	—
Mr. Shaojun JIA	—	327	119	42	—	488
Mr. Wen GUAN	—	327	119	42	422	910
Ms. Aijun WANG	—	—	—	—	—	—
Mr. Jichen ZHAO	—	—	—	—	—	—
	—	1,068	393	128	422	2,011
Supervisors:						
Mr. Lun MA	—	—	—	—	—	—
Mr. Jiashuai SONG	—	60	20	25	—	105
Mr. Tingfeng SONG	—	100	—	—	—	100
	—	160	20	25	—	205
	—	1,228	413	153	422	2,216

Notes:

- (i) Mr. Yu ZHANG has tendered his resignation as a supervisor, with effect from 7 January 2019.
- (ii) The Board announced that Mr. Zihang CHENG has been appointed as a supervisor, with effect from 7 January 2019.
- (iii) Mr. Wen GUAN and Mr. Zhaoxing WANG have tendered their resignation as directors, with effect from 21 April 2020.
- (iv) The Board announced that Mr. Jichen ZHAO has been appointed as a director, with effect from 19 June 2020.
- (v) Mr. Yuheng SONG, Mr. Zhigang BO, Mr. Xinggang LI and Mr. Zihang CHENG have tendered their resignation as supervisors, with effect from 21 April 2020.
- (vi) The Board announced that Mr. Wen GUAN and Mr. Jiashuai SONG have been appointed as supervisors, with effect from 19 June 2020.
- (vii) Mr. Wen GUAN has tendered his resignation as a supervisor and has been appointed as a director, with effect from 18 February 2021.
- (viii) The Board announced that Mr. Tingfeng SONG has been appointed as a supervisor, with effect from 18 February 2021.
- * Mr. Yan ZHOU, who acts as a director of the Company, is also the chief executive officer of the Company.

On 9 June 2021, Mr. Yan ZHOU, Mr. Wen GUAN and Mr. Shaojun JIA were re-designated as executive directors and Mr. Jie ZHOU, Mr. Xin ZHOU, Mr. Jichen ZHAO and Ms. Aijun WANG were re-designated as non-executive directors.

There was no arrangement under which a director waived or agreed to waive any remuneration during the Relevant Periods and the four months ended 30 April 2021.

10. FIVE HIGHEST PAID EMPLOYEES

The five highest paid employees during the years ended 31 December 2019, 2020 and 2021 and the four months ended 30 April 2021 and 2022 included one, nil, one, nil and nil director, respectively, details of whose remuneration are set out in note 9.

Details of the remuneration for the remaining highest paid employees who are neither directors, supervisors nor the chief executive of the Company during the Relevant Periods and the four months ended 30 April 2021 are as follows:

	Year ended 31 December			Four months ended 30 April	
	2019	2020	2021	2021	2022
	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000
				(Unaudited)	
Salaries, allowances and benefits in kind	5,731	7,551	6,236	2,894	1,899
Performance related bonuses	1,121	3,608	4,286	1,098	983
Equity-settled share-based compensation expenses	4,253	6,988	11,092	5,374	7,603
Pension scheme contributions	379	290	408	133	215
	<u>11,484</u>	<u>18,437</u>	<u>22,022</u>	<u>9,499</u>	<u>10,700</u>

The number of non-director, non-supervisor and non-chief executive highest paid employees whose remuneration fell within the following bands is as follows:

	Year ended 31 December			Four months ended 30 April	
	2019	2020	2021	2021	2022
				(Unaudited)	
Nil to HK\$1,500,000	1	–	–	3	2
HK\$1,500,001 to HK\$2,000,000	2	–	–	1	1
HK\$2,000,001 to HK\$3,000,000	1	3	–	1	2
Above HK\$3,000,001	–	2	4	–	–

Restricted stock shares and share options were granted to three, five, four, five and five non-director, non-supervisor and non-chief executive highest paid employees in respect of their services to the Group for the years ended 31 December 2019, 2020 and 2021 and the four months ended 30 April 2021 and 2022. Further details are included in the disclosures in note 32 to the Historical Financial Information. The fair value of such restricted stock shares and share options, which has been recognised in profit or loss over the vesting period, was determined as at the date of grant and the amount included in the Historical Financial Information for the Relevant Periods is included in the above non-director and non-chief executive highest paid employees' remuneration disclosures.

11. INCOME TAX EXPENSE

The Group is subject to income tax on an entity basis on profits arising in or derived from the jurisdictions in which members of the Group are domiciled and operate.

Under the Law of the PRC on Enterprise Income Tax (the "EIT Law") and the Implementation Regulation of the EIT Law, the EIT rate of the PRC subsidiaries is 25% unless they are subject to preferential tax as set out below.

AIM Kanghuai Biopharmaceutical (Jiangsu) Co., Ltd. was accredited as a "High and New Technology Enterprise" on 22 November 2019, and therefore, AIM Kanghuai Biopharmaceutical (Jiangsu) Co., Ltd. was entitled to a preferential CIT rate of 15% for the Relevant Periods. This qualification is subject to review by the relevant tax authority in the PRC for every three years.

AIM Honesty Biopharmaceutical Co., Ltd. was renewed as a "High and New Technology Enterprise" on 16 November 2018 and 19 November 2021, and therefore, AIM Honesty Biopharmaceutical Co., Ltd. was entitled to a preferential CIT rate of 15% for the Relevant Periods. This qualification is subject to review by the relevant tax authority in the PRC for every three years.

Ningbo Rong'an Biological Pharmaceutical Co., Ltd. was renewed as a "High and New Technology Enterprise" on 27 November 2018 and 10 December 2021, and therefore, Ningbo Rong'an Biological Pharmaceutical Co., Ltd. was entitled to a preferential CIT rate of 15% for the Relevant Periods. This qualification is subject to review by the relevant tax authority in the PRC for every three years.

AIM Weixin Biopharmaceutical (Zhejiang) Co., Ltd. was renewed as a "High and New Technology Enterprise" on 27 November 2018 and 10 December 2021, and therefore, AIM Weixin Biopharmaceutical (Zhejiang) Co., Ltd. was entitled to a preferential CIT rate of 15% for the Relevant Periods. This qualification is subject to review by the relevant tax authority in the PRC for every three years.

	Year ended 31 December			Four months ended 30 April	
	2019	2020	2021	2021	2022
	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000
				(Unaudited)	
Current income tax	38,250	91,115	79,797	28,049	2,700
Deferred tax (note 29)	(1,303)	(5,643)	(10,627)	(3,443)	(9,700)
Tax charge for the year/period	<u>36,947</u>	<u>85,472</u>	<u>69,170</u>	<u>24,606</u>	<u>(7,000)</u>

A reconciliation of the tax expense applicable to profit before tax at the statutory rates for the countries (or jurisdictions) in which the Company and the majority of its subsidiaries are domiciled to the tax expense at the effective tax rates, and a reconciliation of the applicable rates (i.e., the statutory tax rates) to the effective tax rates, are as follows:

	Year ended 31 December			Four months ended 30 April	
	2019	2020	2021	2021	2022
	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000
				(Unaudited)	
Profit/(Loss) before tax	156,761	485,886	(606,703)	82,283	(102,804)
Tax at the statutory tax rate	39,190	121,471	(151,675)	20,571	(25,701)
Lower tax rate enacted by local authority	(22,990)	(51,294)	(33,659)	(10,719)	6,863
Effect on opening deferred tax of decrease in tax rate	(1,336)	—	—	—	—
Income not subject to tax	(8)	—	—	—	—
Additional deductible allowance for research and development expenses	(10,229)	(14,931)	(39,187)	(11,414)	(13,767)
Expenses not deductible for tax*	14,879	6,099	229,079	933	1,423
Utilisation of losses in previous years	(17,498)	(1,527)	(7,659)	(196)	—
Temporary difference and tax losses not recognised	34,939	25,654	72,271	25,431	24,182
Tax charge at the Group's effective rate	<u>36,947</u>	<u>85,472</u>	<u>69,170</u>	<u>24,606</u>	<u>(7,000)</u>

* Expenses not deductible for tax mainly represent expenses that exceed the tax-deductible limitation such as entertainment, commission, expense without invoices and non-deductible share-based payment expenses. These expenses are not to be deductible for tax.

12. DIVIDENDS

The Board did not recommend the payment of any dividend during the Relevant Periods and the four months ended 30 April 2021.

13. EARNINGS/(LOSS) PER SHARE ATTRIBUTABLE TO ORDINARY EQUITY HOLDERS OF THE PARENT

The basic earnings/(loss) per share is calculated based on the profit/(loss) attributable to the owners of the parent and the weighted average number of ordinary shares outstanding during the Relevant Periods and the four months ended 30 April 2021.

	Year ended 31 December			Four months ended 30 April	
	2019	2020	2021	2021	2022
	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000
				(Unaudited)	
Earnings/(Loss)					
Profit/(Loss) attributable to ordinary equity holders of the parent, used in the basic earnings/(loss) per share calculation	<u>117,406</u>	<u>379,287</u>	<u>(692,774)</u>	<u>58,027</u>	<u>(93,832)</u>

The weighted average number of ordinary shares in issue before the conversion into a joint stock company was determined assuming that the paid-in capital had been fully converted into share capital at the same conversion ratio of 1:1 as upon transformation into a joint stock company in September 2020.

The weighted average number of ordinary shares used in the calculation of the diluted earnings per share amounts is the number of ordinary shares in issue during the Relevant Periods and the four months ended 30 April 2021, as used in the basic earnings per share calculation, and the weighted average number of ordinary shares assumed to have been issued at no consideration on the deemed exercise or conversion of all dilutive potential ordinary shares into ordinary shares.

	Year ended 31 December			Four months ended 30 April	
	2019	2020	2021	2021	2022
				(Unaudited)	
Shares					
Weighted average number of ordinary shares in issue during the year/period used in the basic earnings per share calculation . . .	834,323,919	962,566,797	1,162,556,106	1,109,999,999	1,199,999,999
Effect of dilution – weighted average number of ordinary shares:					
Share options	–	–	–	3,297,912	–
	834,323,919	962,566,797	1,162,556,106	1,113,297,911	1,199,999,999

The Group had no potentially dilutive ordinary shares in issue during the years ended 31 December 2019 and 2020.

As the Group incurred losses for the year ended 31 December 2021 and four months ended 30 April 2022, the potential ordinary shares were not included in the calculation of diluted loss per share as the potential ordinary shares had an anti-dilutive effect on the basic loss per share. Accordingly, the diluted loss per share amount for the year ended 31 December 2021 and four months ended 30 April 2022 is the same as the basic loss per share amount.

14. PROPERTY, PLANT AND EQUIPMENT

The Group

	Buildings	Plant and machinery	Equipment and others	Motor vehicles	Leasehold improvements	Construction in progress	Total
	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000
31 December 2019							
At 1 January 2019:							
Cost	520,726	293,537	27,592	12,504	12,921	69,474	936,754
Accumulated depreciation . . .	(145,306)	(143,682)	(15,035)	(7,662)	(3,868)	–	(315,553)
Impairment	(16,881)	(21,934)	(1,035)	–	–	(42,350)	(82,200)
Net carrying amount	<u>358,539</u>	<u>127,921</u>	<u>11,522</u>	<u>4,842</u>	<u>9,053</u>	<u>27,124</u>	<u>539,001</u>
At 1 January 2019, net of accumulated depreciation and impairment	358,539	127,921	11,522	4,842	9,053	27,124	539,001
Additions	9,442	82,079	3,529	2,067	819	122,062	219,998
Depreciation provided during the year	(29,120)	(22,675)	(4,809)	(1,148)	(5,685)	–	(63,437)
Transfers	16,313	15,299	7,846	181	50,243	(89,882)	–
Disposals	(6,552)	(3,721)	(84)	(1,283)	–	(783)	(12,423)
At 31 December 2019, net of accumulated depreciation and impairment	<u>348,622</u>	<u>198,903</u>	<u>18,004</u>	<u>4,659</u>	<u>54,430</u>	<u>58,521</u>	<u>683,139</u>
At 31 December 2019:							
Cost	535,142	377,864	37,254	12,375	63,983	100,871	1,127,489
Accumulated depreciation . . .	(169,639)	(157,303)	(18,224)	(7,716)	(9,553)	–	(362,435)
Impairment	(16,881)	(21,658)	(1,026)	–	–	(42,350)	(81,915)
Net carrying amount	<u>348,622</u>	<u>198,903</u>	<u>18,004</u>	<u>4,659</u>	<u>54,430</u>	<u>58,521</u>	<u>683,139</u>

APPENDIX I

ACCOUNTANTS' REPORT

	Buildings	Plant and machinery	Equipment and others	Motor vehicles	Leasehold improvements	Construction in progress	Total
	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000
31 December 2020							
At 1 January 2020:							
Cost	535,142	377,864	37,254	12,375	63,983	100,871	1,127,489
Accumulated depreciation . . .	(169,639)	(157,303)	(18,224)	(7,716)	(9,553)	–	(362,435)
Impairment	(16,881)	(21,658)	(1,026)	–	–	(42,350)	(81,915)
Net carrying amount	348,622	198,903	18,004	4,659	54,430	58,521	683,139
At 1 January 2020, net of accumulated depreciation and impairment	348,622	198,903	18,004	4,659	54,430	58,521	683,139
Additions	1,335	16,204	3,750	976	209	694,034	716,508
Depreciation provided during the year	(27,173)	(29,004)	(5,989)	(1,057)	(9,283)	–	(72,506)
Transfers	17,287	22,768	457	–	–	(40,512)	–
Disposals	(1,971)	(516)	(194)	(963)	(593)	(475)	(4,712)
Impairment provided during the year	–	(3,530)	(25)	–	–	–	(3,555)
At 31 December 2020, net of accumulated depreciation and impairment	338,100	204,825	16,003	3,615	44,763	711,568	1,318,874
At 31 December 2020:							
Cost	550,899	413,347	38,821	11,949	63,598	753,898	1,832,512
Accumulated depreciation . . .	(195,918)	(183,314)	(21,767)	(8,334)	(18,835)	–	(428,168)
Impairment	(16,881)	(25,208)	(1,051)	–	–	(42,330)	(85,470)
Net carrying amount	338,100	204,825	16,003	3,615	44,763	711,568	1,318,874
	Buildings	Plant and machinery	Equipment and others	Motor vehicles	Leasehold improvements	Construction in progress	Total
	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000
31 December 2021							
At 1 January 2021:							
Cost	550,899	413,347	38,821	11,949	63,598	753,898	1,832,512
Accumulated depreciation . . .	(195,918)	(183,314)	(21,767)	(8,334)	(18,835)	–	(428,168)
Impairment	(16,881)	(25,208)	(1,051)	–	–	(42,330)	(85,470)
Net carrying amount	338,100	204,825	16,003	3,615	44,763	711,568	1,318,874
At 1 January 2021, net of accumulated depreciation and impairment	338,100	204,825	16,003	3,615	44,763	711,568	1,318,874
Additions	1,141	48,247	16,210	2,157	1,037	1,345,619	1,414,411
Acquisition of a subsidiary (note 35)	–	6,689	209	–	1,732	879	9,509
Depreciation provided during the year	(34,324)	(33,931)	(7,498)	(1,166)	(10,511)	–	(87,430)
Transfers	147,093	12,713	9,746	242	4,337	(174,131)	–
Disposals	(30)	(108)	(76)	(17)	–	–	(231)
At 31 December 2021, net of accumulated depreciation and impairment	451,980	238,435	34,594	4,831	41,358	1,883,935	2,655,133
At 31 December 2021:							
Cost	699,074	480,399	63,718	14,225	70,705	1,926,265	3,254,386
Accumulated depreciation . . .	(230,213)	(216,948)	(28,076)	(9,394)	(29,347)	–	(513,978)
Impairment	(16,881)	(25,013)	(1,051)	–	–	(42,330)	(85,275)
Net carrying amount	451,980	238,438	34,591	4,831	41,358	1,883,935	2,655,133

	Buildings	Plant and machinery	Equipment and others	Motor vehicles	Leasehold improvements	Construction in progress	Total
	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000
30 April 2022							
At 1 January 2022:							
Cost	699,074	480,399	63,718	14,225	70,705	1,926,265	3,254,386
Accumulated depreciation . . .	(230,213)	(216,948)	(28,076)	(9,394)	(29,347)	–	(513,978)
Impairment	(16,881)	(25,013)	(1,051)	–	–	(42,330)	(85,275)
Net carrying amount	451,980	238,438	34,591	4,831	41,358	1,883,935	2,655,133
At 1 January 2022, net of accumulated depreciation and impairment	451,980	238,438	34,591	4,831	41,358	1,883,935	2,655,133
Additions	–	5,001	371	450	–	257,333	263,155
Depreciation provided during the period	(11,200)	(13,062)	(3,447)	(505)	(3,980)	–	(32,194)
Transfers	895	448	245	–	–	(1,588)	–
Disposals	–	(15)	(22)	–	–	–	(37)
At 30 April 2022, net of accumulated depreciation and impairment	441,675	230,810	31,738	4,776	37,378	2,139,680	2,886,057
At 30 April 2022:							
Cost	699,969	485,577	64,207	14,675	70,705	2,182,010	3,517,143
Accumulated depreciation . . .	(241,413)	(229,754)	(31,418)	(9,899)	(33,327)	–	(545,811)
Impairment	(16,881)	(25,013)	(1,051)	–	–	(42,330)	(85,275)
Net carrying amount	441,675	230,810	31,738	4,776	37,378	2,139,680	2,886,057

As at 31 December 2019, 2020 and 2021 and 30 April 2022, certain of the Group's buildings with aggregate net carrying amount values of approximately RMB87,569,000, RMB24,691,000, RMB160,502,000 and RMB157,371,000, respectively, were pledged to secure certain interest-bearing bank borrowings of the Group (note 28).

As at 31 December 2019, 2020 and 2021 and 30 April 2022, certain of the Group's buildings with aggregate net carrying amount values of approximately nil, nil, nil and RMB141,830,000, respectively, were pledged to secure general banking facilities granted to the Group.

As at 31 December 2019, 2020 and 2021 and 30 April 2022, certain of the Group's buildings with aggregate net carrying amount values of approximately RMB7,665,000, RMB14,482,000, RMB6,771,000 and RMB6,519,000, respectively, do not have building ownership certificates.

During the year ended 31 December 2020, the impairment loss of RMB3,555,000 mainly represented the write-down of the carrying amounts of certain plant and machinery and equipment and others to their recoverable amounts due to the upgrade of product technology. The estimated recoverable amounts as at 31 December 2020 and 2021 and 30 April 2022 were nil, nil, and nil, respectively.

The Company

	Buildings	Plant and machinery	Equipment and others	Motor vehicles	Leasehold improvements	Construction in progress	Total
	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000
31 December 2019							
At 1 January 2019:							
Cost	6,750	–	761	1,124	416	216	9,267
Accumulated depreciation . . .	(2,223)	–	(181)	(36)	(35)	–	(2,475)
Net carrying amount	4,527	–	580	1,088	381	216	6,792
At 1 January 2019, net of accumulated depreciation and impairment	4,527	–	580	1,088	381	216	6,792
Additions	–	–	145	–	739	–	884
Depreciation provided during the year	(324)	–	(301)	(71)	(203)	–	(899)
Merger	–	95	–	12	–	–	107
Transfers	–	–	216	–	–	(216)	–
Disposals	–	(73)	–	(1,029)	–	–	(1,102)
At 31 December 2019, net of accumulated depreciation and impairment	4,203	22	640	–	917	–	5,782
At 31 December 2019:							
Cost	6,750	443	1,124	–	1,155	–	9,472
Accumulated depreciation . . .	(2,547)	(225)	(484)	–	(238)	–	(3,494)
Impairment	–	(196)	–	–	–	–	(196)
Net carrying amount	4,203	22	640	–	917	–	5,782
	Buildings	Plant and machinery	Equipment and others	Motor vehicles	Leasehold improvements	Construction in progress	Total
	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000
31 December 2020							
At 1 January 2020:							
Cost	6,750	443	1,124	–	1,155	–	9,472
Accumulated depreciation . . .	(2,547)	(225)	(484)	–	(238)	–	(3,494)
Impairment	–	(196)	–	–	–	–	(196)
Net carrying amount	4,203	22	640	–	917	–	5,782
At 1 January 2020, net of accumulated depreciation and impairment	4,203	22	640	–	917	–	5,782
Additions	–	–	594	850	–	–	1,444
Depreciation provided during the year	(324)	–	(373)	(94)	(524)	–	(1,315)
At 31 December 2020, net of accumulated depreciation and impairment	3,879	22	861	756	393	–	5,911
At 31 December 2020:							
Cost	6,750	443	1,718	850	1,155	–	10,916
Accumulated depreciation . . .	(2,871)	(225)	(857)	(94)	(762)	–	(4,809)
Impairment	–	(196)	–	–	–	–	(196)
Net carrying amount	3,879	22	861	756	393	–	5,911

APPENDIX I

ACCOUNTANTS' REPORT

	Buildings	Plant and machinery	Equipment and others	Motor vehicles	Leasehold improvements	Construction in progress	Total
	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000
31 December 2021							
At 1 January 2021:							
Cost	6,750	443	1,718	850	1,155	–	10,916
Accumulated depreciation . . .	(2,871)	(225)	(857)	(94)	(762)	–	(4,809)
Impairment	–	(196)	–	–	–	–	(196)
Net carrying amount	3,879	22	861	756	393	–	5,911
At 1 January 2021, net of accumulated depreciation and impairment	3,879	22	861	756	393	–	5,911
Additions	–	–	392	2,035	–	613	3,040
Depreciation provided during the period	(325)	–	(490)	(281)	(393)	–	(1,489)
Disposals	–	(22)	–	–	–	–	(22)
At 31 December 2021, net of accumulated depreciation and impairment	3,554	–	763	2,510	–	613	7,440
At 31 December 2021:							
Cost	6,750	–	2,108	2,885	1,155	613	13,511
Accumulated depreciation . . .	(3,196)	–	(1,345)	(375)	(1,155)	–	(6,071)
Net carrying amount	3,554	–	763	2,510	–	613	7,440
	Buildings	Plant and machinery	Equipment and others	Motor vehicles	Leasehold improvements	Construction in progress	Total
	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000
30 April 2022							
At 1 January 2022:							
Cost	6,750	–	2,108	2,885	1,155	613	13,511
Accumulated depreciation . . .	(3,196)	–	(1,345)	(375)	(1,155)	–	(6,071)
Net carrying amount	3,554	–	763	2,510	–	613	7,440
At 1 January 2022, net of accumulated depreciation and impairment	3,554	–	763	2,510	–	613	7,440
Additions	–	–	22	–	–	–	22
Depreciation provided during the period	(108)	–	(124)	(183)	–	–	(415)
At 30 April 2022, net of accumulated depreciation and impairment	3,446	–	661	2,327	–	613	7,047
At 30 April 2022:							
Cost	6,750	–	2,130	2,885	1,155	613	13,533
Accumulated depreciation . . .	(3,304)	–	(1,469)	(558)	(1,155)	–	(6,486)
Net carrying amount	3,446	–	661	2,327	–	613	7,047

As at 31 December 2019, 2020 and 2021 and 30 April 2022, certain of the Company's buildings with net carrying amounts of approximately RMB4,203,000, nil, nil and nil, respectively, were pledged to secure certain interest-bearing bank borrowings of the Group.

15. RIGHT-OF-USE ASSETS AND LEASE LIABILITIES

The Group as a lessee

The Group has lease contracts for various items of buildings, motor vehicles and other equipment used in its operations. Leases of buildings generally have lease terms between 30 months and 8 years, while motor vehicles generally have lease terms of 5 years. Other equipment generally has lease terms of 12 months or less and/or is individually of low value. Generally, the Group is restricted from assigning and subleasing the leased assets outside the Group.

(a) Right-of-use assets

The carrying amounts of the Group's right-of-use assets and the movements during each of the Relevant Periods are as follows:

The Group:

	Buildings	Motor vehicles	Leasehold land	Total
	RMB'000	RMB'000	RMB'000	RMB'000
As at 1 January 2019	32,744	400	158,305	191,449
Additions	5,241	—	—	5,241
Depreciation charge	(7,309)	(100)	(4,762)	(12,171)
As at 31 December 2019 and 1 January 2020 . . .	30,676	300	153,543	184,519
Additions	45,687	296	—	45,983
Depreciation charge	(17,068)	(110)	(4,762)	(21,940)
As at 31 December 2020 and 1 January 2021 . . .	59,295	486	148,781	208,562
Acquisition of a subsidiary (note 35)	3,104	—	—	3,104
Additions	—	—	16,122	16,122
Revision of a lease term arising from a change in the term of a lease	10,861	—	—	10,861
Revision of a lease payment arising from a change in the payment of a lease	—	(111)	—	(111)
Depreciation charge	(17,507)	(104)	(5,460)	(23,071)
As at 31 December 2021 and 1 January 2022 . . .	55,753	271	159,443	215,467
Depreciation charge	(5,792)	(105)	(2,662)	(8,559)
As at 30 April 2022	49,961	166	156,781	206,908

As at 31 December 2019, 2020 and 2021 and 30 April 2022, certain of the leasehold land with aggregate net carrying amount values of approximately RMB34,348,000, RMB6,502,000, RMB56,022,000 and RMB55,407,000, respectively, was pledged to secure certain interest-bearing bank borrowings of the Group (note 28).

The carrying amounts of the Company's right-of-use assets and the movements during each of the Relevant Periods are as follows:

The Company:

	Buildings	Motor vehicles	Leasehold land	Total
	RMB'000	RMB'000	RMB'000	RMB'000
As at 1 January 2019	6,860	400	—	7,260
Additions	5,241	—	—	5,241
Depreciation charge	(4,004)	(100)	—	(4,104)
As at 31 December 2019 and 1 January 2020 . . .	8,097	300	—	8,397
Additions	45,687	296	—	45,983
Depreciation charge	(13,763)	(110)	—	(13,873)
As at 31 December 2020 and 1 January 2021 . . .	40,021	486	—	40,507
Revision of a lease term arising from a change in the term of a lease	10,861	—	16,122	26,983
Revision of a lease payment arising from a change in the payment of a lease	—	(111)	—	(111)
Depreciation charge	(13,480)	(104)	(734)	(14,318)
As at 31 December 2021 and 1 January 2022 . . .	37,402	271	15,388	53,061
Depreciation charge	(4,284)	(105)	(1,075)	(5,464)
As at 30 April 2022	33,118	166	14,313	47,597

(b) Lease liabilities

The carrying amount of lease liabilities and the movements during each of the Relevant Periods are as follows:

The Group:

	As at 31 December			As at 30 April
	2019	2020	2021	2022
	RMB'000	RMB'000	RMB'000	RMB'000
Carrying amount at the beginning of the year/period	32,312	30,813	61,312	58,733
New lease	5,241	45,687	–	–
Revision of a lease term arising from a change in the term of a lease	–	–	10,861	–
Additions as a result of acquisition of a subsidiary (note 35)	–	–	3,209	–
Revision of a lease term payment arising from a change in the payment of a lease	–	–	(111)	–
Accretion of interest recognised during the year/period	1,465	2,790	2,376	723
Payments	(8,205)	(17,978)	(18,914)	(3,055)
Carrying amount at the end of the year/period	30,813	61,312	58,733	56,401
Analysed into:				
Current portion	7,351	14,627	16,904	17,300
Non-current portion	23,462	46,685	41,829	39,101

The maturity analysis of lease liabilities is disclosed in note 43 to the Historical Financial Information.

As disclosed in note 2.1 to the Historical Financial Information, the Group has early adopted the amendment to IFRS 16 and applied the practical expedient to all eligible rent concessions granted by the lessors for leases of certain plant and equipment during each of the Relevant Periods.

The Company:

	As at 31 December			As at 30 April
	2019	2020	2021	2022
	RMB'000	RMB'000	RMB'000	RMB'000
Carrying amount at the beginning of the year/period	6,653	7,705	40,987	38,955
New lease	5,241	45,687	–	–
Revision of a lease term arising from a change in the term of a lease	–	–	10,861	–
Revision of a lease term payment arising from a change in the payment of a lease	–	–	(111)	–
Accretion of interest recognised during the year/period	321	1,767	1,426	438
Payments	(4,510)	(14,172)	(14,208)	(1,382)
Carrying amount at the end of the year/period	7,705	40,987	38,955	38,011
Analysed into:				
Current portion	4,568	11,597	12,302	12,790
Non-current portion	3,137	29,390	26,653	25,221

(c) The amounts recognised in profit or loss in relation to leases are as follows:

The Group:

	Year ended 31 December			Four months ended 30 April	
	2019	2020	2021	2021	2022
	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000
				(Unaudited)	
Interest on lease liabilities	1,465	2,790	2,376	774	723
Depreciation charge of right-of-use assets	12,171	21,940	23,071	7,069	8,559
Expense relating to short-term leases	11,034	2,836	2,879	952	1,280
Expense relating to leases of low-value assets	87	70	2	–	11
Total amount recognised in profit or loss	24,757	27,636	28,328	8,795	10,573

The Company:

	Year ended 31 December			Four months ended 30 April	
	2019	2020	2021	2021	2022
	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000
				(Unaudited)	
Interest on lease liabilities	321	1,767	1,426	463	438
Depreciation charge of right-of-use assets	4,104	13,873	14,318	4,381	5,464
Expense relating to short-term leases	9,693	625	854	268	316
Expense relating to leases of low-value assets	51	33	2	–	–
Total amount recognised in profit or loss	14,169	16,298	16,600	5,112	6,218

(d) The total cash outflow for leases is disclosed in note 36 to the Historical Financial Information.

(e) Included in the lease liabilities, amounts of nil, RMB37,850,000, RMB29,390,000 and RMB29,726,000 as at 31 December 2019, 2020 and 2021 and 30 April 2022, respectively, were due to related parties. Details were disclosed in note 40(b) to the Historical Financial Information.

The Group as a lessor

The Group leases its properties consisting of one industrial property under operating lease arrangements. Rental income recognised by the Group during the years ended 31 December 2019, 2020 and 2021 and the four months ended 30 April 2021 and 2022 was RMB171,000, RMB343,000, RMB343,000, RMB120,000, and RMB105,000, respectively.

At the end of each of the Relevant Periods, the undiscounted lease payments receivable by the Group in future periods under non-cancellable operating leases with its tenants are as follows:

	As at 31 December			As at 30 April
	2019	2020	2021	2022
	RMB'000	RMB'000	RMB'000	RMB'000
Within 1 year	45	225	225	165
After 1 year but within 2 years	–	180	45	–
After 2 years but within 3 years	–	45	–	–
	45	450	270	165

16. GOODWILL

	Rong'an Bio	AIM Honesty	AIM Kanghuai	Liverna	Total
	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000
At 1 January 2019:					
Cost	82,647	298,238	111,932	–	492,817
Accumulated impairment	–	(150,474)	(107,771)	–	(258,245)
Net carrying amount	82,647	147,764	4,161	–	234,572
Cost at 1 January 2019, net of accumulated impairment	82,647	147,764	4,161	–	234,572
Impairment during the year	–	–	–	–	–
At 31 December 2019	82,647	147,764	4,161	–	234,572
At 31 December 2019:					
Cost	82,647	298,238	111,932	–	492,817
Accumulated impairment	–	(150,474)	(107,771)	–	(258,245)
Net carrying amount	82,647	147,764	4,161	–	234,572
Cost at 1 January 2020, net of accumulated impairment	82,647	147,764	4,161	–	234,572
Impairment during the year	–	–	–	–	–
At 31 December 2020	82,647	147,764	4,161	–	234,572
At 31 December 2020:					
Cost	82,647	298,238	111,932	–	492,817
Accumulated impairment	–	(150,474)	(107,771)	–	(258,245)
Net carrying amount	82,647	147,764	4,161	–	234,572
Cost at 1 January 2021, net of accumulated impairment	82,647	147,764	4,161	–	234,572
Acquisition of a subsidiary (note 35)	–	–	–	248,325	248,325
Impairment during the year	–	–	–	–	–
At 31 December 2021	82,647	147,764	4,161	248,325	482,897
At 31 December 2021:					
Cost	82,647	298,238	111,932	248,325	741,142
Accumulated impairment	–	(150,474)	(107,771)	–	(258,245)
Net carrying amount	82,647	147,764	4,161	248,325	482,897
Cost at 1 January 2022, net of accumulated impairment	82,647	147,764	4,161	248,325	482,897
Impairment during the period	–	–	–	–	–
At 30 April 2022	82,647	147,764	4,161	248,325	482,897
At 30 April 2022:					
Cost	82,647	298,238	111,932	248,325	741,142
Accumulated impairment	–	(150,474)	(107,771)	–	(258,245)
Net carrying amount	82,647	147,764	4,161	248,325	482,897

Impairment testing of goodwill

Goodwill acquired through business combinations is allocated to the following cash-generating units for impairment testing:

- Rong'an Bio cash-generating unit;
- AIM Honesty cash-generating unit;
- AIM Kanghuai cash-generating unit; and
- Liverna cash-generating unit.

Rong'an Bio cash-generating unit

The recoverable amount of the Rong'an Bio cash-generating unit has been determined based on a value-in-use calculation using cash flow projections based on financial budgets covering a five-year period approved by senior management. The discount rates applied to the cash flow projections are 15.14%, 14.78% and 13.78% for the years ended 31 December 2019, 2020 and 2021, respectively. The growth rate used to extrapolate the cash flows beyond the five-year period is 3% for the years ended 31 December 2019, 2020 and 2021. Management of the Rong'an Bio unit believes that this growth rate is justified, which was the same as the long-term average growth rate of the vaccine industry.

AIM Honesty cash-generating unit

The recoverable amount of the AIM Honesty cash-generating unit has been determined based on a value-in-use calculation using cash flow projections based on financial budgets covering a five-year period approved by senior management. The discount rates applied to the cash flow projections are 15.10%, 14.80%, and 13.81% for the years ended 31 December 2019, 2020 and 2021, respectively. The growth rate used to extrapolate the cash flows beyond the five-year period is 3% for the years ended 31 December 2019, 2020 and 2021. Management of the AIM Honesty unit believes that this growth rate is justified, which was the same as the long-term average growth rate of the vaccine industry.

AIM Kanghuai cash-generating unit

The recoverable amount of the AIM Kanghuai cash-generating unit has been determined based on a value-in-use calculation using cash flow projections based on financial budgets covering an eight-year period approved by senior management. The senior management considers that using an eight-year forecast period for the financial budget in the goodwill impairment test is appropriate because the useful life of AIM Kanghuai's relevant intellectual property is no less than eight years, and it generally takes longer for a vaccine company to reach perpetual growth mode, compared to companies in other industries, especially when its products are still under clinical trials and the markets of such products are at an early stage of development with substantial growth potential. Hence, the financial budget covering an eight-year period was used as the senior management of the Group believes that a forecasted period longer than five years is feasible and reflects a more accurate entity value. The discount rates applied to the cash flow projections are 14.80%, 14.89%, and 14.17% for the years ended 31 December 2019, 2020 and 2021, respectively. The growth rate used to extrapolate the cash flows beyond the eight-year period is 3% for the years ended 31 December 2019, 2020 and 2021. Management of the AIM Kanghuai unit believes that this growth rate is justified, which was the same as the long-term average growth rate of the vaccine industry.

Liverna cash-generating unit

The recoverable amount of the Liverna cash-generating unit has been determined based on a value-in-use calculation using cash flow projections based on financial budgets covering a twelve-year period approved by senior management. The senior management considers that using a twelve-year forecast period for the financial budget in the goodwill impairment test is appropriate because the useful lives of Liverna's relevant intellectual properties range from eight years to twenty years, and it generally takes longer for a vaccine company to reach perpetual growth mode, compared to companies in other industries, especially when its products are still under clinical trials and the markets of such products are at an early stage of development with substantial growth potential. Hence, the financial budget covering a twelve-year period was used as the senior management of the Group believes that a forecasted period longer than five years is feasible and reflects a more accurate entity value. The discount rate applied to the cash flow projections is 17.22%. The growth rate used to extrapolate the cash flows beyond the twelve-year period is 3% for the year ended 31 December 2021. Management of the Liverna unit believes that this growth rate is justified, which was the same as the long-term average growth rate of the vaccine industry. Further details of the acquisition are included in the disclosures in note 34 to the consolidated financial statements.

Assumptions were used in the value-in-use calculation of the above cash-generating units for 31 December 2019, 2020 and 2021. The following describes each key assumption on which management has based its cash flow projections to undertake impairment testing of goodwill:

Budgeted gross margins – The basis used to determine the value assigned to the budgeted gross margins is the average gross margins achieved in the year immediately before the budget year, increased for expected efficiency improvements, and expected market development.

Discount rates – The discount rates used are before tax and reflect specific risks relating to the relevant units.

The values assigned to the key assumptions on market development and discount rates are consistent with external information sources.

The following table sets forth the headroom of Rong'an Bio cash-generating unit, AIM Honesty cash-generating unit, AIM Kanghuai cash-generating unit, and Liverna cash-generating unit under impairment testing as of the dates indicated.

	Recoverable amount of the cash-generating unit exceeds its carrying amount		
	As at 31 December		
	2019 RMB'000	2020 RMB'000	2021 RMB'000
Rong'an Bio	2,105,062	2,480,990	2,259,007
AIM Honesty	473,593	658,274	774,738
AIM Kanghuai	82,941	34,392	31,512
Liverna	–	–	162,944

The following tables set forth the impact of reasonably possible changes in each of the key assumptions, with all other variables held constant, on impairment testing of Rong'an Bio cash-generating unit, AIM Honesty cash-generating unit, AIM Kanghuai cash-generating unit, and Liverna cash-generating unit as of the dates indicated.

	Recoverable amount of the cash-generating unit exceeds its carrying amount decrease by		
	As at 31 December 2019		
	Rong'an Bio	AIM Honesty	AIM Kanghuai
	RMB'000	RMB'000	RMB'000
Possible changes of key assumptions:			
Gross margin rate decreased by 5.0%	15,000	5,000	6,000
Discount rate increased by 1.0%	297,555	85,967	7,164

	Recoverable amount of the cash-generating unit exceeds its carrying amount decrease by		
	As at 31 December 2020		
	Rong'an Bio	AIM Honesty	AIM Kanghuai
	RMB'000	RMB'000	RMB'000
Possible changes of key assumptions:			
Gross margin rate decreased by 5.0%	8,000	4,000	28,000
Discount rate increased by 1.0%	375,640	103,580	8,027

	Recoverable amount of the cash-generating unit exceeds its carrying amount decrease by			
	As at 31 December 2021			
	Rong'an Bio	AIM Honesty	AIM Kanghuai	Liverna
	RMB'000	RMB'000	RMB'000	RMB'000
Possible changes of key assumptions:				
Gross margin rate decreased by 5.0%	10,000	17,000	23,000	19,703
Discount rate increased by 1.0%	358,316	137,579	10,120	156,600

As disclosed in note 3 to the Historical Financial Information, goodwill is tested for impairment annually or more frequently if events or changes in circumstances indicate that the carrying amount may be impaired. In this regard, the Company's management did not identify any significant adverse changes in the operating results and the macro environment during the four months ended 30 April 2022, and considering that there was sufficient headroom based on the above, the directors of the Company believe that any reasonably possible change in any of the key assumptions would not cause the carrying amounts of the Rong'an Bio cash-generating unit, AIM Honesty cash-generating unit, AIM Kanghuai cash-generating unit and Liverna cash-generating unit to exceed their recoverable amounts.

17. OTHER INTANGIBLE ASSETS

	Deferred development costs	Patents and proprietary know-how	Brands	Software	Others	Total
	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000
31 December 2019						
At 1 January 2019:						
Cost	17,059	511,517	23,220	5,509	3,191	560,496
Accumulated amortisation	(376)	(125,227)	(5,038)	(2,589)	(3,160)	(136,390)
Net carrying amount	16,683	386,290	18,182	2,920	31	424,106
At 1 January 2019, net of accumulated amortisation	16,683	386,290	18,182	2,920	31	424,106
Additions	—	—	—	414	69	483
Amortisation provided during the year	(1,706)	(30,436)	(1,298)	(383)	(9)	(33,832)
At 31 December 2019, net of accumulated amortisation	14,977	355,854	16,884	2,951	91	390,757
At 31 December 2019:						
Cost	17,059	511,517	23,220	5,923	3,260	560,979
Accumulated amortisation	(2,082)	(155,663)	(6,336)	(2,972)	(3,169)	(170,222)
Net carrying amount	14,977	355,854	16,884	2,951	91	390,757

	Deferred development costs	Patents and proprietary know-how	Brands	Software	Others	Total
	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000
31 December 2020						
At 1 January 2020:						
Cost	17,059	511,517	23,220	5,923	3,260	560,979
Accumulated amortisation	(2,082)	(155,663)	(6,336)	(2,972)	(3,169)	(170,222)
Net carrying amount	14,977	355,854	16,884	2,951	91	390,757
At 1 January 2020, net of accumulated amortisation	14,977	355,854	16,884	2,951	91	390,757
Additions	–	–	–	36	–	36
Amortisation provided during the year . .	(1,706)	(30,436)	(1,298)	(365)	(91)	(33,896)
Disposal	–	–	–	(41)	–	(41)
At 31 December 2020, net of accumulated amortisation	13,271	325,418	15,586	2,581	–	356,856
At 31 December 2020:						
Cost	17,059	511,517	23,220	5,906	3,117	560,819
Accumulated amortisation	(3,788)	(186,099)	(7,634)	(3,325)	(3,117)	(203,963)
Net carrying amount	13,271	325,418	15,586	2,581	–	356,856
	Deferred development costs	Patents and proprietary know-how	Brands	Software	Others	Total
	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000
31 December 2021						
At 1 January 2021:						
Cost	17,059	511,517	23,220	5,906	3,117	560,819
Accumulated amortisation	(3,788)	(186,099)	(7,634)	(3,325)	(3,117)	(203,963)
Net carrying amount	13,271	325,418	15,586	2,581	–	356,856
Cost at 1 January 2021, net of accumulated amortisation	13,271	325,418	15,586	2,581	–	356,856
Additions	–	–	–	225	–	225
Acquisition of a subsidiary (note 35) . .	1,869,400	–	–	2	–	1,869,402
Amortisation provided during the year . .	(1,706)	(30,436)	(1,298)	(350)	–	(33,790)
At 31 December 2021	1,880,965	294,982	14,288	2,458	–	2,192,693
At 31 December 2021:						
Cost	1,886,459	511,517	23,220	6,133	3,117	2,430,446
Accumulated amortisation	(5,494)	(216,535)	(8,932)	(3,675)	(3,117)	(237,753)
Net carrying amount	1,880,965	294,982	14,288	2,458	–	2,192,693
	Deferred development costs	Patents and proprietary know-how	Brands	Software	Others	Total
	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000
30 April 2022						
At 1 January 2022:						
Cost	1,886,459	511,517	23,220	6,133	3,117	2,430,446
Accumulated amortisation	(5,494)	(216,535)	(8,932)	(3,675)	(3,117)	(237,753)
Net carrying amount	1,880,965	294,982	14,288	2,458	–	2,192,693
Cost at 1 January 2022, net of accumulated amortisation	1,880,965	294,982	14,288	2,458	–	2,192,693
Additions	30,254	–	–	–	–	30,254
Amortisation provided during the period .	(569)	(10,158)	(433)	(123)	–	(11,283)
At 30 April 2022	1,910,650	284,824	13,855	2,335	–	2,211,664
At 30 April 2022:						
Cost	1,916,713	511,517	23,220	6,133	3,117	2,460,700
Accumulated amortisation	(6,063)	(226,693)	(9,365)	(3,798)	(3,117)	(249,036)
Net carrying amount	1,910,650	284,824	13,855	2,335	–	2,211,664

Impairment testing of the deferred development costs

Included in the deferred development costs, a balance of RMB1,869,400,000 as at 31 December 2021 was acquired deferred development costs as a result of the acquisition of Liverna in May 2021, which were not yet available for use but subject to mandatory impairment testing on an annual basis. The recoverable amount is determined based on the higher of fair value less cost to sell and value in use

The fair value of the deferred development costs not yet available for use was determined using the multi-period excess earnings method, taking into account the nature of the assets, using cash flow projections and the contributory asset charges. Cash flow projection is estimated by management based on the financial budget covering the expected life of the respective vaccine products, ranging from 8 to 20 years. The senior management considers that using an 8 to 20-year forecast period for the financial budget in the impairment testing of the deferred development costs is appropriate because it generally takes longer for a vaccine company to reach a stable growth mode, compared to companies in other industries, especially when its products are still under clinical trials and the markets of such products are at an early stage of development with substantial growth potential.

Key assumptions used in the calculation are as follows:

	2021
Discount rate	15.45%
Contributory asset charges	1.38%-5.11%

Based on the result of impairment test, the recoverable amount of deferred development costs not yet available for use is estimated to exceed the carrying amount as at 31 December 2021.

The following table sets forth the headroom of the deferred development costs under impairment testing at 31 December 2021.

	Recoverable amount exceeds its carrying amount
	As at 31 December 2021
	RMB'000
Deferred development costs	109,095

The following tables set forth the impact of reasonably possible changes in each of the key assumptions, with all other variables held constant, on impairment testing of the deferred development costs as at 31 December 2021.

	Recoverable amount exceeds its carrying amount decrease by
	As at 31 December 2021
	RMB'000
Possible changes of key assumptions:	
Discount rate increased by 1.0%	92,400
Contributory asset charges increased by 1.0%	25,220

As disclosed in note 3 to the Historical Financial Information, deferred development costs not yet available for use are tested for impairment annually or more frequently if events or changes in circumstances indicate that the carrying amount may be impaired. In this regard, the Company's management did not identify any significant adverse changes in the operating results and the macro environment during the four months ended 30 April 2022, and considering that there was sufficient headroom, the directors of the Company believe that any reasonably possible change in any of the key assumptions would not cause the carrying amount of the deferred development costs not yet available for use to exceed their recoverable amounts.

Except for this, there was no other intangible asset which was not yet available for use but subject to mandatory impairment testing during the Relevant Periods.

18. PREPAYMENTS FOR EQUIPMENT**The Group:**

	As at 31 December			As at 30 April
	2019	2020	2021	2022
	RMB'000	RMB'000	RMB'000	RMB'000
Prepayments for equipment	95,180	107,795	149,565	228,428

The increased prepayments for equipment at 30 April 2022 was mainly due to the increase in equipment investment in relation to support upcoming launch of new vaccine candidates.

The Company:

	As at 31 December			As at 30 April
	2019	2020	2021	2022
	RMB'000	RMB'000	RMB'000	RMB'000
Prepayments for equipment	—	—	61,728	61,728

19. OTHER NON-CURRENT ASSETS

	As at 31 December			As at 30 April
	2019	2020	2021	2022
	RMB'000	RMB'000	RMB'000	RMB'000
Value-added-tax recoverable	13,362	18,576	11,448	14
Others	2,885	2,796	6,466	4,955
	16,247	21,372	17,914	4,969

20. INVENTORIES

	As at 31 December			As at 30 April
	2019	2020	2021	2022
	RMB'000	RMB'000	RMB'000	RMB'000
Raw materials	52,277	54,368	114,360	130,264
Work in progress	78,983	84,348	86,862	101,814
Finished goods	97,556	113,997	166,175	209,738
	228,816	252,713	367,397	441,816

21. TRADE AND BILLS RECEIVABLES

	As at 31 December			As at 30 April
	2019	2020	2021	2022
	RMB'000	RMB'000	RMB'000	RMB'000
Trade receivables	472,974	888,335	1,089,903	1,048,921
Bills receivable	700	—	—	279
Impairment	(28,836)	(18,471)	(26,250)	(31,165)
	444,838	869,864	1,063,653	1,018,035

The Group's trading terms with its customers are mainly on credit. The credit period is generally from two to six months. Each customer has a maximum credit limit. The Group seeks to maintain strict control over its outstanding receivables and has a credit control department to minimise credit risk. Overdue balances are reviewed regularly by senior management. In view of the aforementioned and the fact that the Group's trade receivables relate to a large number of diversified customers, there is no significant concentration of credit risk. The Group does not hold any collateral or other credit enhancements over its trade receivable balances. Trade receivables are non-interest-bearing.

The Group's bills receivable were all aged within six months and were neither past due nor impaired.

An ageing analysis of the Group's trade receivables, based on the invoice date and net of loss allowance, as at the end of each of the Relevant Periods is as follows:

	As at 31 December			As at 30 April
	2019	2020	2021	2022
	RMB'000	RMB'000	RMB'000	RMB'000
Within 1 year	391,964	836,921	945,047	847,989
1-2 years	42,927	26,081	110,085	161,998
2-3 years	8,050	4,891	6,145	5,082
3-4 years	961	1,822	1,893	2,315
4-5 years	236	149	483	372
Over 5 years	—	—	—	—
	444,138	869,864	1,063,653	1,017,756

The movements in the loss allowance for impairment of trade receivables are as follows:

	As at 31 December			As at 30 April
	2019	2020	2021	2022
	RMB'000	RMB'000	RMB'000	RMB'000
At the beginning of the year/period	31,052	28,836	18,471	26,250
Impairment losses, net	(2,216)	176	7,984	4,915
Amount written off as uncollectible	—	(10,541)	(205)	—
At the end of the year/period	28,836	18,471	26,250	31,165

An impairment analysis is performed at each reporting date using a provision matrix to measure expected credit losses. The provision rates are based on ageing analysis of customers that have similar loss patterns. The calculation reflects the probability-weighted outcome, the time value of money and reasonable and supportable information that is available at the reporting date about past events, current conditions and forecasts of future economic conditions. Generally, trade receivables are written off according to management approval.

Set out below is the information about the credit risk exposure on the Group's trade receivables using a provision matrix:

As at 31 December 2019

	Expected credit loss rate (%)	Gross carrying amount	Expected credit losses	Net carrying amount
		RMB'000	RMB'000	RMB'000
Provision on an individual basis	100.00	14,599	14,599	—
Provision on a collective basis				
Aged less than 1 year	0.78	395,037	3,073	391,964
Aged 1 to 2 years	7.19	46,253	3,326	42,927
Aged 2 to 3 years	23.50	10,523	2,473	8,050
Aged 3 to 4 years	66.10	2,835	1,874	961
Aged 4 to 5 years	89.00	2,159	1,923	236
Aged over 5 years	100.00	1,568	1,568	—
		472,974	28,836	444,138

As at 31 December 2020

	Expected credit loss rate (%)	Gross carrying amount	Expected credit losses	Net carrying amount
		RMB'000	RMB'000	RMB'000
Provision on an individual basis	100.00	3,430	3,430	—
Provision on a collective basis				
Aged less than 1 year	0.54	841,438	4,517	836,921
Aged 1 to 2 years	6.27	27,827	1,746	26,081
Aged 2 to 3 years	26.62	6,665	1,774	4,891
Aged 3 to 4 years	59.61	4,510	2,688	1,822
Aged 4 to 5 years	88.26	1,274	1,125	149
Aged over 5 years	100.00	3,191	3,191	—
		888,335	18,471	869,864

As at 31 December 2021

	Expected credit loss rate (%)	Gross carrying amount	Expected credit losses	Net carrying amount
		RMB'000	RMB'000	RMB'000
Provision on an individual basis	100.00	3,430	3,430	–
Provision on a collective basis				
Aged less than 1 year	0.54	950,191	5,144	945,047
Aged 1 to 2 years	5.65	116,678	6,593	110,085
Aged 2 to 3 years	24.38	8,126	1,981	6,145
Aged 3 to 4 years	54.65	4,174	2,281	1,893
Aged 4 to 5 years	86.15	3,488	3,005	483
Aged over 5 years	100.00	3,816	3,816	–
		<u>1,089,903</u>	<u>26,250</u>	<u>1,063,653</u>

As at 30 April 2022

	Expected credit loss rate (%)	Gross carrying amount	Expected credit losses	Net carrying amount
		RMB'000	RMB'000	RMB'000
Provision on an individual basis	100.00	3,430	3,430	–
Provision on a collective basis				
Aged less than 1 year	0.57	852,826	4,837	847,989
Aged 1 to 2 years	5.92	172,194	10,196	161,998
Aged 2 to 3 years	25.55	6,826	1,744	5,082
Aged 3 to 4 years	57.27	5,417	3,102	2,315
Aged 4 to 5 years	90.27	3,822	3,450	372
Aged over 5 years	100.00	4,406	4,406	–
		<u>1,048,921</u>	<u>31,165</u>	<u>1,017,756</u>

22. PREPAYMENTS, OTHER RECEIVABLES AND OTHER ASSETS**The Group:**

	As at 31 December			As at 30 April
	2019	2020	2021	2022
	RMB'000	RMB'000	RMB'000	RMB'000
Prepayments	9,986	19,762	17,510	30,555
Deposits for acquisition (i)	81,751	81,751	81,751	81,751
Deposits receivable	7,711	6,043	11,545	12,566
Receivables of land payments	5,375	5,375	5,375	5,375
Prepaid listing expenses	–	–	31,948	40,145
Other receivables	11,646	10,676	11,988	14,228
	<u>116,469</u>	<u>123,607</u>	<u>160,117</u>	<u>184,620</u>
Impairment allowance	<u>(14,730)</u>	<u>(11,535)</u>	<u>(11,545)</u>	<u>(11,545)</u>
	<u>101,739</u>	<u>112,072</u>	<u>148,572</u>	<u>173,075</u>

- (i) Deposits for acquisition of RMB81,751,000, RMB81,751,000, RMB81,751,000 and RMB81,751,000 as of 31 December 2019, 2020 and 2021 and 30 April 2022, respectively, represented deposit balance in Renminbi paid to a previous offshore shareholder of AIM Weixin for the acquisition of AIM Weixin. The consideration for this acquisition payable in U.S. dollars has not been paid and was recorded in payable for acquisition included in other payables and accruals, amounting to RMB94,713,000, RMB88,586,000, RMB86,560,000 and RMB89,846,000 as of 31 December 2019, 2020 and 2021 and 30 April 2022, respectively, as there is no legally enforceable right to set off the respective receivable and payable balances. The management of the Company considers there is no recoverability issue for this deposits as the Company is in the process of proceeding with the final settlement and the deposit balance will be collected upon the settlement of the payables.

Impairment of other receivables is measured as either 12-month expected credit losses or lifetime expected credit losses, depending on whether there has been a significant increase in credit risk since initial recognition. If a significant increase in credit risk of a receivable has occurred since initial recognition, then impairment is measured as lifetime expected credit losses.

Reconciliation of allowance for receivables of land payments and other receivables is as follows:

As at 31 December 2019

	12-month ECLs	Lifetime ECLs			
	Stage 1	Stage 2 Individual basis	Stage 2 Collective basis	Stage 3	Total
	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000
At 1 January 2019	124	–	–	14,493	14,617
Impairment losses, net	(109)	–	–	222	113
	15	–	–	14,715	14,730

As at 31 December 2020

	12-month ECLs	Lifetime ECLs			
	Stage 1	Stage 2 Individual basis	Stage 2 Collective basis	Stage 3	Total
	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000
At 1 January 2020	15	–	–	14,715	14,730
Impairment losses, net	–	–	–	650	650
Written off	(15)	–	–	(3,830)	(3,845)
	–	–	–	11,535	11,535

As at 31 December 2021

	12-month ECLs	Lifetime ECLs			
	Stage 1	Stage 2 Individual basis	Stage 2 Collective basis	Stage 3	Total
	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000
At 1 January 2021	–	–	–	11,535	11,535
Impairment losses, net	(3)	–	–	–	(3)
Additions as a result of acquisition of a subsidiary	13	–	–	–	13
	10	–	–	11,535	11,545

As at 30 April 2022

	12-month ECLs	Lifetime ECLs			
	Stage 1	Stage 2 Individual basis	Stage 2 Collective basis	Stage 3	Total
	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000
At 1 January 2022	10	–	–	11,535	11,545
Impairment losses, net	–	–	–	–	–
	10	–	–	11,535	11,545

The Company:

	As at 31 December			As at 30 April
	2019	2020	2021	2022
	RMB'000	RMB'000	RMB'000	RMB'000
Prepayments	2,090	3,016	2,170	9,305
Receivables of land payments	5,375	5,375	5,375	5,375
Deposits receivable	1,188	37	50	50
Prepaid listing expenses	–	–	31,948	40,145
Other receivables	1,372	370	470	673
	10,025	8,798	40,013	55,548
Impairment allowance	(7,382)	(5,375)	(5,375)	(5,375)
	2,643	3,423	34,638	50,173

23. FINANCIAL ASSETS AT FAIR VALUE THROUGH PROFIT OR LOSS

	As at 31 December			As at 30 April
	2019	2020	2021	2022
	RMB'000	RMB'000	RMB'000	RMB'000
Wealth management product investments at fair value	50,000	—	100,000	—

The wealth management product investment as of 31 December 2019 did not have fixed terms and its expected annual yield was 2.55%. The Group redeemed the products on 2 January 2020.

The wealth management product investment as of 31 December 2021 which has fixed terms was due on 1 April 2022 and its expected annual yield was 1.50%-3.25%.

24. CASH AND CASH EQUIVALENTS AND RESTRICTED CASH

The Group:

	As at 31 December			As at 30 April
	2019	2020	2021	2022
	RMB'000	RMB'000	RMB'000	RMB'000
Cash and bank balances	182,816	972,830	612,792	631,084
Time deposit	191,543	154,406	56,270	80,559
	374,359	1,127,236	669,062	711,643
Less:				
Pledged time deposit for performance bond . .	32,863	15,588	13,365	11,804
Pledged time deposit for project deposit . . .	—	8,818	8,955	8,955
Restricted bank deposits (i)	22,857	—	—	400
Cash and cash equivalents	318,639	1,102,830	646,742	690,484

The Company:

	As at 31 December			As at 30 April
	2019	2020	2021	2022
	RMB'000	RMB'000	RMB'000	RMB'000
Cash and bank balances	33,883	624,546	163,285	41,301
Time deposit	—	—	—	19,400
Cash and cash equivalents	33,883	624,546	163,285	60,701

(i) Restricted bank deposits included:

- As at 31 December 2019, bank deposit amounted to RMB22,857,000 have been frozen by the court due to litigation. As the litigation was settled in 2020, such bank deposit had been unfrozen accordingly.

The RMB is not freely convertible into other currencies, however, under Mainland China's Foreign Exchange Control Regulations and Administration of Settlement, Sale and Payment of Foreign Exchange Regulations, the Group is permitted to exchange RMB for other currencies through banks authorised to conduct foreign exchange business.

Cash at banks earns interest at floating rates based on daily bank deposit rates. Short term time deposits are made for varying periods between one day and three months, depending on the immediate cash requirements of the Group. The bank balances and time deposits are deposited with creditworthy banks with no recent history of default.

25. TRADE PAYABLES

An ageing analysis of the trade payables as at the end of each of the Relevant Periods, based on the invoice date, is as follows:

The Group:

	As at 31 December			As at 30 April
	2019	2020	2021	2022
	RMB'000	RMB'000	RMB'000	RMB'000
Within 1 year	41,167	35,166	50,287	72,609
1 to 2 years	579	1,728	742	1,994
2 to 3 years	339	92	50	243
Over 3 years	840	986	683	531
	<u>42,925</u>	<u>37,972</u>	<u>51,762</u>	<u>75,377</u>

The Company:

	As at 31 December			As at 30 April
	2019	2020	2021	2022
	RMB'000	RMB'000	RMB'000	RMB'000
Within 1 year	193,477	321,969	277,840	219,089
1 to 2 years	–	–	21,224	71,872
2 to 3 years	–	–	–	4,051
	<u>193,477</u>	<u>321,969</u>	<u>299,064</u>	<u>295,012</u>

The trade payables are non-interest-bearing and are normally settled on 30 to 90-day terms.

26. OTHER PAYABLES AND ACCRUALS

The Group

	As at 31 December			As at 30 April
	2019	2020	2021	2022
	RMB'000	RMB'000	RMB'000	RMB'000
Promotion fee payable	262,919	346,382	320,218	313,759
Payable for acquisition	94,713	88,586	86,560	89,846
Payable for purchase of property, plant and equipment	30,493	98,058	316,160	332,014
Deposits payable	84,936	88,325	77,980	78,191
Salary payables	32,237	53,011	88,268	48,782
Other tax payables	24,734	17,863	20,611	12,122
Freight payable	6,415	34,537	68,510	64,954
Others (i)	185,604	102,594	25,077	45,881
	<u>722,051</u>	<u>829,356</u>	<u>1,003,384</u>	<u>985,549</u>

- (i) Included in others, balances of RMB146,180,000, RMB76,197,000, nil and nil as at 31 December 2019, 2020 and 2021 and 30 April 2022, respectively, represented certain liabilities recorded by AIM Honesty before it was acquired by the Company from Lhasa Meihua Biological Investment Holdings Co., Ltd. ("Lhasa Meihua") in 2015. According to the agreement between the Company and Lhasa Meihua, such liabilities should be assumed by Lhasa Meihua. More details had been disclosed in note 40 (d).

The Company

	As at 31 December			As at 30 April
	2019	2020	2021	2022
	RMB'000	RMB'000	RMB'000	RMB'000
Salary payables	—	19,961	23,171	13,279
Deposits payable	43,474	66,076	65,749	69,189
Other tax payable	17,596	880	2,074	1,090
Other payables and accruals	2,747	4,770	3,488	13,057
	<u>63,817</u>	<u>91,687</u>	<u>94,482</u>	<u>96,615</u>

Other payables are unsecured, non-interest-bearing and repayable on demand, except for certain liabilities in note 26 (i). The fair values of other payables at the end of each of the Relevant Periods approximated to their corresponding carrying amounts.

27. CONTRACT LIABILITIES

Details of contract liabilities are as follows:

	As at 31 December			As at 30 April
	2019	2020	2021	2022
	RMB'000	RMB'000	RMB'000	RMB'000
<i>Advances received from customers:</i>				
Sale of vaccine	30,839	14,658	41,074	46,382
Current portion	<u>30,839</u>	<u>14,658</u>	<u>41,074</u>	<u>46,382</u>

Contract liabilities include advances received to deliver vaccine products. The changes in contract liabilities during the Relevant Periods were mainly due to the changes in advances received from customers in relation to the sales of vaccine products.

28. INTEREST-BEARING BANK BORROWINGS

The Group

	As at 31 December 2019			As at 31 December 2020			As at 31 December 2021			As at 30 April 2022		
	Effective interest rate (%)	Maturity	RMB'000	Effective interest rate (%)	Maturity	RMB'000	Effective interest rate (%)	Maturity	RMB'000	Effective interest rate (%)	Maturity	RMB'000
Current												
Bank loans – secured	4.65-6.00	2020	223,710	1.85-4.61	2021	123,672	1.85-4.50	2022	192,346	3.85-4.20	2022-2023	172,277
								On demand			On demand	
Bank loans – secured	—	—	—	—	—	—	5.22		29,835	5.22		123,327
Bank loans – unsecured	—	—	—	3.85	2021	50,053	3.85-4.70	2022	175,205	3.85-4.70	2022-2023	375,247
Current portion of long-term bank loans – unsecured	—	—	—	—	—	—	—	—	—	3.85	2023	40,000
Current portion of long-term bank loans – secured	6.023-6.365	2020	32,480	—	—	—	4.65	2022	9,978	4.65	2022-2023	22,567
			<u>256,190</u>			<u>173,725</u>			<u>407,364</u>			<u>733,418</u>
Non-current												
Bank loans – secured	6.023-6.365	2021	27,440	—	—	—	4.65	2023-2028	184,334	4.65	2023-2028	199,832
			<u>283,630</u>			<u>173,725</u>			<u>591,698</u>			<u>933,250</u>

The Company

	As at 31 December 2019			As at 31 December 2020			As at 31 December 2021			As at 30 April 2022		
	Effective interest rate (%)	Maturity	RMB'000	Effective interest rate (%)	Maturity	RMB'000	Effective interest rate (%)	Maturity	RMB'000	Effective interest rate (%)	Maturity	RMB'000
Current												
Bank loans – secured	5.8725-6.0000	2020	160,098	-	-	-	-	-	-	-	-	-

The Group

	As at 31 December			As at 30 April
	2019	2020	2021	2022
	RMB'000	RMB'000	RMB'000	RMB'000
Analysed into:				
Bank loans repayable:				
Within one year or on demand	256,190	173,725	407,364	733,418
In the second year	27,440	-	19,403	22,203
In the third to fifth years, inclusive	-	-	97,018	122,120
Beyond five years	-	-	67,913	55,509
	283,630	173,725	591,698	933,250

The Company

	As at 31 December			As at 30 April
	2019	2020	2021	2022
	RMB'000	RMB'000	RMB'000	RMB'000
Analysed into:				
Bank loans repayable:				
Within one year or on demand	160,098	-	-	-

As at 31 December 2019, certain of the Group's bank loans with the amounts of RMB283,630,000 were secured by:

- (i) the pledge of certain of the Group's buildings with a carrying amount of RMB87,569,000 at 31 December 2019;
- (ii) the pledge of certain of the Group's leasehold land with a carrying amount of RMB34,348,000 at 31 December 2019;
- (iii) the guarantee from subsidiaries of the Group; and
- (iv) the guarantee from Mr. Yan ZHOU, a company controlled by Mr. Yan ZHOU and a close family member of Mr. Yan ZHOU for free. Such guarantees were released in 2020.

As at 31 December 2020, certain of the Group's bank loans with the amounts of RMB123,672,000 were secured by:

- (i) the pledge of certain of the Group's buildings with a carrying amount of RMB24,691,000 at 31 December 2020;
- (ii) the pledge of certain of the Group's leasehold land with a carrying amount of RMB6,502,000 at 31 December 2020; and
- (iii) the guarantee from a subsidiary of the Group.

As at 31 December 2021, certain of the Group's bank loans with the amounts of RMB416,493,000 were secured by:

- (i) the pledge of certain of the Group's buildings with a carrying amount of RMB160,502,000 at 31 December 2021;
- (ii) the pledge of certain of the Group's leasehold land with a carrying amount of RMB56,022,000 at 31 December 2021; and
- (iii) the guarantee from the Company and a subsidiary of the Group.

As at 30 April 2022, certain of the Group's bank loans with the amounts of RMB518,003,000 were secured by:

- (i) the pledge of certain of the Group's buildings with a carrying amount of RMB157,371,000 at 30 April 2022;
- (ii) the pledge of certain of the Group's leasehold land with a carrying amount of RMB55,407,000 at 30 April 2022; and
- (iii) the guarantee from the Company and a subsidiary of the Group.

Certain of the bank loans are subject to the fulfillment of covenants based on the borrowing subsidiaries' statement of financial position, as are commonly found in lending arrangements with financial institutions. If the entities were to breach the covenants, the bank loans would become repayable on demand. These borrowings were classified as current liabilities even though the directors of the Company do not expect that the lenders would exercise their rights to demand immediate repayment.

The directors of the Company regularly monitor its compliance with these covenants and do not consider it probable that the lenders will exercise their discretion to demand immediate repayment so long as the Group continues to make payments according to the schedule of the loans. Further details of the Group's management of liquidity risk are set out in note 43 to the Historical Financial Information. As at 31 December 2019, 2020 and 2021 and 30 April 2022, covenants relating to bank loans amounting to approximately nil, nil, RMB29,835,000 and RMB123,327,000 had been breached.

29. DEFERRED TAX

The movements in deferred tax liabilities and assets during the Relevant Periods are as follows:

Deferred tax assets

	Loss available for offsetting against future taxable profits	Lease liabilities	Impairment of inventories and financial assets	Accruals	Promotion fee	Others	Total
	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000
At 1 January 2019	6,993	8,130	17,464	3,417	3,006	617	39,627
Deferred tax (charged)/credited to profit or loss during the year (note 11)	(2,995)	(461)	(3,696)	(2,761)	3,367	194	(6,352)
Gross deferred tax assets at 31 December 2019	<u>3,998</u>	<u>7,669</u>	<u>13,768</u>	<u>656</u>	<u>6,373</u>	<u>811</u>	<u>33,275</u>
At 1 January 2020	3,998	7,669	13,768	656	6,373	811	33,275
Deferred tax (charged)/credited to profit or loss during the year (note 11)	(155)	7,397	1,670	4,227	(6,373)	1,003	7,769
Gross deferred tax assets at 31 December 2020	<u>3,843</u>	<u>15,066</u>	<u>15,438</u>	<u>4,883</u>	<u>—</u>	<u>1,814</u>	<u>41,044</u>
	Loss available for offsetting against future taxable profits	Lease liabilities	Impairment of inventories and financial assets	Accruals	Share-based compensation	Others	Total
	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000
At 1 January 2021	3,843	15,066	15,438	4,883	—	1,814	41,044
Deferred tax (charged)/credited to profit or loss during the year (note 11)	(33)	2,027	(1,049)	4,964	1,583	1,006	8,498
Credited to the reserve during the year	—	—	—	—	441	—	441
Acquisition of a subsidiary (note 35)	—	760	—	—	—	—	760
Gross deferred tax assets at 31 December 2021	<u>3,810</u>	<u>17,853</u>	<u>14,389</u>	<u>9,847</u>	<u>2,024</u>	<u>2,820</u>	<u>50,743</u>
At 1 January 2022	3,810	17,853	14,389	9,847	2,024	2,820	50,743
Deferred tax credited to profit or loss during the period (note 11)	3,173	(1,747)	761	118	995	4,778	8,078
Credited to the reserve during the period	—	—	—	—	641	—	641
Gross deferred tax assets at 30 April 2022	<u>6,983</u>	<u>16,106</u>	<u>15,150</u>	<u>9,965</u>	<u>3,660</u>	<u>7,598</u>	<u>59,462</u>

Deferred tax liabilities

	Fair value adjustment arising from acquisition of subsidiaries	Right-of-use assets	Depreciation	Unrealised internal losses	Total
	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000
At 1 January 2019	73,695	8,263	161	–	82,119
Deferred tax credited to profit or loss during the year (note 11)	(7,133)	(519)	(3)	–	(7,655)
Gross deferred tax liabilities at 31 December 2019	66,562	7,744	158	–	74,464
At 1 January 2020	66,562	7,744	158	–	74,464
Deferred tax (credited)/charged to profit or loss during the year (note 11)	(5,024)	7,202	(52)	–	2,126
Gross deferred tax liabilities at 31 December 2020	61,538	14,946	106	–	76,590
At 1 January 2021	61,538	14,946	106	–	76,590
Deferred tax (credited)/charged to profit or loss during the year (note 11)	(4,204)	2,147	(72)	–	(2,129)
Acquisition of a subsidiary (note 35)	467,350	760	–	–	468,110
Gross deferred tax liabilities at 31 December 2021	524,684	17,853	34	–	542,571
At 1 January 2022	524,684	17,853	34	–	542,571
Deferred tax (credited)/charged to profit or loss during the period (note 11)	(1,020)	(1,747)	(34)	1,179	(1,622)
Gross deferred tax liabilities at 30 April 2022 . . .	523,664	16,106	–	1,179	540,949

For presentation purposes, certain deferred tax assets and liabilities have been offset in the consolidated statements of financial position. The following is an analysis of the deferred tax balances of the Group for financial reporting purposes:

	As at 31 December			As at 30 April
	2019	2020	2021	2022
	RMB'000	RMB'000	RMB'000	RMB'000
Reflected in the consolidated statements of financial position:				
– Deferred tax assets	–	1,464	–	–
– Deferred tax liabilities	41,189	37,010	491,828	481,487

Deferred tax assets have not been recognised in respect of the following items:

	As at 31 December			As at 30 April
	2019	2020	2021	2022
	RMB'000	RMB'000	RMB'000	RMB'000
Tax losses	278,648	302,716	597,375	695,007
Deductible temporary differences	128,539	133,875	224,068	259,025
	407,187	436,591	821,443	954,032

The Group has tax losses arising in Mainland China of RMB96,267,000, RMB115,027,000, RMB293,966,000 and RMB97,632,000 for the years ended 31 December 2019, 2020 and 2021 and the four months ended 30 April 2022, respectively, that will expire in five to ten years for offsetting against future taxable profits. Deferred tax assets have not been recognised in respect of these losses as they have arisen in subsidiaries and the Company that have been loss-making for some time and it is not considered probable that taxable profits will be available against which the tax losses can be utilised.

30. DEFERRED GOVERNMENT GRANTS

	As at 31 December			As at 30 April
	2019	2020	2021	2022
	RMB'000	RMB'000	RMB'000	RMB'000
At the beginning of the year/period	9,985	52,734	55,460	89,601
Addition	44,853	6,125	38,035	47,317
Acquisition of a subsidiary (note 35)	—	—	1,040	—
Amortisation during the year/period	(2,104)	(3,399)	(4,934)	(1,453)
At the end of the year/period	52,734	55,460	89,601	135,465
Current portion	3,196	3,796	4,571	4,359
Non-current portion	49,538	51,664	85,030	131,106

31. PAID-IN CAPITAL/SHARE CAPITAL

The paid-in capital/share capital of the Company as at 31 December 2019, 2020 and 2021 and 30 April 2022 was RMB850,734,000, RMB1,110,000,000, RMB1,200,000,000 and RMB1,200,000,000, respectively. The movements are as follows:

	Numbers of ordinary shares	Paid-in capital/share capital
		RMB'000
As at 1 January 2019	N/A	812,339
Capital contribution from shareholders (a)	N/A	38,395
As at 31 December 2019	N/A	850,734
Capital contribution from shareholders (b)	N/A	174,256
Issue of ordinary shares upon conversion into a joint stock company (c)	1,024,990,000	—
Issuance of shares (d)	85,009,999	85,010
As at 31 December 2020	1,109,999,999	1,110,000
Issuance of shares (e)	90,000,000	90,000
As at 31 December 2021	1,199,999,999	1,200,000
As at 30 April 2022	1,199,999,999	1,200,000

Notes:

- (a) In April 2019, the Company received a capital contribution of RMB208,000,000 in cash from Tibet Sincere Heart Enterprise Management Co., Ltd ("Tibet Sincere Heart"), resulted in approximately RMB29,799,000 and RMB178,201,000 credited to the Company's paid-in capital and capital reserves, respectively.

In December 2019, the Company received a capital contribution of RMB60,000,000 in cash from Tibet Sincere Heart, resulted in approximately RMB8,596,000 and RMB51,404,000 credited to the Company's paid-in capital and capital reserves, respectively.

- (b) In April 2020, the Company received a capital contribution of RMB113,000,000 in cash from Tibet Yingfeng Industrial Co., Ltd. (西藏盈豐實業有限公司), resulted in approximately RMB16,189,000 and RMB96,811,000 credited to the Company's paid-in capital and capital reserves, respectively.

In May 2020, the Company received capital contributions of RMB145,000,000 in cash from Tibet Yingfeng Industrial Co., Ltd. (西藏盈豐實業有限公司), RMB372,000,000 in cash from Tibet Sincere Heart, respectively. As a result, approximately RMB74,069,000 and RMB442,931,000 credited to the Company's paid-in capital and capital reserves, respectively.

In June 2020, the Company received capital contributions of RMB56,392,000 in cash from Shenzhen Tongchuang Jiaxing Investment Partnership (Limited Partnership) (深圳市同創佳興投資合夥企業(有限合夥)), RMB77,000,000 in cash from Tibet Sincere Heart, RMB18,620,000 in cash from Foshan Hongtao Kexuan Equity Investment Partnership (Limited Partnership) (佛山弘陶科選股權投資合夥企業(有限合夥)), RMB7,714,000 in cash from Shenzhen Tongchuang Jiazhi Investment Partnership (Limited Partnership) (深圳市同創佳致投資合夥企業(有限合夥)), RMB40,000,000 in cash from Tibet Yingfeng Industrial Co., Ltd. (西藏盈豐實業有限公司), RMB111,354,000 in cash from Tibet Sincere Heart, and RMB134,942,000 in cash from Shenyang Zhongrenxing Enterprise Management Centre (Limited Partnership) (瀋陽眾人行企業管理中心(有限合夥)), respectively. As a result, approximately RMB58,249,000 and RMB387,773,000 credited to the Company's paid-in capital and capital reserves, respectively.

In July 2020, the Company received capital contributions of RMB48,641,000 in cash from Shenyang Zhongrenxing Enterprise Management Center (Limited Partnership) (瀋陽眾人行企業管理中心(有限合夥)), RMB133,000,000 in cash from Shenzhen CMB Langyao Growth Equity Investment Fund Partnership (Limited Partnership) (深圳市招銀朗曜成長股權投資基金合夥企業(有限合夥)) and RMB116,774,000 in cash from CMB Growth II Investment (Shenzhen) Partnership (Limited Partnership) (招銀成長貳號投資(深圳)合夥企業(有限合夥)), respectively. As a result, approximately RMB25,749,000 and RMB272,666,000 credited to the Company's paid-in capital and capital reserves respectively.

- (c) In September 2020, the Company converted into a joint stock company with limited liability under the Company Law of the PRC. The net assets of the Company as of the conversion base date, including paid-in capital, capital reserves and accumulated losses, amounting to RMB3,119,025,000, were converted into 1,024,990,000 ordinary shares at RMB1.00 each. The excess of net assets converted over nominal value of the ordinary shares was credited to the Company's capital reserves.
- (d) In September 2020, the Company issued 10,500,000 shares in total with par value of RMB1.00 each to Beijing Yizhuang International Emerging Industry Investment Center (Limited Partnership) (北京亦莊國際新興產業投資中心(有限合夥)) and Beijing Key Industry Intellectual Property Operation Fund (Limited Partnership) (北京市重點產業知識產權運營基金(有限合夥)). The total proceeds of RMB139,650,000 were received in 2020, with approximately RMB10,500,000 and RMB129,150,000 credited to the Company's share capital and capital reserves, respectively.

In October 2020, the Company issued 54,051,428 shares with par value of RMB1.00 each to Ningbo Free Trade Zone Holding Co., Ltd. (寧波保稅區控股有限公司) for the acquisition of the 20% non-controlling interest of a subsidiary of the Group. The fair value of share consideration is approximate to RMB718,884,000, out of which, approximately RMB54,051,000 and RMB664,833,000 were credited to the Company's share capital and capital reserves, respectively.

In November 2020, the Company issued 20,458,571 shares in total with par value of RMB1.00 each to Shanghai Hutong Investment Center (Limited Partnership) (上海胡桐投資中心(有限合夥)), Beijing Huakong Industrial Investment Fund (Limited Partnership) (北京華控產業投資基金(有限合夥)), Mr. Wenkai CHEN (陳文凱), Suqian Lingdao Life Evergreen Equity Investment Partnership (Limited Partnership) (宿遷領道生命常青股權投資合夥企業(有限合夥)), Zhuhai Gao Ling Xiheng Equity Investment L.P. (Limited Partnership) (珠海高瓴汐恒股權投資合夥企業(有限合夥)), and Zhejiang Yiwu Letai Investment Management Partnership Enterprise (Limited Partnership) (浙江義烏市樂泰投資管理合夥企業(有限合夥)). The total proceeds of RMB380,121,000 were received in 2020, with approximately RMB20,459,000 and RMB359,662,000 credited to the Company's share capital and capital reserves, respectively.

- (e) In May 2021, the Company issued 21,921,409 shares in total with par value of RMB1.00 each to Hainan Jiashui Trade Co., Ltd (海南嘉水貿易有限責任公司), Yunnan Ziyongchen Investment Co., Ltd. (雲南紫雍晨投資有限公司), Ms. Jing HUANG (黃靜), Mr. Zhen LIN (林振), Mr. Bole Ma (馬伯樂), Qingdao Huakong Growth Equity Investment Partnership (Limited Partnership) (青島華控成長股權投資合夥企業(有限合夥)), Mr. Hua WU (吳華), Shenzhen Chongshi Equity Investment Fund Management Co., Ltd. (深圳崇石私募股權投資基金管理有限公司), Tibet Jiaze Venture Capital Co., Ltd. (西藏嘉澤創業投資有限公司), Zhuhai Gao Ling Xiheng Equity Investment L.P. (Limited Partnership) (珠海高瓴汐恒股權投資合夥企業(有限合夥)), Laobaixing Pharmaceutical Group Co., Ltd. (老百姓醫藥集團有限公司), Shenzhen Tongchuang Wenjian Equity Investment Fund Partnership (Limited Partnership) (深圳同創穩健股權投資基金合夥企業(有限合夥)) and Qingdao Penglong Equity Investment Partnership (Limited Partnership) (青島蓬龍股權投資合夥企業(有限合夥)). The total proceeds of RMB513,476,000 were received in 2021, with approximately RMB21,921,000 and RMB491,555,000 credited to the Company's share capital and capital reserves, respectively.

In May 2021, the Company issued 28,078,591 shares with par value of RMB1.00 each to Zhuhai Ruijin Technology Partnership (Limited Partnership) (珠海瑞進科技合夥企業(有限合夥)), Zhuhai Hengqin Qijing Technology Partnership (Limited Partnership) (珠海橫琴麒麟晶科技合夥企業(有限合夥)), Shanghai Kangcheng Health Technology Co., Ltd (上海康橙健康科技有限公司), Zhuhai Hengqin Yuanyan Technology Partnership (Limited Partnership) (珠海橫琴源炎科技合夥企業(有限合夥)), Jiangsu Jiequan Tianhui Sumintou Health Industry Fund (Limited Partnership) (江蘇趵泉天匯蘇民投健康產業基金(有限合夥)) and Zhuhai Hengqin Ruifan Technology Partnership (Limited Partnership) (珠海橫琴瑞凡科技合夥企業(有限合夥)), for the acquisition of the 30.4990% interest of a subsidiary of the Group (note 35). The fair value of the share consideration is approximately RMB657,699,000, out of which approximately RMB28,079,000 and RMB629,620,000 were credited to the Company's share capital and capital reserves, respectively.

In June 2021, the Company issued 40,000,000 shares with par value of RMB1.00 to Tibet Sincere Heart. The total proceeds of RMB40,000,000 were received in 2021, with approximately RMB40,000,000 credited to the Company's share capital.

The Company

	Paid-in capital/Share capital	Capital reserve	Merger reserve	Share-based compensation reserves	(Accumulated losses)/retained profits	Total
	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000
At 1 January 2019	812,339	1,269,654	(34,490)	—	(534,632)	1,512,871
Loss for the year	—	—	—	—	(36,336)	(36,336)
Total comprehensive loss for the year	—	—	—	—	(36,336)	(36,336)
Equity-settled share-based compensation	—	—	—	7,775	—	7,775
Merger reserve	—	—	(34,450)	—	—	(34,450)
Contribution from shareholders	38,395	229,605	—	—	—	268,000
At 31 December 2019 and at 1 January 2020	850,734	1,499,259	(68,940)	7,775	(570,968)	1,717,860
Profit for the year	—	—	—	—	24,679	24,679
Total comprehensive income for the year	—	—	—	—	24,679	24,679
Contribution from shareholders	174,256	1,200,181	—	—	—	1,374,437
Conversion into a joint stock company	—	(547,434)	—	—	547,434	—
Issue of shares	85,010	1,153,645	—	—	—	1,238,655
Share issue expenses	—	(2,068)	—	—	—	(2,068)
Equity-settled share-based compensation	—	—	—	23,476	—	23,476
Merger reserve	—	—	925	—	—	925
At 31 December 2020 and at 1 January 2021	1,110,000	3,303,583	(68,015)	31,251	1,145	4,377,964
Loss for the year	—	—	—	—	(909,278)	(909,278)
Total comprehensive loss for the year	—	—	—	—	(909,278)	(909,278)
Issue of shares	90,000	1,121,175	—	—	—	1,211,175
Equity-settled share-based compensation	—	—	—	952,128	—	952,128
At 31 December 2021 and at 1 January 2022	1,200,000	4,424,758	(68,015)	983,379	(908,133)	5,631,989
Loss for the period	—	—	—	—	(13,360)	(13,360)
Total comprehensive loss for the period	—	—	—	—	(13,360)	(13,360)
Equity-settled share-based compensation	—	—	—	27,658	—	27,658
At 30 April 2022	<u>1,200,000</u>	<u>4,424,758</u>	<u>(68,015)</u>	<u>1,011,037</u>	<u>(921,493)</u>	<u>5,646,287</u>

32. SHARE-BASED PAYMENT

(a) Restricted share awards

According to the Company's shareholders' meeting held on 29 December 2017, all shareholders unanimously agreed that Shenyang Zhongrenxing Enterprise Management Center (Limited Partnership) (hereinafter referred to as "Shenyang Zhongrenxing"), a company owned by Mr. Yan ZHOU, subscribed the 33,390,000 shares of the Company (equivalent to RMB33,390,000 paid-in capital before the conversion into a joint stock company) at a price of RMB6.98 per share.

On 26 December 2018, some employees of the Group (the "Grantees") signed a partnership agreement with Shenyang Zhongrenxing, pursuant to which these employees indirectly own 7,017,000 shares of the Company (equivalent to RMB7,017,000 paid-in capital before the conversion into a joint stock company) at a price of RMB6.98 per share through their share of the interest in Shenyang Zhongrenxing. The aggregate fair value of the shares granted amounted to approximately RMB87,713,000 (RMB12.50 per share), and the fair value is determined by the financing price from a third-party investor in May 2018.

On 13 July 2020, some employees of the Group (the “Grantees”) signed a partnership agreement with Shenyang Zhongrenxing, pursuant to which these employees indirectly own 15,165,000 shares of the Company (equivalent to RMB15,165,000 paid-in capital before the conversion into a joint stock company) at a price of RMB6.98 per share through their share of the interest in Shenyang Zhongrenxing. The aggregate fair value of the shares granted amounted to approximately RMB197,145,000 (RMB13.00 per share), and the fair value is determined by the financing price from a third-party investor in May 2020.

On 7 December 2020, some employees of the Group (the “Grantees”) signed a partnership agreement with Shenyang Zhongrenxing, pursuant to which these employees indirectly own 600,000 shares of the Company at price of RMB6.98 per share through their share of the interest in Shenyang Zhongrenxing. The aggregate fair value of the shares granted amounted to approximately RMB11,148,000 (RMB18.58 per share), and the fair value is determined by the financing price from a third-party investor in November 2020.

According to the relevant agreements, the Grantees mentioned above shall provide services to the Group for 60 months from the respective grant dates, i.e. the date when the Grantees entered into the partnership agreements with Shenyang Zhongrenxing. If an employee ceases to be employed by the Company within this period, the awarded shares will be forfeited. Forfeited shares are purchased back by Mr. Yan ZHOU or his nominee at the price that the employees initially purchased.

On 16 February 2022, the Grantees signed a supplementary partnership agreement with Shenyang Zhongrenxing for a modification of the service period, according to which, the Grantees shall provide services to the Group from the respective grant dates, i.e. the date when the Grantees entered into the partnership agreements with Shenyang Zhongrenxing, to the listing date of the Company, instead of a 60-month service period.

On 17 April 2022 and 25 April 2022, some employees of the Group (the “Grantees”) signed a partnership agreement with Shenyang Zhongrenxing, pursuant to which these employees indirectly own 1,100,000 shares of the Company at a price of RMB6.98 per share through their share of the interest in Shenyang Zhongrenxing. The aggregate fair value of the shares granted amounted to approximately RMB26,048,000 (RMB23.68 per share), and the fair value is determined by an external valuer using the discounted cash flow model taking into account the terms and conditions upon which the restricted shares were granted.

The following restricted shares were outstanding under the above restricted share rewards during the Relevant Periods:

	As at 31 December			As at 30 April
	2019	2020	2021	2022
	Number '000	Number '000	Number '000	Number '000
At the beginning of the year/period	7,017	6,947	22,070	22,070
Granted during the year/period	—	15,765	—	1,100
Forfeited during the year/period	(70)	(642)	—	(7,720)
At the end of the year/period	6,947	22,070	22,070	15,450

The weighted average remaining contractual lives for the outstanding restricted shares granted were 3.92, 4.06, 3.06 and 0.42 years as of the end of each of the Relevant Periods, respectively.

The fair values of the restricted stock awards granted in 2018, 2020 and 2022 were RMB87,713,000, RMB208,293,000 and RMB26,048,000. The Group recognised equity-settled share-based compensation expenses of RMB7,775,000, RMB18,159,000 and RMB26,602,000 during the years ended 31 December 2019, 2020 and 2021, and RMB8,867,000 and RMB8,914,000 for the four months ended 30 April 2021 and 2022, respectively, as the purchase price was lower than the fair value of the shares.

(b) Share option scheme

2020 Share Option Scheme

In 2020, the Company implemented a share option scheme to motivate and reward those who contribute to the operation of the Group. Eligible persons include senior management, core technical personnel and core business personnel of the Group. The plan became effective on 30 November 2020 and, unless otherwise cancelled or amended, will remain in force for 7 years from that date. Under the share option scheme, grantees are granted options which only vest if certain non-market performance conditions are met.

On 16 February 2022, the general meeting of shareholders of the Company approved a modification of the vesting conditions of the 2020 Share Option Scheme, which was beneficial to the employee, resulting in an increase of 6,258,000 share options.

A stock option does not give the holder the right to vote at the general meeting of shareholders.

The following share options were outstanding under the 2020 Share Option Scheme during the years ended 31 December 2020 and 2021 and four months ended 30 April 2022:

31 December 2020

	Weighted average exercise price	Number of options
	RMB per share	'000
At the beginning of the year	—	—
Granted during the year	6.98	14,447
At the end of the year	6.98	14,447

31 December 2021

	Weighted average exercise price	Number of options
	RMB per share	'000
At the beginning of the year	6.98	14,447
Forfeited during the year	6.98	(6,798)
At the end of the year	6.98	7,649

30 April 2022

	Weighted average exercise price	Number of options
	RMB per share	'000
At the beginning of the period	6.98	7,649
Modification during the year	6.98	6,258
Forfeited during the year	6.98	(1,100)
At the end of the period	6.98	12,807

No share options were exercised during the years ended 31 December 2020 and 2021 and four months ended 30 April 2022.

The exercise prices and exercise periods of the share options outstanding as at 31 December 2020, 2021 and 30 April 2022 are as follows:

31 December 2020

Number of options	Exercise price	Exercise period
'000	RMB per share	
4,334	6.98	1 December 2022 to 30 November 2023
4,334	6.98	1 December 2023 to 30 November 2024
5,779	6.98	1 December 2024 to 30 November 2027
14,447		

31 December 2021

Number of options	Exercise price	Exercise period
'000	RMB per share	
2,086	6.98	1 December 2022 to 30 November 2023
—	6.98	1 December 2023 to 30 November 2024
5,563	6.98	1 December 2024 to 30 November 2027
7,649		

30 April 2022

Number of options	Exercise price	Exercise period
'000	RMB per share	
3,842	6.98	1 December 2022 to 30 November 2023
3,842	6.98	1 December 2023 to 30 November 2024
5,123	6.98	1 December 2024 to 30 November 2027
12,807		

The fair value of the share options granted during the year ended 31 December 2020 was RMB186,958,000 (RMB12.43 each, RMB12.74 each and RMB13.48 each), of which the Group recognised share option expenses of RMB5,317,000 and RMB28,586,000 for the years ended 31 December 2020 and 2021 and RMB21,603,000 and RMB18,744,000 for the four months ended 30 April 2021 and 2022, respectively.

The fair value of equity-settled share options granted during the year ended 31 December 2020 was estimated as at the date of grant, using a binomial model, taking into account the terms and conditions upon which the options were granted. The following table lists the inputs to the model used:

Dividend yield	—
Expected volatility	43.64%-45.78%
Expected exercise multiple	2.6
Risk free interest rate	3.02%-3.08%
Expected life of options (year)	3 years – 7 years

The expected life of the options is based on the historical data over the past three years and is not necessarily indicative of the exercise patterns that may occur. The volatility measured at the standard deviation of expected share price returns is based on statistical analysis of comparable listed companies in the same industry. No other feature of the options granted was incorporated into the measurement of fair value.

At 30 April 2022, the Company had 12,807,000 share options outstanding under the 2020 Share Option Scheme. The exercise in full of the outstanding share options would, under the present capital structure of the Company, result in the issue of 12,807,000 additional ordinary shares of the Company and additional share capital of RMB12,807,000 and capital reserve of RMB76,586,000 (before issue expenses).

Subsequent to the end of the reporting period, until the date of approval of this report, a total of 700,000 share options were forfeited in respect of the resignation of three grantees.

At the date of approval of this report, the Company had 12,107,000 share options outstanding under the 2020 Share Option Scheme, which represented approximately 1.01% of the Company's shares in issue as at that date.

(c) Others

On 1 June 2021, the Board approved the issue of 40,000,000 shares for a consideration of RMB40,000,000 to Tibet Sincere Heart, an entity with its 99.99% equity interests owned by Mr. Yan ZHOU, to reward Mr. Yan ZHOU's contributions to the Group. All the award shares have been vested and settled without subject to further conditions. In June 2021, the Company issued 40,000,000 shares in total with par value of RMB1.00 each to Tibet Sincere Heart. As the consideration paid by Tibet Sincere Heart to subscribe the shares was lower than the fair value of the shares, the Group deemed this transaction as equity-settled share-based compensation and recognised compensation charges of RMB896,940,000 accordingly.

33. RESERVES

The amounts of the Group's reserves and the movements therein are presented in the consolidated statement of changes in equity of the Historical Financial Information.

(i) Capital reserve

The capital reserve comprises the capital premium of the Company and the difference between the aggregate of the then net assets of the non-controlling interests acquired and the consideration paid by the Group.

(ii) Merger reserve

The merger reserve of the Group represents the difference between the aggregate of the then net assets of the subsidiary acquired and the consideration paid by the Group for the business combination under common control.

(iii) Statutory reserve

In accordance with the Company Law of the PRC, the Company in the PRC are required to allocate 10% of the statutory after-tax profits to the statutory reserve until the cumulative total of the reserve reaches 50% of the Company's registered capital. Subject to approval from the relevant PRC authorities, the statutory reserve may be used to offset any accumulated losses or increase the registered capital of the Company. The statutory reserve is not available for dividend distribution to shareholders of the PRC subsidiaries.

34. PARTLY-OWNED SUBSIDIARIES WITH MATERIAL NON-CONTROLLING INTERESTS

Details of the Group's subsidiaries that have material non-controlling interests are set out below:

(a) Rong'an Bio

	As at 31 December	
	2019	2020
Percentage of equity interest held by non-controlling interests	20.00%	—
	Year ended 31 December	Ten months ended 31 October
	2019	2020
	RMB'000	RMB'000
Profit for the year/period allocated to non-controlling interests	25,986	48,111
Dividends paid to non-controlling interests of Rong'an Bio	86,000	—
	As at 31 December	
	2019	2020
	RMB'000	RMB'000
Accumulated balances of non-controlling interests	78,599	—

(b) Liverna

	As at 31 December	As at 30 April
	2021	2022
Percentage of equity interest held by non-controlling interests	49.8454%	49.8454%
	Seven months from 31 May 2021 to 31 December 2021	Four months ended 30 April 2022
	RMB'000	RMB'000
Profit/(Loss) for the period allocated to non-controlling interests	17,350	(1,972)
	As at 31 December	As at 30 April
	2021	2022
	RMB'000	RMB'000
Accumulated balances of non-controlling interests	807,144	805,171

The following tables illustrate the summarised financial information of the above subsidiaries. The amounts disclosed are before any inter-company eliminations:

(a) Rong'an Bio

	Year ended 31 December	Ten months ended 31 October
	2019	2020
	RMB'000	RMB'000
Revenue	446,114	830,477
Total expenses	(316,183)	(589,923)
Profit for the year/period	129,931	240,554
Total comprehensive income for the year/period	129,931	240,554
Net cash flows generated from operating activities	230,353	156,384
Net cash flows generated from/(used in) investing activities	91,096	(191,729)
Net cash flows used in financing activities	(378,347)	(28,737)
Net decrease in cash and cash equivalents	(56,898)	(64,082)
		As at 31 December
		2019
		RMB'000
Current assets		488,132
Non-current assets		272,738
Current liabilities		(337,316)
Non-current liabilities		(30,558)

In October 2020, the Company issued 54,051,428 shares with par value of RMB1.00 each to Ningbo Free Trade Zone Holding Co., Ltd. (寧波保稅區控股有限公司) for the acquisition of the 20% non-controlling interest of Rong'an Bio. After this transaction, Rong'an Bio became a wholly-owned subsidiary of the Group.

(b) Liverna

	Seven months from 31 May 2021 to 31 December 2021	Four months ended 30 April 2022
	RMB'000	RMB'000
Revenue	52,375	28
Total expenses	(17,570)	(3,985)
Profit/(Loss) for the period	34,805	(3,957)
Total comprehensive Profit/(Loss) for the period	34,805	(3,957)
Net cash flows used in operating activities	(23,477)	(1,418)
Net cash flows (used in)/generated from investing activities	(10,435)	102,058
Net cash flows generated from financing activities	44,886	10,000
Net increase in cash and cash equivalents	10,974	110,640
	As at 31 December	As at 30 April
	2021	2022
	RMB'000	RMB'000
Current assets	204,467	202,490
Non-current assets	1,895,250	1,897,176
Current liabilities	(11,898)	(16,292)
Non-current liabilities	(468,524)	(468,037)

35. BUSINESS COMBINATION

On 28 May 2021, the Group acquired a 50.1546% interest in Liverna Therapeutics Inc. ("Liverna"). Liverna was established in June 2019, which was a clinical-stage innovative biotech company focusing on the research and development of mRNA drugs with patented mRNA platform technologies covering drug design, production and delivery. Liverna is one of the few domestic companies having a mRNA COVID-19 vaccine candidate undergoing clinical trial in the PRC. Through such acquisition, the Group not only add one COVID-19 mRNA vaccine candidate ready for clinical development, but also industry-leading mRNA vaccine platform technologies and hands-on experience and expertise from top mRNA drug scientists, enabling it to pursue innovative mRNA vaccines for a broad spectrum of diseases. The purchase consideration for the acquisition was in the form of cash and equity instruments of RMB1,043,019,000 in total.

The fair values of the identifiable assets and liabilities of Liverna as at the date of acquisition were as follows:

	Notes	Fair value recognised on acquisition
		RMB'000
Property, plant and equipment	14	9,509
Right-of-use assets	15	3,104
Other intangible assets	17	1,869,402
Cash and cash equivalents		74,943
Prepayments, other receivables and other assets		73,085
Financial assets at fair value through profit or loss		104,229
Other payables and accruals		(7,855)
Interest-bearing bank borrowings		(15,000)
Contract liabilities		(55,330)
Lease liabilities	15	(3,209)
Deferred government grants	30	(1,040)
Deferred tax liabilities	29	(467,350)
Total identifiable net assets at fair value		1,584,488
Less: non-controlling interests		789,794
		794,694
Goodwill on acquisition	16	248,325
		1,043,019
Consideration satisfied by:		
Cash		385,320
Shares (28,078,591 shares of the Company)		657,699
Total consideration transferred		1,043,019

The fair value of the 28,078,591 shares issued as part of the consideration paid for Liverna was measured using the recent transaction price of the Company's shares on the acquisition date.

The fair value of prepayments, other receivables and other assets as at the date of acquisition amounted to RMB73,085,000. The gross contractual amounts of prepayments, other receivables and other assets acquired amounted to RMB73,085,000 at the date of acquisition. None of the contractual cash flows are not expected to be collected at the acquisition date.

Goodwill arising on this acquisition is not expected to be deductible for tax purposes.

An analysis of the cash flows in respect of the acquisition of a subsidiary is as follows:

	RMB'000
Cash consideration transferred	385,320
Less: unpaid cash consideration included in other current liabilities	60,000
Cash consideration paid	325,320
Less: cash and bank balances acquired	74,943
	250,377

No material acquisition related costs were incurred.

Since the acquisition, Liverna contributed RMB2,847,000 to the Group's consolidated revenue for the year ended 31 December 2021, and recorded a loss of RMB14,723,000 in the consolidated loss for the year ended 31 December 2021.

Had the combination taken place on 1 January 2021, the revenue of the Group and the loss of the Group for the year ended 31 December 2021 would have been RMB1,570,129,000 and RMB965,014,000, respectively.

36. NOTES TO THE CONSOLIDATED STATEMENTS OF CASH FLOWS

(a) Major non-cash transactions

– Acquisition of non-controlling interests

In October 2020, the Company issued 54,051,428 shares as the consideration for the acquisition of the 20% non-controlling interest in Rong'an Bio, a subsidiary of the Group. The fair value of share consideration is approximate to RMB718,884,000, out of which, approximately RMB54,051,000 and RMB664,833,000 were credited to the Company's share capital and capital reserves, respectively.

– Recognition of right-of-use assets and lease liabilities

During the Relevant Periods, the Group had non-cash additions to right-of-use assets of RMB5,241,000, RMB45,687,000, RMB10,861,000 and nil, respectively, and lease liabilities of RMB5,241,000, RMB45,687,000, RMB10,861,000 and nil, respectively, in respect of lease arrangements for buildings and motor vehicles.

– Acquisition of a subsidiary

In May 2021, the Company issued 28,078,591 shares as part of the consideration for the acquisition of Liverna. The fair value of share consideration is approximately RMB657,699,000, out of which approximately RMB28,079,000 and RMB629,620,000 were credited to the Company's share capital and capital reserves, respectively.

– Non-cash transactions on interest-bearing bank borrowings

The Group had non-cash additions to the interest-bearing bank borrowings of RMB109,240,000 for the year ended 31 December 2021 in respect of financing through reverse factoring arrangements to pay the suppliers of the Group.

(b) Changes in liabilities arising from financing activities

Year ended 31 December 2019

	Bank loans	Lease liabilities
	RMB'000	RMB'000
At 1 January 2019	168,453	32,312
Changes from financing cash flows	105,861	(8,205)
Additions of lease liabilities	–	5,241
Interest expense (note 7)	9,316	1,465
At 31 December 2019	283,630	30,813

Year ended 31 December 2020

	Bank loans	Lease liabilities
	RMB'000	RMB'000
At 1 January 2020	283,630	30,813
Changes from financing cash flows	(122,856)	(17,978)
Additions of lease liabilities	–	45,687
Interest expense (note 7)	12,951	2,790
At 31 December 2020	173,725	61,312

Year ended 31 December 2021

	Bank loans	Lease liabilities
	RMB'000	RMB'000
At 1 January 2021	173,725	61,312
Changes from financing cash flows	285,406	(18,914)
Additions as a result of acquisition of a subsidiary	15,000	3,209
Revision of a lease term payment arising from a change in the payment of a lease	–	(111)
Interest expense (note 7)	8,327	2,376
Financing through reverse factoring arrangements	109,240	–
Revision of a lease term arising from a change in the term of a lease	–	10,861
At 31 December 2021	591,698	58,733

Four months ended 30 April 2022

	Bank loans	Lease liabilities
	RMB'000	RMB'000
At 1 January 2022	591,698	58,733
Changes from financing cash flows	336,006	(3,055)
Interest expense (note 7)	5,546	723
At 30 April 2022	933,250	56,401

(c) Total cash outflow for leases

The total cash outflow for leases included in the consolidated statements of cash flows is as follows:

	Year ended 31 December			Four months ended 30 April	
	2019	2020	2021	2021	2022
	RMB'000	RMB'000	RMB'000	RMB'000 (Unaudited)	RMB'000
Within operating activities	11,121	2,906	2,881	952	1,291
Within financing activities	8,205	17,978	18,914	2,510	3,055
	19,326	20,884	21,795	3,462	4,346

37. CONTINGENT LIABILITIES

As at 30 April 2022, the Group is subject to several legal claims, involving: (i) a dispute over subrogation rights of a creditor. On 13 January 2022, the Group received a notice from the People's Court of Dalian Economic and Technological Development Zone in respect of the claim. This creditor claimed a sum of approximately RMB11,318,000. As at 30 April 2022, the claim was in the pre-trial mediation process. The directors of the Company, based on the advice from the Group's internal legal counsel, are of the opinion that the Group has reasonable ground to defend the legal claim and it is more likely than not that the claim will not be supported by the court; and (ii) a dispute over subrogation rights of a creditor. On 3 December 2021, a subsidiary of the Group received a notice from an intermediate people's court in respect of a claim against the subsidiary of the Group in respect of subrogation rights of a creditor. The amount of claim was approximately RMB80,198,000 by alleging the same indemnification obligations as disclosed in (i). In the opinion of the directors, based on legal advice, the Group has reasonable ground to defend the legal claim and it is more likely than not that the claim will not be supported by the court.

38. PLEDGE OF ASSETS

Details of the Group's assets pledged for business operation are included in note 28 to the Historical Financial Information.

39. COMMITMENTS

The Group had the following capital commitments at the end of each of the Relevant Periods:

	As at 31 December			As at 30 April
	2019	2020	2021	2022
	RMB'000	RMB'000	RMB'000	RMB'000
Contracted, but not provided for:				
Property, plant and equipment	488,425	544,201	1,235,474	1,122,187

40. RELATED PARTY TRANSACTIONS

(a) Name and relationship

Name of related party	Relationship with the Company
Mr. Yan ZHOU	Director and single largest shareholder
Lhasa Meihua	Shareholder of the Company
Tibet Silicon Valley Angel Venture Capital Co., Ltd.* ("Tibet Silicon Valley Angel")	Company controlled by a director and his close family member
Shanghai Tianxia Asset Management Co., Ltd. ("Shanghai Tianxia")	Company controlled by Mr. Yan ZHOU
Tibet Sincere Heart	Company controlled by Mr. Yan ZHOU
Tibet Tianxia Holdings Group Co., Ltd. ("Tibet Tianxia")	Company controlled by Mr. Yan ZHOU
Tibet Bohai Investment Group Co., Ltd. ("Tibet Bohai")	Company controlled by Mr. Yan ZHOU
Chambray Investment Ltd.	Company controlled by Mr. Yan ZHOU
Little Wheel Investment Ltd.	Company controlled by Mr. Yan ZHOU
Shenyang Green Sino Pharmaceutical Co., Ltd. (瀋陽格林賽諾藥業有限公司) ("Shenyang Green Sino")	Company controlled by Mr. Yan ZHOU
Ms. Lirong ZHANG	Close family member of Mr. Yan ZHOU
Shanghai Zhonglianxin Investment Development Co., Ltd. ("Shanghai Zhonglianxin")	Significantly influenced by key management
Yifeng Senturui Biotechnology Co., Ltd. (宜豐森途瑞生物科技有限公司)	Company controlled by Mr. Yan ZHOU
Alhealth Eye Medicine (Liaoning) Co., Ltd. (艾爾健康眼藥(遼寧)有限公司)	Company controlled by Mr. Yan ZHOU
Zhuhai Hengqin Ruifan Technology Partnership (Limited Partnership) (珠海橫琴瑞凡科技合夥企業(有限合夥)) ("Zhuhai Hengqin Ruifan")	Shareholder of the Company and shareholder of the significant subsidiary

* The director and his close family member disposed of all of their shareholdings in Tibet Silicon Valley Angel in December 2020 to a third party. From then on, Tibet Silicon Valley Angel was no longer a related party to the Group.

(b) The Group had the following material related party transactions during the Relevant Periods:

Notes	Year ended 31 December			Four months ended 30 April	
	2019	2020	2021	2021	2022
	RMB'000	RMB'000	RMB'000	RMB'000 (Unaudited)	RMB'000
Rental expenses to related parties					
Mr. Yan ZHOU (i)	9,404	9,404	9,759	3,180	3,423
Shanghai Tianxia (ii)	282	336	336	112	112
Shenyang Green Sino (iii)	—	194	221	59	80

Notes:

- (i) The Group has entered into lease agreements in respect of buildings from Mr. Yan ZHOU. The rental fees under the lease were RMB9,404,000, RMB9,404,000, RMB9,759,000, RMB3,180,000 and RMB3,423,000 for the years ended 31 December 2019, 2020 and 2021 and for the four months ended 30 April 2021 and 2022, respectively. The Group recognised right-of-use assets of nil, RMB36,550,000, RMB27,412,000 and RMB24,367,000, and lease liabilities of nil, RMB37,850,000, RMB29,390,000 and RMB29,727,000 as at 31 December 2019, 2020 and 2021 and 30 April 2022, respectively. The transactions were made according to the prices and terms agreed with the related parties.
- (ii) The Group has entered into lease agreements in respect of motor vehicles from Shanghai Tianxia. The rental fees under the lease were RMB282,000, RMB336,000, RMB336,000, RMB112,000 and RMB112,000 for the years ended 31 December 2019, 2020 and 2021 and for the four months ended 30 April 2021 and 2022, respectively. As the lease agreements were short-term leasing, the Group did not recognise right-of-use assets and lease liabilities. The transactions were made according to the prices and terms agreed with the related parties.
- (iii) The Group has entered into lease agreements in respect of buildings from Shenyang Green Sino Pharmaceutical Co., Ltd. The rental fees under the lease were nil, RMB194,000, RMB221,000, RMB59,000 and RMB80,000 for the years ended 31 December 2019, 2020 and 2021 and for the four months ended 30 April 2021 and 2022, respectively. As the lease agreements were short-term leasing, the Group recognised no right-of-use assets and lease liabilities. The transactions were made according to the prices and terms agreed with the related parties.

(c) Other transactions with related parties:

- Mr. Yan ZHOU, Ms. Lirong ZHANG, and Tibet Sincere Heart have guaranteed certain bank loans made to the Group with amounts of RMB160,000,000, nil and nil as at 31 December 2019, 2020 and 2021, respectively, as disclosed in note 28 to the Historical Financial information.
- In January 2019, Shenyang Aimei Pharmaceutical Technology Co., Ltd. (瀋陽艾美醫藥科技有限公司), a subsidiary of the Group but was deregistered in 2020, entered into (i) a share purchase agreement with Chambray Investment Ltd. for the acquisition of 20% shares of AIM Weixin for a consideration of RMB220,000,000 and (ii) a share purchase agreement with Little Wheel Investment Ltd. for the acquisition of 19.342% shares of AIM Weixin for a consideration of RMB213,000,000 according to the valuation result.
- In January 2020, the Group disposed of its 51% equity interests in Aimei Explorer Biopharmaceutical Research Institute (Shenyang) Co., Ltd. (艾美探索者生物製藥研究院(瀋陽)有限公司) (“Aimei Explorer Shenyang”) to Alhealth Eye Medicine (Liaoning) Co., Ltd. with no consideration. Aimei Explorer Shenyang has not started its operation at the time of disposal, with net assets of nil.
- In November 2020, the Company entered into a share purchase agreement with Yifeng Senturui Biotechnology Co., Ltd. for the acquisition of 49% shares of Aimei Explorer Biomedical R&D Co., Ltd. for a consideration of RMB512,529,000 according to the valuation result.

(d) Outstanding balances with related parties

The Group:

	As at 31 December			As at 30 April
	2018	2019	2021	2022
	RMB'000	RMB'000	RMB'000	RMB'000
Non-trade related:				
<i>Due from related parties</i>				
Tibet Silicon Valley Angel	376	376	–	–
Zhuhai Hengqin Ruifan	–	–	10,000	–
Lhasa Meihua (i)	146,180	76,197	–	–
	<u>146,556</u>	<u>76,573</u>	<u>10,000</u>	<u>–</u>
Non-trade related:				
<i>Due to related parties</i>				
Tibet Tianxia	73	73	–	–
Tibet Bohai	78	78	–	–
Shanghai Zhonglianxin	100,000	–	–	–
Mr. Yan ZHOU	9,540	–	–	–
	<u>109,691</u>	<u>151</u>	<u>–</u>	<u>–</u>

- (i) The Company acquired the 100% equity shareholder of AIM Honesty from Lhasa Meihua in 2015. Based on the agreement between the Company and Lhasa Meihua, certain liabilities (note 26) recorded by AIM Honesty before the acquisition should be assumed by Lhasa Meihua. Accordingly, the Group recorded the relevant receivable amounts due from Lhasa Meihua as there is no legally enforceable right to set off the respective receivable and payable balances. Lhasa Meihua has become the shareholder of the Group since 2017.

The Company:

	As at 31 December			As at 30 April
	2019	2020	2021	2022
	RMB'000	RMB'000	RMB'000	RMB'000
Non-trade related:				
<i>Due from subsidiaries</i>	1,412,323	902,200	1,305,533	1,378,967
<i>Due from other related parties</i>				
Tibet Silicon Valley Angel	376	376	–	–
	1,412,699	902,576	1,305,533	1,378,967
Non-trade related:				
<i>Due to subsidiaries</i>	145,926	193	–	–
<i>Due to other related parties</i>				
Tibet Tianxia	73	73	–	–
Tibet Bohai	78	78	–	–
Shanghai Zhonglianxin	100,000	–	–	–
Mr. Yan ZHOU	9,540	–	–	–
	109,691	151	–	–
	255,617	344	–	–

The amounts due from related parties are unsecured, interest-free and repayable on demand.

(e) Compensation of key management personnel of the Group:

	Year ended 31 December			Four months ended 30 April	
	2019	2020	2021	2021	2022
	RMB'000	RMB'000	RMB'000	RMB'000 (Unaudited)	RMB'000
Salaries, allowances and benefits in kind	7,958	8,506	9,156	3,120	2,996
Performance related bonuses	2,275	3,256	3,492	1,164	731
Equity-settled share-based compensation expenses (i)	3,805	7,277	908,601	5,108	(11,253)
Pension scheme contributions	835	528	745	233	292
	14,873	19,567	921,994	9,625	(7,234)

- (i) Two personnel have tendered their resignation as key management, with effect from 31 March 2022. The accumulated equity-settled share-based compensation expenses were reversed accordingly.

41. FINANCIAL INSTRUMENTS BY CATEGORY

The carrying amounts of each of the categories of financial instruments as at the end of each of the Relevant Periods are as follows:

Financial assets

As at 31 December 2019

	Financial assets at fair value through profit or loss	Financial assets at amortised cost	Total
	RMB'000	RMB'000	RMB'000
Trade and bills receivables	–	444,838	444,838
Financial assets included in prepayments and other receivables (note 22)	–	90,892	90,892
Due from related parties	–	146,556	146,556
Financial assets at fair value through profit and loss	50,000	–	50,000
Restricted cash	–	55,720	55,720
Cash and cash equivalents	–	318,639	318,639
	50,000	1,056,645	1,106,645

As at 31 December 2020

	Financial assets at amortised cost
	RMB'000
Trade and bills receivables	869,864
Financial assets included in prepayments and other receivables (note 22)	88,841
Due from related parties	76,573
Restricted cash	24,406
Cash and cash equivalents	1,102,830
	<u>2,162,514</u>

As at 31 December 2021

	Financial assets at fair value through profit or loss	Financial assets at amortised cost	Total
	RMB'000	RMB'000	RMB'000
Trade and bills receivables	–	1,063,653	1,063,653
Financial assets included in prepayments and other receivables (note 22)	–	95,043	95,043
Due from related parties	–	10,000	10,000
Financial assets at fair value through profit and loss	100,000	–	100,000
Restricted cash	–	22,320	22,320
Cash and cash equivalents	–	646,742	646,742
	<u>100,000</u>	<u>1,837,758</u>	<u>1,937,758</u>

As at 30 April 2022

	Financial assets at amortised cost
	RMB'000
Trade and bills receivables	1,018,035
Financial assets included in prepayments and other receivables (note 22)	96,966
Restricted cash	21,159
Cash and cash equivalents	690,484
	<u>1,826,644</u>

Financial liabilities*As at 31 December 2019*

	Financial liabilities at amortised cost
	RMB'000
Financial liabilities included in other payables and accruals (note 26)	665,080
Due to related parties	109,691
Trade payables	42,925
Interest-bearing bank borrowings	283,630
Lease liabilities	30,813
	<u>1,132,139</u>

As at 31 December 2020

	Financial liabilities at amortised cost
	RMB'000
Financial liabilities included in other payables and accruals (note 26)	758,482
Due to related parties	151
Trade payables	37,972
Interest-bearing bank borrowings	173,725
Lease liabilities	61,312
	<u>1,031,642</u>

As at 31 December 2021

	Financial liabilities at amortised cost
	RMB'000
Financial liabilities included in other payables and accruals (note 26)	894,505
Trade payables	51,762
Interest-bearing bank borrowings	591,698
Lease liabilities	58,733
	<u>1,596,698</u>

As at April 2022

	Financial liabilities at amortised cost
	RMB'000
Financial liabilities included in other payables and accruals (note 26)	924,530
Trade payables	75,377
Interest-bearing bank borrowings	933,250
Lease liabilities	56,401
	<u>1,989,558</u>

42. FAIR VALUE AND FAIR VALUE HIERARCHY OF FINANCIAL INSTRUMENTS

The carrying amounts and fair values of the Group's financial instruments, other than those with carrying amounts that reasonably approximate to fair values, are as follows:

	Carrying amounts				Fair values			
	As at 31 December			As at 30 April	As at 31 December			As at 30 April
	2019	2020	2021	2022	2019	2020	2021	2022
	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000
Financial asset								
Financial assets at fair value through profit or loss	50,000	–	100,000	–	50,000	–	100,000	–
Financial liability								
Interest-bearing bank borrowings	283,630	173,725	591,698	933,250	284,574	173,725	596,457	936,061

Management has assessed that the fair values of cash and cash equivalents, trade and bills receivables, financial assets included in prepayments, other receivables and other assets, financial assets at fair value through profit or loss and financial liabilities included in other payables and accruals approximate to their carrying amounts largely due to the short-term maturities of these instruments.

The Group's finance department headed by the finance manager is responsible for determining the policies and procedures for the fair value measurement of financial instruments. At the end of each of the Relevant Periods, the finance department analyses the movements in the values of financial instruments and determines the major inputs applied in the valuation. The valuation is reviewed and approved by the chief financial officer.

The fair values of the financial assets and liabilities are included at the amount at which the instrument could be exchanged in a current transaction between willing parties, other than in a forced or liquidation sale. The following methods and assumptions were used to estimate the fair values:

The fair values of the non-current portion of interest-bearing bank borrowings have been calculated by discounting the expected future cash flows using rates currently available for instruments with similar terms, credit risk and remaining maturities. The changes in fair value as a result of the Group's own non-performance risk for interest-bearing bank borrowings as at the end of each of the Relevant Periods were assessed to be insignificant.

Fair value hierarchy

The following table illustrates the fair value measurement hierarchy of the Group's financial instruments:

Assets measured at fair value:

As at 31 December 2019

	Fair value measurement using			Total
	Quoted prices in active markets	Significant observable inputs	Significant unobservable inputs	
	(Level 1)	(Level 2)	(Level 3)	
	RMB'000	RMB'000	RMB'000	RMB'000
Financial assets at fair value through profit or loss	—	50,000	—	50,000

As at 31 December 2021

	Fair value measurement using			Total
	Quoted prices in active markets	Significant observable inputs	Significant unobservable inputs	
	(Level 1)	(Level 2)	(Level 3)	
	RMB'000	RMB'000	RMB'000	RMB'000
Financial assets at fair value through profit or loss	—	100,000	—	100,000

The Group did not have any financial liabilities measured at fair value at the end of each of the Relevant Periods.

During the Relevant Periods, there were no transfers of fair value measurements between Level 1 and Level 2 and no transfers into or out of Level 3 for both financial assets and financial liabilities.

Liabilities for which fair values are disclosed:

As at 31 December 2019

	Fair value measurement using			Total
	Quoted prices in active markets	Significant observable inputs	Significant unobservable inputs	
	(Level 1)	(Level 2)	(Level 3)	
	RMB'000	RMB'000	RMB'000	RMB'000
Interest-bearing bank borrowings	—	284,574	—	284,574

As at 31 December 2020

	Fair value measurement using			Total
	Quoted prices in active markets	Significant observable inputs	Significant unobservable inputs	
	(Level 1)	(Level 2)	(Level 3)	
	RMB'000	RMB'000	RMB'000	RMB'000
Interest-bearing bank borrowings	—	173,725	—	173,725

	Fair value measurement using		
	Quoted prices in active markets	Significant observable inputs	Significant unobservable inputs
	(Level 1)	(Level 2)	(Level 3)
	RMB'000	RMB'000	RMB'000
Interest-bearing bank borrowings	—	596,457	—
			RMB'000
			596,457

	Fair value measurement using			
	Quoted prices in active markets	Significant observable inputs	Significant unobservable inputs	
	(Level 1)	(Level 2)	(Level 3)	Total
	RMB'000	RMB'000	RMB'000	RMB'000
Interest-bearing bank borrowings	—	936,061	—	936,061

The Group's principal financial instruments comprise cash and cash equivalents and bank loans. The main purpose of these financial instruments is to support the Group's operations. The Group has various other financial assets and liabilities such as trade receivables which arise directly from its operations.

The main risks arising from the Group's financial instruments are interest rate risk, credit risk and liquidity risk. Generally, the senior management of the Company meets regularly to analyse and formulate measures to manage the Group's exposure to these risks. In addition, the board of directors of the Company holds meetings regularly to analyse and approve the proposals made by the senior management of the Company. Generally, the Group introduces conservative strategies on its risk management. As the Group's exposure to these risks is kept to a minimum, the Group has not used any derivatives and other instruments for hedging purposes. The Group does not hold or issue derivative financial instruments for trading purposes. The board of directors reviews and agrees policies for managing each of these risks and they are summarised below.

The Group's exposure to market risk for changes in interest rates relates primarily to its interest-bearing bank borrowings. The increase/decrease in 100 basis points of floating rates on the Group's interest-bearing bank borrowings will not have a significant impact on the Group's profit/(loss) before tax.

The following table demonstrates the sensitivity to a reasonably possible change in interest rates, with all other variables held constant, of the Group's profit/(loss) after tax (through the impact on floating rate borrowings) and the Group's equity.

	Increase/ (decrease) in basis points	(Decrease)/ increase in profit/(loss) after tax	(Decrease)/ increase in equity*
		(RMB'000)	(RMB'000)
Year ended 31 December 2019	100/(100)	(1,660)/1,660	(1,660)/1,660
Year ended 31 December 2020	100/(100)	(2,805)/2,805	(2,805)/2,805
Year ended 31 December 2021	100/(100)	(1,871)/1,871	(1,871)/1,871
Four months ended 30 April 2022	100/(100)	(1,270)/1,270	(1,270)/1,270

* Excluding retained profits

Credit risk

The Group trades only with recognised and creditworthy third parties. It is the Group's policy that all customers who wish to trade on credit terms are subject to credit verification procedures. In addition, receivable balances are monitored on an ongoing basis and the Group's exposure to bad debts is not significant.

The Group trades only with recognised and creditworthy third parties, and there is no requirement for collateral. Concentrations of credit risk are managed by analysis by customer/counterparty.

Concentrations of credit risk are managed by analysis by customer. There are no significant concentrations of credit risk within the Group as the customer bases of the Group's trade receivables are widely dispersed in different regions.

Maximum exposure and year-end staging as at 31 December 2019, 2020 and 2021 and 30 April 2022

The table below shows the credit quality and the maximum exposure to credit risk based on the Group's credit policy, which is mainly based on past due information unless other information is available without undue cost or effort, and year-end staging classification as at the end of each of the Relevant Periods. The amounts presented are gross carrying amounts for financial assets.

31 December 2019

	12 months ECLs	Lifetime ECLs			
	Stage 1	Stage 2	Stage 3	Simplified approach	Total
	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000
Trade receivables*	—	—	—	472,974	472,974
Bills receivable	700	—	—	—	700
Financial assets included in prepayments, other receivables and other assets					
– Normal**	105,622	—	—	—	105,622
Due from related parties	146,556	—	—	—	146,556
Restricted cash	55,720	—	—	—	55,720
Cash and cash equivalents	318,639	—	—	—	318,639
	<u>627,237</u>	<u>—</u>	<u>—</u>	<u>472,974</u>	<u>1,100,211</u>

31 December 2020

	12 months ECLs	Lifetime ECLs			
	Stage 1	Stage 2	Stage 3	Simplified approach	Total
	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000
Trade receivables*	—	—	—	888,335	888,335
Financial assets included in prepayments, other receivables and other assets					
– Normal**	100,376	—	—	—	100,376
Due from related parties	76,573	—	—	—	76,573
Restricted cash	24,406	—	—	—	24,406
Cash and cash equivalents	1,102,830	—	—	—	1,102,830
	<u>1,304,185</u>	<u>—</u>	<u>—</u>	<u>888,335</u>	<u>2,192,520</u>

31 December 2021

	12 months ECLs	Lifetime ECLs			
	Stage 1	Stage 2	Stage 3	Simplified approach	Total
	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000
Trade receivables*	–	–	–	1,089,903	1,089,903
Financial assets included in prepayments, other receivables and other assets					
– Normal**	106,588	–	–	–	106,588
Due from related parties	10,000	–	–	–	10,000
Restricted cash	22,320	–	–	–	22,320
Cash and cash equivalents	646,742	–	–	–	646,742
	<u>785,650</u>	<u>–</u>	<u>–</u>	<u>1,089,903</u>	<u>1,875,553</u>

30 April 2022

	12 months ECLs	Lifetime ECLs			
	Stage 1	Stage 2	Stage 3	Simplified approach	Total
	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000
Trade receivables*	–	–	–	1,048,921	1,048,921
Bills receivable	279	–	–	–	279
Financial assets included in prepayments, other receivables and other assets					
– Normal**	108,511	–	–	–	108,511
Restricted cash	20,759	–	–	–	21,159
Cash and cash equivalents	690,884	–	–	–	690,484
	<u>820,433</u>	<u>–</u>	<u>–</u>	<u>1,048,921</u>	<u>1,869,354</u>

* For trade receivables to which the Group applies the simplified approach for impairment, information based on the provision matrix is disclosed in note 21 to the Historical Financial Information.

** The credit quality of the financial assets included in prepayments, other receivables and other assets is considered to be “normal” when they are not past due and there is no information indicating that the financial assets had a significant increase in credit risk since initial recognition.

Further quantitative data in respect of the Group's exposure to credit risk arising from trade receivables and deposits and other receivables are respectively disclosed in notes 21 and 22 to the Historical Financial Information.

Liquidity risk

The Group monitors its exposure to liquidity risk by monitoring the current ratio, which is calculated by comparing the current assets with the current liabilities.

The liquidity of the Group is primarily dependent on its ability to maintain adequate cash inflows from operations to meet its debt obligations as they fall due, and its ability to obtain external financing to meet its committed future capital expenditure.

The maturity profile of the Group's financial liabilities as at the end of each of the Relevant Periods, based on the contractual undiscounted payments, is as follows:

	As at 31 December 2019			
	On demand	Within 1 year	1 to 5 years	Total
	RMB'000	RMB'000	RMB'000	RMB'000
Lease liabilities	–	9,098	28,327	37,425
Interest-bearing bank borrowings	–	265,358	27,540	292,898
Trade payables	8,368	34,557	–	42,925
Financial liabilities included in other payables and accruals	665,080	–	–	665,080
Due to related parties	109,691	–	–	109,691
	<u>783,139</u>	<u>309,013</u>	<u>55,867</u>	<u>1,148,019</u>

As at 31 December 2020				
	On demand	Within 1 year	1 to 5 years	Total
	RMB'000	RMB'000	RMB'000	RMB'000
Lease liabilities	–	17,169	52,968	70,137
Interest-bearing bank borrowings	–	177,644	–	177,644
Trade payables	10,706	27,266	–	37,972
Financial liabilities included in other payables and accruals	758,482	–	–	758,482
Due to related parties	151	–	–	151
	<u>769,339</u>	<u>222,079</u>	<u>52,968</u>	<u>1,044,386</u>

As at 31 December 2021					
	On demand	Within 1 year	1 to 5 years	Over 5 years	Total
	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000
Lease liabilities	–	18,977	44,370	–	63,347
Interest-bearing bank borrowings	29,835	393,915	141,574	70,233	635,557
Trade payables	27,492	24,270	–	–	51,762
Financial liabilities included in other payables and accruals	894,505	–	–	–	894,505
	<u>951,832</u>	<u>437,162</u>	<u>185,944</u>	<u>70,233</u>	<u>1,645,171</u>

As at 30 April 2022					
	On demand	Within 1 year	1 to 5 years	Over 5 years	Total
	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000
Lease liabilities	–	19,331	41,992	–	61,323
Interest-bearing bank borrowings	123,327	632,963	170,971	57,323	984,584
Trade payables	36,290	39,087	–	–	75,377
Financial liabilities included in other payables and accruals	924,530	–	–	–	924,530
	<u>1,084,147</u>	<u>691,381</u>	<u>212,963</u>	<u>57,323</u>	<u>2,045,814</u>

Capital management

The primary objectives of the Group's capital management are to safeguard the Group's ability to continue as a going concern, so that it can continue to provide returns to shareholders and benefits to other stakeholders, by pricing services commensurately with the level of risk.

The Group manages its capital structure and makes adjustments to it in light of changes in economic conditions and the risk characteristics of the underlying assets. To maintain or adjust the capital structure, the Group may adjust the dividend payment to shareholders, return capital to shareholders or issue new shares. The Group is not subject to any externally imposed capital requirements. No changes were made in the objectives, policies or processes for managing capital during the Relevant Periods.

The Group monitors capital on the basis of the asset-liability ratio. This ratio is calculated as total liabilities divided by total assets.

As at 31 December				As at 30 April
	2019	2020	2021	2022
	RMB'000	RMB'000	RMB'000	RMB'000
Total assets	2,950,722	4,687,953	8,072,353	8,365,583
Total liabilities	1,332,598	1,266,328	2,373,063	2,728,798
Asset-liability ratio	45%	27%	29%	33%

44. IMPACT OF COVID-19

Since the outbreak of the coronavirus disease ("COVID-19") in early 2020, a series of prevention and control measures have been implemented in China and around the world. In the first quarter of 2022, a Omicron variant has become the dominant variant and led to a new wave of COVID-19 recurrence in China, causing local outbreaks in a number of areas and to achieve "dynamic-zero COVID-19 cases", the PRC government has adopted diversified disease containment measures. The pandemic control measures periodically and temporarily impacted the operations of the Group since the outbreak of COVID-19.

The Group is closely paying attention to the development of COVID-19 pandemic and so as to adopt positive measures to overcome any challenges arising, and is continuously evaluating any potential impact of the pandemic that may have on the financial position and operating performance of the Group.

45. EVENTS AFTER THE RELEVANT PERIODS

Liverna, a subsidiary of the Group, was entitled to a preferential CIT rate of 15% effective for annual periods beginning on 1 January 2021 in accordance with Caishui [2022] No. 19 issued on 17 May 2022, which is expected to result in a decrease in deferred tax liability arising from the fair value adjustment for the acquisition of Liverna of approximately RMB186,940,000.

On 18 June 2022, the Company submitted an application in relation to H share full circulation to the China Securities Regulatory Commission (the “CSRC”) in order to convert 481,111,111 unlisted domestic shares of the Company (the “Domestic Shares”) into H shares (the “H Shares”). Upon obtaining all necessary approvals (including approvals from the CSRC and the Stock Exchange) and having complied with all applicable laws, rules and regulations, the Domestic Shares shall be converted into H Shares and the Company will apply for the listing of and permission to deal in such H Shares on the Main Board of the Stock Exchange (the “Conversion and Listing”). The Conversion and Listing was approved by the Board on 13 June 2022 and was approved by the shareholder in the general meeting held on 14 June 2022. On 6 September 2022, the Company received the formal approval from the CSRC in relation to the H share full circulation programme of the Company. The approval shall remain effective within 12 months from 2 September 2022. As at the date of this report, the Conversion and Listing is still subject to the performance of other relevant procedures required by the Stock Exchange and other domestic and foreign regulatory authorities. Upon the completion of such procedures, the Conversion and Listing is expected to result in an increase in administrative expenses of approximately RMB39,350,000.

As at 30 April 2022, the Group was subject to a dispute under a service contract with a contract sales organisation in the amount of approximately RMB12,539,000 and has recorded liabilities amounting to RMB4,496,000 in relation to the mentioned contract sales organisation. On 29 July 2022, the first instance judgement of this legal claim was completed, and the Group was obliged to pay an amount of RMB4,483,000 to the contract sales organisation.

46. SUBSEQUENT FINANCIAL STATEMENTS

No audited financial statements have been prepared by the Company, the Group or any of the companies now comprising the Group in respect of any period subsequent to 30 April 2022.

A. UNAUDITED PRO FORMA STATEMENT OF ADJUSTED CONSOLIDATED NET TANGIBLE ASSETS

The following unaudited pro forma adjusted consolidated net tangible assets of the Group have been prepared in accordance with paragraph 4.29 of the Rules Governing the Listing of Securities on the Stock Exchange of Hong Kong Limited and with reference to Accounting Guideline 7 “*Preparation of Pro Forma Financial Information for inclusion in Investment Circulars*” issued by the Hong Kong Institute of Certified Public Accountants for illustration purposes only, and is set out here to illustrate the effect of the Global Offering on the consolidated net tangible assets of the Group attributable to owners of the Company as at 30 April 2022 as if Global Offering had taken place on 30 April 2022.

The unaudited pro forma adjusted consolidated net tangible assets of the Group attributable to owners of the Company has been prepared for illustrative purposes only and because of its hypothetical nature, it may not give a true picture of the financial position of the Group had the Global Offering been completed as at 30 April 2022 or any future date. It is prepared based on the consolidated net tangible assets as at 30 April 2022 as set out in the Accountants’ Report as set out in Appendix I to this prospectus, and adjusted as described below. The unaudited pro forma adjusted consolidated net tangible assets do not form part of the Accountants’ Report as set out in Appendix I to this prospectus.

	Consolidated net tangible assets of our Group attributable to owners of the Company as at 30 April 2022	Estimated net proceeds from the Global Offering	Unaudited pro forma adjusted net tangible assets of our Group attributable to owners of the Company	Unaudited pro forma adjusted net tangible assets per Share	
	(RMB’000) (Note 1)	(RMB’000) (Note 2)	(RMB’000)	(RMB) (Note 3)	(HK\$) (Note 4)
Based on an Offer Price of HK\$16.16 per Share . . .	3,064,328	66,112	3,130,440	2.59	2.93

Notes:

- (1) The consolidated net tangible assets attributable to owners of the Company as of 30 April 2022 is extracted from “Appendix I – Accountants’ Report”, which is based on the audited consolidated equity attributable to owners of the Company as of 30 April 2022 of approximately RMB4,827,062,000 less intangible assets attributable to the owners of the Company and goodwill as of 30 April 2022 of RMB1,279,837,000 and RMB482,897,000, respectively. The amount of intangible assets attributable to owners of the Company as of 30 April 2022 of RMB1,279,837,000 is based on the intangible assets as of 30 April 2022 of RMB2,211,664,000 after deducting intangible assets attributable to the non-controlling shareholders as of 30 April 2022 of RMB931,827,000. The amount of intangible assets attributable to the non-controlling shareholders is arrived by multiplying the intangible assets of RMB1,869,434,000 with the percentage of non-controlling interest of 49.8454%.
- (2) The estimated net proceeds from the Global Offering are based on the Offer Price of HK\$16.16 per Share, after deduction of the underwriting fees and other related expenses payable by our Group (excluding listing expense of RMB4,299,000 that have been charged to profit or loss during the Relevant Periods and does not take into account of any Shares which may be issued upon the exercise of the Over-allotment Option. The estimated net proceeds from the Global Offering are converted into Renminbi at an exchange rate of RMB0.88297 to HK\$1.00.
- (3) The unaudited pro forma adjusted consolidated net tangible assets attributable to Shareholders of the Company per Share is arrived at by dividing the unaudited pro forma adjusted net tangible assets by 1,209,713,999 shares, being the number of shares in issue assuming that the Global Offering had been completed on 30 April 2022, without taking account of the exercise of the Over-allotment Option.
- (4) The unaudited pro forma adjusted consolidated net tangible assets per Share are converted into Hong Kong dollars at an exchange rate of RMB0.88297 to HK\$1.00.
- (5) No adjustment has been made to the unaudited pro forma consolidated net tangible assets to reflect any trading results or other transactions of our Company subsequent to 30 April 2022.

B. INDEPENDENT REPORTING ACCOUNTANTS' ASSURANCE REPORT ON THE COMPILATION OF PRO FORMA FINANCIAL INFORMATION

Ernst & Young
27/F, One Taikoo Place
979 King's Road
Quarry Bay, Hong Kong

安永會計師事務所
香港鰂魚涌英皇道 979 號
太古坊一座 27 樓

Tel 電話: +852 2846 9888
Fax 傳真: +852 2868 4432
ey.com

To the Directors of AIM Vaccine Co., Ltd.

We have completed our assurance engagement to report on the compilation of pro forma financial information of AIM Vaccine Co., Ltd. (the “Company”) and its subsidiaries (hereinafter collectively referred to as the “Group”) by the directors of the Company (the “Directors”) for illustrative purposes only. The pro forma financial information consists of the pro forma consolidated net tangible assets as at 30 April 2022 and related notes as set out on pages II-1 of the prospectus dated 23 September 2022 issued by the Company (the “Pro Forma Financial Information”). The applicable criteria on the basis of which the Directors have compiled the Pro Forma Financial Information are described in Appendix II (A) to the Prospectus.

The Pro Forma Financial Information has been compiled by the Directors to illustrate the impact of the global offering of shares of the Company on the Group’s financial position as at 30 April 2022 as if the transaction had taken place at 30 April 2022. As part of this process, information about the Group’s financial position has been extracted by the Directors from the Group’s financial statements for the period ended 30 April 2022, on which an accountants’ report has been published.

Directors’ responsibility for the Pro Forma Financial Information

The Directors are responsible for compiling the Pro Forma Financial Information in accordance with paragraph 4.29 of the Rules Governing the Listing of Securities on The Stock Exchange of Hong Kong Limited (the “Listing Rules”) and with reference to Accounting Guideline (“AG”) 7 *Preparation of Pro Forma Financial Information for Inclusion in Investment Circulars* issued by the Hong Kong Institute of Certified Public Accountants (the “HKICPA”).

Our independence and quality control

We have complied with the independence and other ethical requirements of the *Code of Ethics for Professional Accountants* issued by the HKICPA, which is founded on fundamental principles of integrity, objectivity, professional competence and due care, confidentiality and professional behavior.

Our firm applies Hong Kong Standard on Quality Control 1 *Quality Control for Firms that Perform Audits and Reviews of Financial Statements, and Other Assurance and Related Services Engagements*, and accordingly maintains a comprehensive system of quality control including documented policies and procedures regarding compliance with ethical requirements, professional standards and applicable legal and regulatory requirements.

Reporting accountants’ responsibilities

Our responsibility is to express an opinion, as required by paragraph 4.29(7) of the Listing Rules, on the Pro Forma Financial Information and to report our opinion to you. We do not accept any responsibility for any reports previously given by us on any financial information used in the compilation of the Pro Forma Financial Information beyond that owed to those to whom those reports were addressed by us at the dates of their issue.

We conducted our engagement in accordance with Hong Kong Standard on Assurance Engagements 3420 *Assurance Engagements to Report on the Compilation of Pro Forma Financial Information Included in a Prospectus* issued by the HKICPA. This standard requires that the reporting accountants plan and perform procedures to obtain reasonable assurance about whether the Directors have compiled the Pro Forma Financial Information in accordance with paragraph 4.29 of the Listing Rules and with reference to AG 7 issued by the HKICPA.

For purposes of this engagement, we are not responsible for updating or reissuing any reports or opinions on any historical financial information used in compiling the Pro Forma Financial Information, nor have we, in the course of this engagement, performed an audit or review of the financial information used in compiling the Pro Forma Financial Information.

The purpose of the Pro Forma Financial Information included in the Prospectus is solely to illustrate the impact of the global offering of shares of the Company on unadjusted financial information of the Group as if the transaction had been undertaken at an earlier date selected for purposes of the illustration. Accordingly, we do not provide any assurance that the actual outcome of the transaction would have been as presented.

A reasonable assurance engagement to report on whether the Pro Forma Financial Information has been properly compiled on the basis of the applicable criteria involves performing procedures to assess whether the applicable criteria used by the Directors in the compilation of the Pro Forma Financial Information provide a reasonable basis for presenting the significant effects directly attributable to the transaction, and to obtain sufficient appropriate evidence about whether:

- the related pro forma adjustments give appropriate effect to those criteria; and
- the Pro Forma Financial Information reflects the proper application of those adjustments to the unadjusted financial information.

The procedures selected depend on the reporting accountants' judgment, having regard to the reporting accountants' understanding of the nature of the Group, the transaction in respect of which the Pro Forma Financial Information has been compiled, and other relevant engagement circumstances.

The engagement also involves evaluating the overall presentation of the Pro Forma Financial Information.

We believe that the evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Opinion

In our opinion:

- (a) the Pro Forma Financial Information has been properly compiled on the basis stated;
- (b) such basis is consistent with the accounting policies of the Group; and
- (c) the adjustments are appropriate for the purpose of the Pro Forma Financial Information as disclosed pursuant to paragraph 4.29(1) of the Listing Rules.

Ernst & Young
Certified Public Accountants
Hong Kong
23 September 2022

TAXATION OF SECURITY HOLDERS

The taxation of income and capital gains of holders of H Shares is subject to the laws and practices of the PRC and of jurisdictions in which holders of H Shares are residents or otherwise subject to tax. The following summary of certain relevant taxation provisions is based on current effective laws and practices, and no predictions are made about changes or adjustments to relevant laws or policies, and no comments or suggestions will be made accordingly. The discussion has no intention to cover all possible tax consequences resulting from the investment in H Shares, nor does it take the specific circumstances of any particular investor into account, some of which may be subject to special regulations. Accordingly, you should consult your own tax advisor regarding the tax consequences of an investment in H Shares. The discussion is based upon laws and relevant interpretations in effect as of the date of this prospectus, which is subject to change or adjustment and may have retrospective effect. No issues on PRC or Hong Kong taxation other than income tax, capital appreciation and profit tax, business tax/appreciation tax, stamp duty and estate duty were referred in the discussion. Prospective investors are urged to consult their financial advisors regarding the PRC, Hong Kong and other tax consequences of owning and disposing of H Shares.

THE PRC TAXATION

Taxation on Dividends

Individual Investor

Pursuant to the Individual Income Tax Law of the PRC (《中華人民共和國個人所得稅法》), which was most recently amended on August 31, 2018 and the Implementation Provisions of the Individual Income Tax Law of the PRC (《中華人民共和國個人所得稅法實施條例》), which was most recently amended on December 18, 2018 (hereinafter collectively referred to as the “**IIT Law**”), dividends distributed by PRC enterprises are subject to individual income tax levied at a flat rate of 20%. For a foreign individual who is not a resident of the PRC, the receipt of dividends from an enterprise in the PRC is normally subject to individual income tax of 20% unless specifically exempted by the tax authority of the State Council or reduced by relevant tax treaty.

Enterprise Investors

In accordance with the Enterprise Income Tax Law of the PRC (《中華人民共和國企業所得稅法》) issued by NPC on March 16, 2007 and latest amended on December 29, 2018 and the Implementation Provisions of the Enterprise Income Tax Law of the PRC (《中華人民共和國企業所得稅法實施條例》) issued by the State Council on December 6, 2007, came into effect on January 1, 2008 and amended on April 23, 2019 (hereinafter collectively referred to as the “**EIT Law**”), a non-resident enterprise is generally subject to a 10% enterprise income tax on PRC-sourced income (including dividends received from a PRC resident enterprise), if it does not have an establishment or premise in the PRC or has an establishment or premise in the PRC but its PRC-sourced income has no real connection with such establishment or premise. The aforesaid income tax payable for non-resident enterprises are deducted at source, where the payer of the income is required to withhold the income tax from the amount to be paid to the non-resident enterprise. The Circular of the State Administration of Tax on Issues Relating to the Withholding and Remitting of Enterprise Income Tax by PRC Resident Enterprises on Dividends Distributed to Overseas Non-Resident Enterprise Shareholders of H Shares (《國家稅務總局關於中國居民企業向境外H股非居民企業股東派發股息代扣代繳企業所得稅有關問題的通知》), which was issued and implemented by the State Administration of Taxation (the “**SAT**”) on November 6, 2008, further clarified that a PRC-resident enterprise must withhold corporate income tax at a rate of 10% on the dividends of 2008 and onwards that it distributes to overseas non-resident enterprise shareholders of H Shares.

Pursuant to the Arrangement between the Mainland and the Hong Kong Special Administrative Region on the Avoidance of Double Taxation and the Prevention of Fiscal Evasion with respect to Taxes on Incomes (《內地和香港特別行政區關於對所得避免雙重徵稅和防止偷漏稅的安排》) (the “**Arrangement**”), which was signed on August 21, 2006, the Chinese Government may levy taxes on the dividends paid by a Chinese company to Hong Kong residents (including natural persons and legal entities) in an amount not exceeding 10% of the total dividends payable by the Chinese company unless a Hong Kong resident directly holds 25% or more of the equity interest in a Chinese company, then such tax shall not exceed 5% of the total dividends payable by the Chinese company. The Fifth Protocol of the Arrangement between the Mainland of China and the Hong Kong Special Administrative Region on the Avoidance of Double Taxation and the Prevention of Fiscal Evasion (《<內地和香港特別行政區關於對所得避免雙重徵稅和防止偷漏稅的安排>第五議定書》), which came into effect on December 6, 2019, adds a criteria for the qualification of entitlement to enjoy treaty benefits. Although there may be other provisions under the Arrangement, the treaty benefits under the criteria shall not be granted in the circumstance where relevant gains, after taking into account all relevant facts and conditions, are reasonably deemed to be one of the main purposes for the arrangement or transactions which will bring any direct or indirect benefits under this Arrangement, except when the grant of benefits under such circumstance is consistent with relevant objective and goal under the Arrangement. The application of the dividend clause of tax agreements is subject to the requirements of PRC tax law and regulation, such as the Notice of the State Administration of Taxation on the Issues Concerning the Application of the Dividend Clauses of Tax Agreements (《國家稅務總局關於執行稅收協定股息條款有關問題的通知》).

Tax Treaties

Non-resident investors residing in jurisdictions which have entered into treaties or adjustments for the avoidance of double taxation with the PRC might be entitled to a reduction of the Chinese corporate income tax imposed on the dividends received from PRC companies. The PRC currently has entered into Avoidance of Double Taxation Treaties or Arrangements with a number of countries and regions including Hong Kong Special Administrative Region, Macau Special Administrative Region, Australia, Canada, France, Germany, Japan, Malaysia, the Netherlands, Singapore, the United Kingdom and the United States. Non-PRC resident enterprises entitled to preferential tax rates in accordance with the relevant taxation treaties or arrangements are required to apply to the Chinese tax authorities for a refund of the corporate income tax in excess of the agreed tax rate, and the refund application is subject to approval by the Chinese tax authorities.

Taxation on Share Transfer

VAT and Local Additional Tax

Pursuant to the Notice on Fully Implementing the Pilot Reform for the Transition from Business Tax to Value-added Tax (《關於全面推開營業稅改徵增值稅試點的通知》) (the “**Circular 36**”), which was implemented on May 1, 2016, entities and individuals engaged in the services sale in the PRC are subject to VAT and “engaged in the services sale in the PRC” means that the seller or buyer of the taxable services is located in the PRC. Circular 36 also provides that transfer of financial products, including transfer of the ownership of marketable securities, shall be subject to VAT at 6% on the taxable revenue (which is the balance of sales price upon deduction of purchase price), for a general or a foreign VAT taxpayer. However, individuals who transfer financial products are exempt from VAT, which is also provided in the Notice of Ministry of Finance and State Administration of Taxation on Several Tax Exemption Policies for Business Tax on Sale and Purchase of Financial Commodities by Individuals (《財政部、國家稅務總局關於個人金融商品買賣等營業稅若干免稅政策的通知》) effective on January 1, 2009. According to these regulations, if the holder is a non-resident individual, the PRC VAT is exempted from the sale or disposal of H shares; if the holder is a non-resident enterprise and the H-share buyer is an individual or entity located outside China, the holder is not necessarily required to pay the PRC VAT, but if the H-share buyer

is an individual or entity located in China, the holder may be required to pay the PRC VAT. However, it is still uncertain whether the non-Chinese resident enterprises are required to pay the PRC VAT for the disposal of H shares in practice.

At the same time, VAT payers are also required to pay urban maintenance and construction tax, education surtax and local education surcharge, which shall be usually subject to 12% of the value-added tax, business tax and consumption tax actually paid (if any).

Income tax

Individual Investors

According to the IIT Law, gains on the transfer of equity interests in the PRC resident enterprises are subject to individual income tax at a rate of 20%. Pursuant to the Circular on Declaring that Individual Income Tax Continues to be Exempted over Income of Individuals from the Transfer of Shares (《關於個人轉讓股票所得繼續暫免徵收個人所得稅的通知》) issued by the State Administration of Tax on March 30, 1998, from January 1, 1997, income of individuals from transfer of the shares of listed enterprises continues to be exempted from individual income tax. The State Administration of Taxation has not expressly stated whether it will continue to exempt tax on income of individuals from transfer of the shares of listed enterprises in the latest amended Individual Income Tax Law.

However, on December 31, 2009, the Ministry of Finance, SAT and CSRC jointly issued the Circular on Related Issues on Levying Individual Income Tax over the Income Received by Individuals from the Transfer of Listed Shares Subject to Sales Limitation (《關於個人轉讓上市公司限售股所得徵收個人所得稅有關問題的通知》), which came into effect on January 1, 2010, which states that individuals' income from the transfer of listed shares obtained from the public offering of listed companies and transfer market on the Shanghai Stock Exchange and the Shenzhen Stock Exchange shall continue to be exempted from individual income tax, except for the relevant shares which are subject to sales restriction (as defined in the Supplementary Notice on Issues Concerning the Levy of Individual Income Tax on Individuals' Income from the Transfer of Restricted Stocks of Listed Companies (《關於個人轉讓上市公司限售股所得徵收個人所得稅有關問題的補充通知》) jointly issued and implemented by such departments on November 10, 2010). As of the Latest Practicable Date, no aforesaid provisions have expressly provided that individual income tax shall be levied from non-Chinese resident individuals on the transfer of shares in PRC resident enterprises listed on overseas stock exchanges.

Enterprise Investors

In accordance with the EIT Law, a non-resident enterprise is generally subject to corporate income tax at the rate of a 10% on PRC-sourced income, including gains derived from the disposal of equity interests in a PRC resident enterprise, if it does not have an establishment or premise in the PRC or has an establishment or premise in the PRC but its PRC-sourced income has no real connection with such establishment or premise. Such income tax payable for non-resident enterprises are deducted at source, where the payer of the income is required to withhold the income tax from the amount to be paid to the non-resident enterprise. Such tax may be reduced or exempted pursuant to relevant tax treaties or agreements on avoidance of double taxation.

Stamp Duty

Pursuant to the Provisional Regulations of the PRC on Stamp Duty (《中華人民共和國印花稅暫行條例》) issued on August 6, 1988 and latest amended on June 10, 2021 which will take effect on July 1, 2022, and the Implementation Provisions of Provisional Regulations of the PRC on Stamp Duty (《中華人民共和國印花稅暫行條例施行細則》), which was issued on September 29, 1988, PRC stamp duty only

applies to specific taxable document executed or received within the PRC, having legally binding force in the PRC and protected under the PRC laws, thus the requirements of the stamp duty imposed on the transfer of shares of PRC listed companies shall not apply to the acquisition and disposal of H Shares by non-PRC investors outside of the PRC.

Estate Duty

As of the date of this prospectus, no estate duty has been levied in the PRC under the PRC laws.

Foreign Exchange

The lawful currency of the PRC is Renminbi, which is currently subject to foreign exchange control and cannot be freely converted into foreign currency. The State Administration of Foreign Exchange (the “SAFE”), with the authorization of the People’s Bank of China (the “PBOC”), is empowered with the functions of administering all matters relating to foreign exchange, including the enforcement of foreign exchange control regulations. The Regulations on Foreign Exchange Control of the PRC (《中華人民共和國外匯管理條例》) which was issued by the State Council on January 29, 1996, implemented on April 1, 1996 and latest amended on August 5, 2008, classifies all international payments and transfers into current items and capital items. Current items are subject to the reasonable examination of the veracity of transaction documents and the consistency of the transaction documents and the foreign exchange receipts and payments by financial institutions engaging in conversion and sale of foreign currencies and supervision and inspection by the foreign exchange control authorities. For capital items, overseas organizations and overseas individuals making direct investments in China shall, upon approval by the relevant authorities in charge, process registration formalities with the foreign exchange control authorities. Foreign exchange income received overseas can be repatriated or deposited overseas, and foreign exchange and foreign exchange settlement funds under the capital account are required to be used only for purposes as approved by the competent authorities and foreign exchange administrative authorities. In the event that international revenues and expenditure occur or may occur a material imbalance, or the national economy encounters or may encounter a severe crisis, the State may adopt necessary safeguard and control measures on international revenues and expenditure.

The Regulations for the Administration of Settlement, Sale and Payment of Foreign Exchange (《結匯、售匯及付匯管理規定》), which was promulgated by the PBOC on June 20, 1996 and implemented on July 1, 1996, removes other restrictions on convertibility of foreign exchange under current items, while imposing existing restrictions on foreign exchange transactions under capital account items.

According to the Announcement on Improving the Reform of the Renminbi Exchange Rate Formation Mechanism (《關於完善人民幣匯率形成機制改革的公告》), which was issued by the PBOC and implemented on July 21, 2005, the PRC has started to implement a managed floating exchange rate system in which the exchange rate would be determined based on market supply and demand and adjusted with reference to a basket of currencies since July 21, 2005. Therefore, the Renminbi exchange rate was no longer pegged to the U.S. dollar. PBOC would publish the closing price of the exchange rate of the Renminbi against trading currencies such as the U.S. dollar in the interbank foreign exchange market after the closing of the market on each working day, as the central parity of the currency against Renminbi transactions on the following working day.

According to the relevant laws and regulations in the PRC, PRC enterprises (including foreign investment enterprises) which need foreign exchange for current item transactions may, without the approval of the foreign exchange administrative authorities, effect payment through foreign exchange accounts opened at the designated foreign exchange bank, on the strength of valid transaction receipts and proof. Foreign investment enterprises which need foreign exchange for the distribution of profits to their shareholders and PRC enterprises which, in accordance with regulations, are required to pay dividends to

their shareholders in foreign exchange (such as our Company) may, on the strength of resolutions of the board of directors or the shareholders' meeting on the distribution of profits, effect payment from foreign exchange accounts at the designated foreign exchange bank, or effect exchange and payment at the designated foreign exchange bank.

According to the Decisions on Matters including Canceling and Adjusting a Batch of Administrative Approval Items (《國務院關於取消和調整一批行政審批項目等事項的決定》) which was promulgated by the State Council on October 23, 2014, it decided to cancel the approval requirement of the SAFE and its branches for the remittance and settlement of the proceeds raised from the overseas listing of the foreign shares into RMB domestic accounts.

According to the Notice of the State Administration of Foreign Exchange on Issues Concerning the Foreign Exchange Administration of Overseas Listing (《國家外匯管理局關於境外上市外匯管理有關問題的通知》) issued by the SAFE and implemented on December 26, 2014, a domestic company shall, within 15 business days from the date of the end of its overseas listing issuance, register the overseas listing with the local branch office of state administration of foreign exchange at the place of its establishment; the proceeds from an overseas listing of a domestic company may be remitted to the domestic account or deposited in an overseas account, but the use of the proceeds shall be consistent with the content of the prospectus and other disclosure documents.

According to the Notice of the State Administration of Foreign Exchange of the PRC on Revolutionizing and Regulating Capital Account Settlement Management Policies (《國家外匯管理局關於改革和規範資本項目結匯管理政策的通知》) which was promulgated by the SAFE and implemented on June 9, 2016, foreign currency earnings in capital account that relevant policies of willingness exchange settlement have been clearly implemented on (including the recalling of raised capital by overseas listing) may undertake foreign exchange settlement in the banks according to actual business needs of the domestic institutions.

The tentative percentage of foreign exchange settlement for foreign currency earnings in capital account of domestic institutions is 100%, subject to adjust of the SAFE in due time in accordance with international revenue and expenditure situations. The Circular on Issues Concerning the Administration of Foreign Exchange in Offshore Investments and Financing and Return Investments by Domestic Residents through Special Purpose Vehicles (《關於境內居民通過特殊目的公司境外投融資及返程投資外匯管理有關問題的通知》) (the “**Circular 37**”) was promulgated and implemented by the SAFE on July 4, 2014. According to Circular 37, domestic residents, individuals and entities shall apply to the SAFE for registration of foreign exchange for offshore investment before making contributions to special purpose vehicles with domestic and overseas legal assets or equities. In addition, any domestic resident who is a shareholder of an overseas special purpose vehicle shall complete the registration formality of foreign exchange alteration for offshore investment with the SAFE in a timely manner in the event of any change of significant matters of such overseas special purpose vehicle such as capital increase/decrease, equity transfer or swap, merge and spin-off.

The subsequent foreign exchange business (including remittance of profits and dividend) of a domestic resident who fails to comply with the registration requirements as set out in Circular 37 may be restricted. Domestic residents that have made contributions to special purpose vehicles with domestic and overseas legal assets or equities without the required registration of foreign exchange for offshore investment prior to the implementation of Circular 37 shall issue a letter of explanation to the SAFE containing specific reasons. The SAFE shall make a post-registration following the principles of legality and rationality and impose administrative penalties in case of suspected violation of the Regulations on Foreign Exchange Control of the PRC.

According to the Circular on Further Simplifying and Improving Policies for the Foreign Exchange Administration Applicable to Direct Investment (《關於進一步簡化和改進直接投資外匯管理政策的通知》), which was issued by the SAFE on February 13, 2015, came into effect on June 1, 2015 and partially repealed on 30 December, 2019, the confirmation of foreign exchange registration under domestic direct investment and the confirmation of foreign exchange registration under overseas direct investment shall be directly examined and handled by banks and the foreign exchange authorities shall indirectly regulate the foreign exchange registration of direct investment through banks. The banks that have obtained financial institution identification codes from foreign exchange authorities and have connected to the Capital Account Information System with the local foreign exchange authorities may directly handle the registration under Circular 37.

PRC LEGAL SYSTEM

The PRC legal system is based on the Constitution of the PRC (《中華人民共和國憲法》) (the “**Constitution**”) and is made up of written laws, administrative regulations, local regulations, separate regulations, autonomous regulations, rules and regulations of departments, rules and regulations of local governments, international treaties of which the PRC government is a signatory, and other regulatory documents. Court verdicts do not constitute binding precedents. However, they may be used as judicial reference and guidance.

According to the Constitution and the Legislation Law of the PRC (2015 revision) (《中華人民共和國立法法(2015年修訂)》) (the “**Legislation Law**”), the NPC and the Standing Committee of the NPC are empowered to exercise the legislative power of the State. The NPC has the power to formulate and amend basic laws governing civil and criminal matters, state organs and other matters. The Standing Committee of the NPC is empowered to formulate and amend laws other than those required to be enacted by the NPC and to supplement and amend any parts of laws enacted by the NPC during the adjournment of the NPC, provided that such supplements and amendments are not in conflict with the basic principles of such laws.

The State Council is the highest organ of the PRC administration and has the power to formulate administrative regulations based on the Constitution and laws.

The people’s congresses of provinces, autonomous regions and municipalities and their respective standing committees may formulate local regulations based on the specific circumstances and actual requirements of their own respective administrative areas, provided that such local regulations do not contravene any provision of the Constitution, laws or administrative regulations.

The ministries and commissions of the State Council, PBOC, the State Audit Administration as well as the other organs endowed with administrative functions directly under the State Council may, in accordance with the laws as well as the administrative regulations, decisions and orders of the State Council and within the limits of their power, formulate rules.

The people’s congresses of cities divided into districts and their respective standing committees may formulate local regulations in terms of urban and rural development and management, environmental protection, and historical and cultural protection based on the specific circumstances and actual requirements of such cities, which will become enforceable after being reported to and approved by the standing committees of the people’s congresses of the relevant provinces or autonomous regions but such local regulations shall conform with the Constitution, laws, administrative regulations, and the relevant local regulations of the relevant provinces or autonomous regions. People’s congresses of national autonomous areas have the power to enact autonomous regulations and separate regulations in light of the political, economic and cultural characteristics of the nationality (nationalities) in the areas concerned.

The people’s governments of the provinces, autonomous regions, and municipalities directly under the central government and the cities divided into districts or autonomous prefectures may enact rules, in accordance with laws, administrative regulations and the local regulations of their respective provinces, autonomous regions or municipalities. The Constitution has supreme legal authority and no laws, administrative regulations, local regulations, autonomous regulations or separate regulations may contravene the Constitution. The authority of laws is greater than that of administrative regulations, local regulations and rules. The authority of administrative regulations is greater than that of local regulations and rules. The authority of local regulations is greater than that of the rules of the local governments at or below the corresponding level. The authority of the rules enacted by the people’s governments of the provinces or autonomous regions is greater than that of the rules enacted by the people’s governments of the city divided into districts or autonomous prefecture within the administrative areas of the provinces and the autonomous regions.

The NPC has the power to alter or annul any inappropriate laws enacted by its Standing Committee, and to annul any autonomous regulations or separate regulations which have been approved by its Standing Committee but which contravene the Constitution or the Legislation Law. The Standing Committee of the NPC has the power to annul any administrative regulations that contravene the Constitution and laws, to annul any local regulations that contravene the Constitution, laws or administrative regulations, and to annul any autonomous regulations or local regulations which have been approved by the standing committees of the people's congresses of the relevant provinces, autonomous regions or municipalities directly under the central government, but which contravene the Constitution and the Legislation Law. The State Council has the power to alter or annul any inappropriate ministerial rules and rules of local governments. The people's congresses of provinces, autonomous regions or municipalities directly under the central government have the power to alter or annul any inappropriate local regulations enacted or approved by their respective standing committees. The people's governments of provinces and autonomous regions have the power to alter or annul any inappropriate rules enacted by the people's governments at a lower level.

According to the Constitution and the Legislation Law, the power to interpret laws is vested in the Standing Committee of the NPC. According to the Decision of the Standing Committee of the NPC Regarding the Strengthening of Interpretation of Laws (《全國人民代表大會常務委員會關於加強法律解釋工作的決議》) passed on June 10, 1981, the Supreme People's Court of the PRC (the "Supreme People's Court") has the power to give general interpretation on questions involving the specific application of laws and decrees in court trials. The State Council and its ministries and commissions are also vested with the power to give interpretation of the administrative regulations and department rules which they have promulgated. At the regional level, the power to give interpretations of the local laws and regulations as well as administrative rules is vested in the regional legislative and administrative organs which promulgate such laws, regulations and rules.

PRC JUDICIAL SYSTEM

Under the Constitution and the PRC Law on the Organization of the People's Courts (2018 revision) (《中華人民共和國人民法院組織法(2018年修訂)》), the PRC judicial system is made up of the Supreme People's Court, the local people's courts and special people's courts.

The local people's courts are comprised of the primary people's courts, the intermediate people's courts and the higher people's courts. The higher level people's courts supervise the primary and intermediate people's courts. The people's procuratorates also have the right to exercise legal supervision over the civil proceedings of people's courts of the same level and lower levels. The Supreme People's Court is the highest judicial body in the PRC. It supervises the judicial administration of the people's courts at all levels.

The PRC Civil Procedure Law (2021 revision) (《中華人民共和國民事訴訟法(2021年修訂)》) (the "**Civil Procedure Law**"), which was adopted in 1991 and amended in 2007, 2012, 2017 and 2021, sets forth the criteria for instituting a civil action, the jurisdiction of the people's courts, the procedures to be followed for conducting a civil action and the procedures for enforcement of a civil judgment or order. All parties to a civil action conducted within the PRC must comply with the Civil Procedure Law. Generally, a civil case is initially heard by a local court of the municipality or province in which the defendant resides. The parties to a contract may, by express agreement, select a judicial court where civil actions may be brought, provided that the judicial court is either the plaintiff's or the defendant's domicile, the place of execution or implementation of the contract or the place of the object of the action, provided that the provisions of this law regarding the level of jurisdiction and exclusive jurisdiction shall not be violated.

A foreign national or enterprise generally has the same litigation rights and obligations as a citizen or legal person of the PRC. If a foreign country's judicial system limits the litigation rights of PRC citizens and enterprises, the PRC courts may apply the same limitations to the citizens and enterprises of that foreign country within the PRC.

If any party to a civil action refuses to comply with a judgment or ruling made by a people's court or an award made by an arbitration panel in the PRC, the other party may apply to the people's court for the enforcement of the same. There are time limits of two years imposed on the right to apply for such enforcement. If a person fails to satisfy a judgment made by the court within the stipulated time, the court will, upon application by either party, enforce the judgment in accordance with the law.

A party seeking to enforce a judgment or ruling of a people's court against a party who is not personally or whose property is not within the PRC may apply to a foreign court with jurisdiction over the case for recognition and enforcement of the judgment or ruling. A foreign judgment or ruling may also be recognized and enforced by the people's court according to PRC enforcement procedures if the PRC has entered into or acceded to an international treaty with the relevant foreign country, which provides for such recognition and enforcement, or if the judgment or ruling satisfies the court's examination according to the principle of reciprocity, unless the people's court finds that the recognition or enforcement of such judgment or ruling will result in a violation of the basic legal principles of the PRC, its sovereignty or security or against social and public interest.

The Company Law, Special Regulations and Mandatory Provisions

A joint stock limited company which was incorporated in the PRC and seeking a listing on the Hong Kong Stock Exchange is mainly subject to the following three laws and regulations in the PRC:

- The PRC Company Law which was promulgated by the Standing Committee of the NPC on December 29, 1993, came into effect on July 1, 1994, revised on December 25, 1999, August 28, 2004, October 27, 2005 and December 28, 2013 respectively and the latest revision of which was implemented on October 26, 2018;
- The Special Regulations of the State Council on Share Offering and Listing Overseas by Joint-Stock Limited Liability Companies (the "Special Regulations") which were promulgated by the State Council on August 4, 1994 pursuant to Articles 85 and 155 of the Company Law in force at that time, and were applicable, to the overseas share subscription and listing of joint stock limited companies; and
- The Mandatory Provisions of Articles of Association of Companies Listing Overseas (the "**Mandatory Provisions**") which were issued jointly by the former Securities Commission of the State Council and the former State Economic Restructuring Commission on August 27, 1994, stating the mandatory provisions which must be incorporated into the articles of association of a joint stock limited company seeking an overseas listing. As such, the Mandatory Provisions are set out in the Articles of Association of the Company, the summary of which is set out in the section entitled "Appendix V—Summary of Articles of Association" in this prospectus.

Set out below is a summary of the major provisions of the Company Law, the Special Regulations and the Mandatory Provisions applicable to the Company.

General

A joint stock limited company refers to an enterprise legal person incorporated under the Company Law with its registered capital divided into shares of equal par value. The liability of its shareholders is limited to the amount of shares held by them and the company is liable to its creditors for an amount equal to the total value of its assets.

A joint stock limited company shall conduct its business in accordance with laws and administrative regulations. It may invest in other limited liability companies and joint stock limited companies and its liabilities with respect to such invested companies are limited to the amount invested. Unless otherwise provided by law, the joint stock limited company may not be a contributor that undertakes joint and several liabilities for the debts of the invested companies.

Incorporation

A joint stock limited company may be incorporated by promotion or public subscription.

A joint stock limited company may be incorporated by a minimum of two but not more than 200 promoters, and at least half of the promoters must have residence within the PRC. According to the Special Regulations, SOEs or enterprises with the majority of their assets owned by the PRC government may be restructured into joint stock limited companies which may issue shares to overseas investors in accordance with the relevant regulations. These companies, if incorporated by promotion, may have less than five promoters and may issue new shares once incorporated.

The promoters must convene an inaugural meeting within 30 days after the issued shares have been fully paid up, and must give notice to all subscribers or make an announcement of the date of the inaugural meeting 15 days before the meeting. The inaugural meeting may be convened only with the presence of promoters or subscribers representing at least half of the shares in the company. At the inaugural meeting, matters including the adoption of articles of association and the election of members of the board of directors and members of the board of supervisors of the company will be dealt with. All resolutions of the meeting require the approval of subscribers with more than half of the voting rights present at the meeting.

Within 30 days after the conclusion of the inaugural meeting, the board of directors must apply to the registration authority for registration of the establishment of the joint stock limited company. A company is formally established, and has the status of a legal person, after the business license has been issued by the relevant registration authority. Joint stock limited companies established by the subscription method shall file the approval on the offering of shares issued by the securities administration department of the State Council with the company registration authority for record.

A joint stock limited company's promoters shall be liable for: (i) the payment of all expenses and debts incurred in the incorporation process jointly and severally if the company cannot be incorporated; (ii) the refund of subscription monies to the subscribers, together with interest, at bank rates for a deposit of the same term jointly and severally if the company cannot be incorporated; and (iii) damages suffered by the company as a result of the default of the promoters in the course of incorporation of the company. According to the Interim Provisional Regulations on the Administration of Share Issuance and Trading (《股票發行與交易管理暫行條例》) promulgated by the State Council on April 22, 1993 (which is only applicable to the issuance and trading of shares in the PRC and their related activities), if a company is established by means of public subscription, the promoters of such company are required to sign on the prospectus to ensure that the prospectus does not contain any misrepresentation, serious misleading statements or material omissions, and assume joint and several responsibility for it.

Registered Capital

The promoters of a company can make capital contributions in cash or in kind, which can be valued in currency and transferable according to law such as intellectual property rights or land use rights based on their appraised value.

If capital contribution is made other than in cash, valuation and verification of the property contributed must be carried out and converted into shares.

A company may issue registered or bearer share. However, shares issued to promoter(s) or legal person(s) shall be in the form of registered share and shall be registered under the name(s) of such promoter(s) or legal person(s) and shall not be registered under a different name or the name of a representative.

The Special Regulations and the Mandatory Provisions provide that shares issued to foreign investors and listed overseas shall be issued in registered form and shall be denominated in Renminbi and subscribed for in foreign currency.

Under the Special Regulations and the Mandatory Provisions, shares issued to foreign investors and investors from the territories of Hong Kong, the Macau and Taiwan and listed overseas are known as overseas listed foreign invested shares, and those shares issued to investors within the PRC other than the territories specified above are known as Domestic Shares.

A company may offer its shares to the public overseas with approval by the securities administration department of the State Council. Specific provisions shall be specifically formulated by the CSRC. Under the Special Regulations, upon approval of the CSRC, a company may agree, in the underwriting agreement in respect of an issue of overseas listed foreign invested shares, to retain not more than 15% of the aggregate number of overseas listed foreign invested shares proposed to be issued after accounting for the number of underwritten shares. The share offering price may be equal to or greater than nominal value, but shall not be less than nominal value.

The transfer of shares by shareholders should be conducted via the legally established stock exchange or in accordance with other methods as stipulated by the State Council. Transfer of registered shares by a shareholder must be made by means of an endorsement or by other means stipulated by laws or administrative regulations. Bearer shares are transferred by delivery of the share certificates to the transferee.

Shares held by a promoter of a company shall not be transferred within one year after the date of the company's incorporation. Shares issued by a company prior to the public offer of its shares shall not be transferred within one year from the date of listing of the shares of the company on a stock exchange. Directors, supervisors and senior management of a company shall not transfer over 25% of the shares held by each of them in the company each year during their term of office and shall not transfer any share of the company held by each of them within one year after the listing date. There is no restriction under the Company Law as to the percentage of shareholding a single shareholder may hold in a company.

Transfers of shares may not be entered in the register of shareholders within 20 days before the date of a shareholders' meeting or within five days before the record date set for the purpose of distribution of dividends.

Allotment and Issue of Shares

All issue of shares of a joint stock limited company shall be based on the principles of equality and fairness. The same class of shares must carry equal rights. Shares issued at the same time and within the same class must be issued on the same conditions and at the same price. It may issue shares at par value or at a premium, but it may not issue shares below the par value.

A company shall obtain the approval of the CSRC to offer its shares to the overseas public. Under the Special Regulations, shares issued to foreign investors by joint stock limited companies and listed overseas are known as "overseas listed and foreign invested shares." Shares issued to investors within the PRC by joint stock limited companies, which also issues overseas listed and foreign shares, are known as "domestic shares." Upon approval of the securities regulatory authority of the State Council, a company

issuing overseas listed and foreign invested shares in total shares determined by the issuance program may agree with underwriters in the underwriting agreement to retain not more than 15% of the aggregate number of overseas listed and foreign invested shares outside the underwritten amount. The issuance of the retained shares is deemed to be a part of this issuance.

Registered Shares

Under the Company Law, the shareholders may make capital contributions in cash, or alternatively may make capital contributions with such valuated non-monetary property as physical items, intellectual property rights, and land-use rights that may be valued in monetary term and may be transferred in accordance with the law. Pursuant to the Special Regulations, overseas listed and foreign invested shares issued shall be in registered form, denominated in Renminbi and subscribed for in a foreign currency. Domestic shares issued shall also be in registered form.

Under the Company Law, when the company issues shares in registered form, it shall maintain a register of shareholders, stating the following matters:

- the name and domicile of each shareholder;
- the number of shares held by each shareholder;
- the serial numbers of shares held by each shareholder; and
- the date on which each shareholder acquired the shares.

Increase of Registered Capital

According to the Company Law, when the joint stock limited company issues new shares, resolutions shall be passed by a shareholders' general meeting, approving the class and number of the new shares, the issue price of the new shares, the commencement and end of the new share issuance and the class and amount of new shares to be issued to existing shareholders. When the company launches a public issuance of new shares with the approval of the securities regulatory authorities of the State Council, it shall publish a document and financial and accounting reports, and prepare the share subscription form. After the new share issuance has been paid up, the change shall be registered with the company registration authorities and an announcement shall be made.

Reduction of Registered Capital

A company may reduce its registered capital in accordance with the following procedures prescribed by the Company Law:

- it shall prepare a balance sheet and a property list;
- the reduction of registered capital shall be approved by a shareholders' general meeting;
- it shall inform its creditors of the reduction in capital within 10 days and publish an announcement of the reduction in the newspaper within 30 days after the resolution approving the reduction has been passed;
- creditors may within 30 days after receiving the notice, or within 45 days of the public announcement if no notice has been received, require the company to pay its debts or provide guarantees covering the debts;
- it shall apply to the relevant administration of registration for the registration of the reduction in registered capital.

Repurchase of Shares

According to the Company Law, a joint stock limited company may not purchase its shares other than for one of the following purposes: (i) to reduce its registered capital; (ii) to merge with another company that holds its shares; (iii) to grant its shares for carrying out an employee stock ownership plan or equity incentive plan; (iv) to purchase its shares from shareholders who are against the resolution regarding the merger or division with other companies at a shareholders' general meeting; (v) use of shares for conversion of convertible corporate bonds issued by a listed company; and (vi) the share buyback is necessary for a listed company to maintain its company value and protect its shareholders' equity.

The purchase of shares on the grounds set out in (i) and (ii) above shall require approval by way of a resolution passed by the shareholders' general meeting. For a company's share buyback under any of the circumstances stipulated in (iii), (v) or (vi) above, a resolution of the company's board of directors shall be made by a two-third majority of directors attending the meeting according to the provisions of the company's articles of association or as authorized by the shareholders' meeting.

Following the purchase of shares in accordance with (i), such shares shall be canceled within 10 days from the date of purchase. The shares shall be assigned or deregistered within six months if the share buyback is made under the circumstances stipulated in either (ii) or (iv). The shares held in total by a company after a share buyback under any of the circumstances stipulated in (iii), (v) or (vi) shall not exceed 10% of the company's total outstanding shares, and shall be assigned or deregistered within three years.

Listed companies making a share buyback shall perform their obligation of information disclosure according to the provisions of the Securities Law. If the share buyback is made under any of the circumstances stipulated in (iii), (v) or (vi) hereof, centralized trading shall be adopted publicly.

Transfer of Shares

Shares held by shareholders may be transferred in accordance with the relevant laws and regulations. Pursuant to the Company Law, transfer of shares by shareholders shall be carried out at a legally established securities exchange or in other ways stipulated by the State Council. No modifications of registration in the share register caused by transfer of registered shares shall be carried out within 20 days prior to the convening of shareholder's general meeting or five days prior to the base date for determination of dividend distributions. However, where there are separate provisions by law on alternation of registration in the share register of listed companies, those provisions shall prevail. Pursuant to the Mandatory Provisions, no modifications of registration in the share register caused by transfer of shares shall be carried out within 30 days prior to convening of shareholder's general meeting or five days prior to any base date for determination of dividend distributions.

Under the Company law, shares issued prior to the public issuance of shares shall not be transferred within one year from the date of the joint stock limited company's listing on a stock exchange. Directors, supervisors and the senior management shall declare to the company their shareholdings in the company and any changes of such shareholdings. They shall not transfer more than 25% of all the shares they hold in the company annually during their tenure. They shall not transfer the shares they hold within one year from the date on which the company's shares are listed and commenced trading on a stock exchange, nor within six months after their resignation from their positions with the company.

Shareholders

Under the Company Law and the Mandatory Provisions, the rights of holders of ordinary shares of a joint stock limited company include:

- the right to attend or appoint a proxy to attend shareholders' general meetings and to vote thereat;
- the right to transfer shares in accordance with laws, administrative regulations and provisions of the articles of association;
- the right to inspect the company's articles of association, share register, counterfoil of company debentures, minutes of shareholder's general meetings, resolutions of meetings of the board of directors, resolutions of meetings of the board of supervisors and financial and accounting reports and to make proposals or enquiries on the company's operations;
- the right to bring an action in the people's court to rescind resolutions passed by shareholder's general meetings and board of directors where the articles of association is violated by the above resolutions;
- the right to receive dividends and other types of interest distributed in proportion to the number of shares held;
- in the event of the termination or liquidation of the company, the right to participate in the distribution of residual properties of the company in proportion to the number of shares held; and
- other rights granted by laws, administrative regulations, other regulatory documents and the company's articles of association.

The obligations of a shareholder include the obligation to abide by the Company's articles of association, to pay the subscription moneys in respect of the shares subscribed for and in accordance with the form of making capital contributions, to be liable for the company's debts and liabilities to the extent of the amount of his or her subscribed shares and any other shareholders' obligation specified in the company's articles of association.

Shareholders' General Meetings

The shareholders' general meeting is the organ of authority of the company, which exercises its powers in accordance with the Company Law. Under the Company Law, the shareholders' general meeting exercises the following principal powers:

- to decide on the company's operational policies and investment plans;
- to elect or remove the directors and supervisors (other than the representative of the employees of the company) and to decide on matters relating to the remuneration of directors and supervisors;
- to examine and approve reports of the board of directors;
- to examine and approve reports of the board of supervisors;

- to examine and approve the company's proposed annual financial budget and final accounts;
- to examine and approve the company's proposals for profit distribution plans and loss recovery plans;
- to decide on any increase or reduction of the company's registered capital;
- to decide on the issue of bonds by the company;
- to decide on issues such as merger, division, dissolution and liquidation of the company and other matters;
- to amend the company's articles of association; and
- other powers as provided for in the articles of association.

Shareholders' annual general meetings are required to be held once every year. Under the Company Law, an extraordinary shareholders' general meeting is required to be held within two months after the occurrence of any of the following:

- the number of directors is less than the number stipulated by the law or less than two thirds of the number specified in the articles of association;
- the aggregate losses of the company which are not recovered reach one-third of the company's total paid-in registered capital;
- when shareholders alone or in aggregate holding 10% or more of the company's shares request the convening of an extraordinary general meeting;
- whenever the board of directors deems necessary;
- when the board of supervisors so requests; or
- other circumstances as provided for in the articles of associations

Under the Company Law, shareholders' general meetings shall be convened by the board of directors, and presided over by the chairman of the board of directors. In the event that the chairman is incapable of performing or does not perform his duties, the meeting shall be presided over by the vice chairman. In the event that the vice chairman is incapable of performing or not performing his duties, a director nominated by more than half of directors shall preside over the meeting.

Where the board of directors is incapable of performing or not performing its duties of convening the shareholders' general meeting, the board of supervisors shall convene and preside over such meeting in a timely manner. In case the board of supervisors fails to convene and preside over such meeting, shareholders alone or in aggregate holding more than 10% of the company's shares for 90 days consecutively may unilaterally convene and preside over such meeting.

Under the Company Law, notice of shareholders' general meeting shall state the time and venue of and matters to be considered at the meeting and shall be given to all shareholders 20 days before the meeting. Notice of extraordinary shareholder's general meetings shall be given to all shareholders 15 days prior to the meeting. Under the Special Regulations and the Mandatory Provisions, such notice shall be delivered to all the registered shareholders 45 days in advance to the meeting, and the matters to be considered and time and venue of the meeting shall be specified. The written reply of shareholders planning to attend the meeting shall be delivered to the company 20 days in advance of the meeting.

There is no specific provision in the Company Law regarding the number of shareholders constituting a quorum in a shareholders' meeting. Pursuant to the Special Regulations and the Mandatory Provisions, shareholder's general meeting may be convened where the number of voting shares held by the shareholders present at the meeting reaches one half or more of the company's total voting shares. If this is not attained, the company shall within five days notify the shareholders again of the matters to be considered and time and venue of the meeting to shareholders in the form of public announcement. The company may convene the shareholders' general meeting after such public announcement. Pursuant to the Mandatory Provisions, modification or abrogation of rights conferred to any class of shareholders shall be passed both by special resolution of shareholders' general meeting and by class meeting convened respectively by shareholders of the affected class.

Pursuant to the Special Regulations, where the company convenes annual shareholder's general meeting, shareholders holding more than 5% of voting shares have a right to submit to the company new proposals in writing, in which the matters falling within the scope of shareholder's general meeting shall be placed in the agenda of the meeting.

Under the Company Law, shareholders present at shareholders' general meeting have one vote for each share they hold, save that shares held by the company are not entitled to any voting rights.

Pursuant to the provisions of the articles of association or a resolution of the shareholders' general meeting, the accumulative voting system may be adopted for the election of directors and supervisors at the shareholders' general meeting. Under the accumulative voting system, each share shall be entitled to vote equivalent to the number of directors or supervisors to be elected at the shareholders' general meeting and shareholders may consolidate their voting rights when casting a vote.

Pursuant to the Company Law and the Mandatory Provisions, resolutions of the shareholders' general meeting shall be adopted by more than half of the voting rights held by the shareholders present at the meeting. However, resolutions of the shareholders' general meeting regarding the following matters shall be adopted by more than two-thirds of the voting rights held by the shareholders present at the meeting: (i) amendments to the articles of association; (ii) the increase or decrease of registered capital; (iii) the issue of any types of shares, warrants or other similar securities; (iv) the issue of debentures; (v) the merger, division, dissolution, liquidation or change in the form of the company; (vi) other matters considered by the shareholders' general meeting, by way of an ordinary resolution, to be of a nature which may have a material impact on the company and should be adopted by a special resolution.

Under the Company Law, meeting minutes shall be prepared in respect of decisions on matters discussed at the shareholders' general meeting. The chairman of the meeting and directors attending the meeting shall sign to endorse such minutes. The minutes shall be kept together with the shareholders' attendance register and the proxy forms.

Board

Under the Company Law, a joint stock limited company shall have a board of directors, which shall consist of 5 to 19 members. Members of the board of directors may include representatives of the employees of the company, who shall be democratically elected by the company's staff at the staff representative assembly, general staff meeting or otherwise. The term of a director shall be stipulated in the articles of association, but no term of office shall last for more than three years. Directors may serve consecutive terms if re-elected. A director shall continue to perform his duties in accordance with the laws, administrative regulations and articles of association until a duly re-elected director takes office, if re-election is not conducted in a timely manner upon the expiry of his term of office, or if the resignation of directors results in the number of directors being less than the quorum.

Under the Company Law, the board of directors mainly exercises the following powers:

- to convene the shareholders' general meetings and report on its work to the shareholders' general meetings;
- to implement the resolutions passed in shareholders' general meetings;
- to decide on the company's business plans and investment proposals;
- to formulate the company's proposed annual financial budget and final accounts;
- to formulate the company's profit distribution proposals and loss recovery proposals;
- to formulate proposals for the increase or reduction of the company's registered capital and the issuance of corporate bonds;
- to prepare plans for the merger, division, dissolution and change in the form of the company;
- to formulate the company's basic management system; and
- to exercise any other power under the articles of association.

Board Meetings

Under the Company Law, meetings of the board of directors of a joint stock limited company shall be convened at least twice a year. Notice of meeting shall be given to all directors and supervisors 10 days before the meeting. Interim board meetings may be proposed to be convened by shareholders representing more than 10% of voting rights, more than one-third of the directors or the board of supervisors. The chairman shall convene and preside over such meeting within 10 days after receiving such proposal. Meetings of the board of directors shall be held only if half or more of the directors are present. Resolutions of the board of directors shall be passed by more than half of all directors. Each director shall have one vote for resolutions to be approved by the board of directors. Directors shall attend board meetings in person. If a director is unable to attend a board meeting, he may appoint another director by a written power of attorney specifying the scope of the authorization to attend the meeting on his behalf.

If a resolution of the board of directors violates the laws, administrative regulations or the articles of association, and as a result of which the company sustains serious losses, the directors participating in the resolution are liable to compensate the company. However, if it can be proved that a director expressly objected to the resolution when the resolution was voted on, and that such objection was recorded in the minutes of the meeting, such director may be released from that liability.

Chairman of the Board

Under the Company Law, the board of directors shall appoint a chairman and may appoint a vice chairman. The chairman and the vice chairman are elected with approval of more than half of all the directors. The chairman shall convene and preside over board meetings and examine the implementation of board resolutions. The vice chairman shall assist the work of the chairman. In the event that the chairman is incapable of performing or not performing his duties, the duties shall be performed by the vice chairman. In the event that the vice chairman is incapable of performing or not performing his duties, a director nominated by more than half of the directors shall perform his duties.

Qualification of Directors

The Company Law provides that the following persons may not serve as a director:

- a person who is unable or has limited ability to undertake any civil liabilities;
- a person who has been convicted of an offense of bribery, corruption, embezzlement or misappropriation of property, or the destruction of socialist market economy order; or who has been deprived of his political rights due to his crimes, in each case where less than five years have elapsed since the date of completion of the sentence;
- a person who has been a former director, factory manager or manager of a company or an enterprise that has entered into insolvent liquidation and who was personally liable for the insolvency of such company or enterprise, where less than three years have elapsed since the date of the completion of the bankruptcy and liquidation of the company or enterprise;
- a person who has been a legal representative of a company or an enterprise that has had its business license revoked due to violations of the law and has been ordered to close down by law and the person was personally responsible, where less than three years have elapsed since the date of such revocation; or
- a person who is liable for a relatively large amount of debts that are overdue.

Other circumstances under which a person is disqualified from acting as a director are set out in the Mandatory Provisions.

Board of Supervisors

A joint stock limited company shall have a board of supervisors composed of not less than three members. The board of supervisors is made up of representatives of the shareholders and an appropriate proportion of representatives of the employees of the company. The actual proportion shall be stipulated in the articles of association, provided that the proportion of representatives of the employees shall not be less than one third of the supervisors. Representatives of the employees of the company in the board of supervisors shall be democratically elected by the employees at the employees' representative assembly, employees' general meeting or otherwise.

The directors and senior management may not act concurrently as supervisors.

The board of supervisors shall appoint a chairman and may appoint a vice chairman. The chairman and the vice chairman of the board of supervisors are elected with approval of more than half of all the supervisors. The chairman of the board of supervisors shall convene and preside over the meetings of the board of supervisors. In the event that the chairman of the board of supervisors is incapable of performing or not performing his duties, the vice chairman of the board of supervisors shall convene and preside over the meetings of the board of supervisors. In the event that the vice chairman of the board of supervisors is incapable of performing or not performing his duties, a supervisor nominated by more than half of the supervisors shall convene and preside over the meetings of the board of supervisors.

Each term of office of a supervisor is three years and he or she may serve consecutive terms if re-elected. A supervisor shall continue to perform his duties in accordance with the laws, administrative regulations and articles of association until a duly re-elected supervisor takes office, if re-election is not conducted in a timely manner upon the expiry of his term of office, or if the resignation of supervisors results in the number of supervisors being less than the quorum.

The board of supervisors of a company shall hold at least one meeting every six months. According to the PRC Company Law, a resolution of the board of supervisors shall be passed by more than half of all the supervisors, while according to the Opinions on Supplementary Amendment to Articles of Associations by Companies to be listed in Hong Kong (《關於到香港上市公司對公司章程作補充修改的意見的函》), a resolution of the board of supervisors shall be passed by more than two-thirds of all the supervisors.

The board of supervisors exercises the following powers:

- to review the company's financial position;
- to supervise the directors and senior management in their performance of their duties and to propose the removal of directors and senior management who have violated laws, regulations, the articles of association or the resolutions of shareholders' meeting;
- when the acts of directors and senior management are harmful to the company's interests, to require correction of those acts;
- to propose the convening of extraordinary shareholders' general meetings and to convene and preside over shareholders' general meetings when the board of directors fails to perform the duty of convening and presiding over shareholders' general meeting under this law;
- to initiate proposals for resolutions to shareholders' general meeting;
- to initiate proceedings against directors and senior management;
- other powers specified in the articles of association; and
- Supervisors may attend board meetings and make enquiries or proposals in respect of board resolutions. The board of supervisors may initiate investigations into any irregularities identified in the operation of the company and, where necessary, may engage an accounting firm to assist their work at the company's expense.

Manager and Senior Management

Under the Company Law, a company shall have a manager who shall be appointed or removed by the board of directors. The manager shall report to the board of directors and may exercise the following powers:

- to supervise the business and administration of the company and arrange for the implementation of resolutions of the board of directors;
- to arrange for the implementation of the company's annual business plans and investment proposals;
- to formulate the general administration system of the company;
- to formulate the company's detailed rules;
- to recommend the appointment and dismissal of deputy managers and person in charge of finance;

- to appoint or dismiss other administration officers (other than those required to be appointed or dismissed by the board of directors); and
- to other powers conferred by the board of directors or the articles of association.

The manager shall comply with other provisions of the articles of association concerning his/her powers. The manager shall attend board meetings.

According to the Company Law, senior management shall mean the manager, deputy manager(s), person-in-charge of finance, board secretary (in case of a listed company) of a company and other personnel as stipulated in the articles of association.

Duties of Directors, Supervisors and Senior Management

Directors, supervisors and senior management of the company are required under the Company Law to comply with the relevant laws, regulations and the articles of association, and have fiduciary and diligent duties to the company. Directors, supervisors and senior management are prohibited from abusing their powers to accept bribes or other unlawful income and from misappropriating of the company's properties. Directors and senior management are prohibited from:

- misappropriation of the company's capital;
- depositing the company's capital into accounts under his own name or the name of other individuals;
- loaning company funds to others or providing guarantees in favor of others supported by the company's assets in violation of the articles of association or without prior approval of the shareholders' general meeting or board of directors;
- entering into contracts or deals with the company in violation of the articles of association or without prior approval of the shareholders' general meeting;
- using their position and powers to procure business opportunities for themselves or others that should have otherwise been available to the company or operating for their own benefits or managing on behalf of others businesses similar to that of the company without prior approval of the shareholders' general meeting;
- accept and possess commissions paid by a third party for transactions conducted with the company;
- unauthorized divulgence of confidential business information of the company; or
- other acts in violation of their duty of loyalty to the company.

A director, supervisor or senior management who contravenes any law, regulation or the company's articles of association in the performance of his duties resulting in any loss to the company shall be personally liable to the company.

Finance and Accounting

Under the Company Law, a company shall establish financial and accounting systems according to laws, administrative regulations and the regulations of the financial department of the State Council and shall at the end of each financial year prepare a financial and accounting report which shall be audited by an accounting firm as required by law. The company's financial and accounting report shall be prepared in accordance with provisions of the laws, administrative regulations and the regulations of the financial department of the State Council.

Pursuant to the Company Law, the company shall deliver its financial and accounting reports to all shareholders within the time limit stipulated in the articles of association and make its financial and accounting reports available at the company for inspection by the shareholders at least 20 days before the convening of an annual general meeting of shareholders. It must also publish its financial and accounting reports.

When distributing each year's after-tax profits, it shall set aside 10% of its after-tax profits into a statutory common reserve fund (except where the fund has reached 50% of its registered capital).

If its statutory common reserve fund is not sufficient to make up losses of the previous year, profits of the current year shall be applied to make up losses before allocation is made to the statutory common reserve fund pursuant to the above provisions.

After allocation of the statutory common reserve fund from after-tax profits, it may, upon a resolution passed at the shareholders' general meeting, allocate discretionary common reserve fund from after-tax profits.

The remaining after-tax profits after making up losses and allocation of common reserve fund shall be distributed in proportion to the number of shares held by the shareholders, unless otherwise stipulated in the articles of association.

Shares held by the Company shall not be entitled to any distribution of profit.

The premium received through issuance of shares at prices above par value and other incomes required by the financial department of the State Council to be allocated to the capital reserve fund shall be allocated to the company's capital reserve fund.

The Company's reserve fund shall be applied to make up losses of the company, expand its business operations or be converted to increase the registered capital of the company. However, the capital reserve fund may not be applied to make up the company's losses. Upon the conversion of statutory common reserve fund into capital, the balance of the statutory common reserve fund shall not be less than 25% of the registered capital of the company before such conversion.

The Company shall have no other accounting books except the statutory accounting books. Its assets shall not be deposited in any accounts opened in the name of any individual.

Appointment and Retirement of Accounting Firms

Pursuant to the Company Law, the appointment or dismissal of accounting firms responsible for the auditing of the company shall be determined by shareholders' general meeting or board of directors in accordance with provisions of articles of association. The accounting firm should be allowed to make representations when the shareholders' general meeting or board of directors conducts a vote on the dismissal of the accounting firm. The company should provide true and complete accounting evidences, books, financial and accounting reports and other accounting data to the accounting firm it employs without any refusal, withholding and misrepresentation.

The Special Regulations provide that a company shall employ an independent accounting firm complying with the relevant regulations of the State to audit its annual report and review and check other financial reports of the company. The accounting firm's term of office shall commence from their appointment at a shareholders' annual general meeting to the end of the next shareholders' annual general meeting.

Distribution of Profits

According to the Company Law, a company shall not distribute profits before losses are covered and the statutory common reserve is drawn. Under the Mandatory Provisions, a company shall appoint receiving agents on behalf of holders of the overseas listed and foreign invested shares to receive on behalf of such shareholders dividends and other distributions payable in respect of their overseas listed and foreign invested shares.

Amendments to Articles of Association

Any amendments to the company's articles of association must be made in accordance with the procedures set out in the company's articles of association. Any amendment of provisions incorporated in the articles of association in connection with the Mandatory Provisions will only be effective after approval by the company's approval department authorized by the State Council and the CSRC. In relation to matters involving the company's registration, its registration with the authority must also be changed.

Dissolution and Liquidation

According to the Company Law, a company shall be dissolved by reason of the following: (i) the term of its operations set down in the articles of association has expired or other events of dissolution specified in the articles of association have occurred; (ii) the shareholders' general meeting have resolved to dissolve the company; (iii) the company is dissolved by reason of merger or division; (iv) the business license is revoked; the company is ordered to close down or be dissolved; or (v) the company is dissolved by the people's court in response to the request of shareholders holding shares that represent more than 10% of the voting rights of all its shareholders, on the grounds that the company suffers significant hardship in its operation and management that cannot be resolved through other means, and the ongoing existence of the company would bring significant losses for shareholders.

In the event of (i) above, it may carry on its existence by amending its articles of association. The amendment of the articles of association in accordance with provisions set out above shall require approval of more than two thirds of voting rights of shareholders attending a shareholders' general meeting.

Where the company is dissolved in the circumstances described in subparagraphs (i), (ii), (iv), or (v) above, a liquidation group shall be established and the liquidation process shall commence within 15 days after the occurrence of an event of dissolution.

The members of the company's liquidation group shall be composed of its directors or the personnel appointed by the shareholders' general meeting. If a liquidation group is not established within the stipulated period, creditors may apply to the people's court and request the court to appoint relevant personnel to form the liquidation group. The people's court should accept such application and form a liquidation group to conduct liquidation in a timely manner.

The liquidation group shall exercise the following powers during the liquidation period:

- to handle the company's assets and to prepare a balance sheet and an inventory of the assets;
- to notify creditors through notice or public announcement;
- to deal with the company's outstanding businesses related to liquidation;
- to pay any tax overdue as well as tax amounts arising from the process of liquidation;
- to claim credits and pay off debts;
- to handle the company's remaining assets after its debts have been paid off; and
- to represent the company in civil lawsuits.

The liquidation group shall notify the company's creditors within 10 days after its establishment and issue public notices in newspapers within 60 days. A creditor shall lodge his claim with the liquidation group within 30 days after receiving notification, or within 45 days of the public notice if he did not receive any notification. A creditor shall state all matters relevant to his creditor rights in making his claim and furnish evidence. The liquidation group shall register such creditor rights. The liquidation group shall not make any debt settlement to creditors during the period of claim.

Upon liquidation of properties and the preparation of the balance sheet and inventory of assets, the liquidation group shall draw up a liquidation plan to be submitted to the shareholders' general meeting or people's court for confirmation.

The company's remaining assets after payment of liquidation expenses, wages, social insurance expenses and statutory compensation, outstanding taxes and debts shall be distributed to shareholders according to their shareholding proportion. It shall continue to exist during the liquidation period, although it can only engage in any operating activities that are related to the liquidation. The company's properties shall not be distributed to the shareholders before repayments are made in accordance to the foregoing provisions.

Upon liquidation of the company's properties and the preparation of the balance sheet and inventory of assets, if the liquidation group becomes aware that the company does not have sufficient assets to meet its liabilities, it must apply to the people's court for a declaration for bankruptcy.

Following such declaration, the liquidation group shall hand over all matters relating to the liquidation to the people's court.

Upon completion of the liquidation, the liquidation group shall submit a liquidation report to the shareholders' general meeting or the people's court for verification. Thereafter, the report shall be submitted to the registration authority of the company in order to cancel the company's registration, and a public notice of its termination shall be issued. Members of the liquidation group are required to discharge their duties honestly and in compliance with the relevant laws. Members of the liquidation group shall be prohibited from abusing their powers to accept bribes or other unlawful income and from misappropriating the company's properties.

A member of the liquidation group is liable to indemnify the company and its creditors in respect of any loss arising from his intentional or gross negligence.

Overseas Listing

According to the Special Regulations, a company shall obtain the approval of the CSRC to list its shares overseas. A company's plan to issue overseas listed and foreign invested shares and domestic shares which has been approved by the CSRC may be implemented by the board of directors of the company by way of separate issue within 15 months after approval is obtained from the CSRC.

On November 14, 2019, CSRC promulgated the Notice on the Guidance of H-share Companies Applying for "Full Circulation" Business of Unlisted Shares in China (CSRC Announcement [2019] No. 22), which came into effect on the same day. This provision is to regulate the listing and circulation (hereinafter referred to as "Full Circulation") of unlisted domestic shares of domestic joint-stock limited companies (hereinafter referred to as H-share Companies) listed on the stock exchange of Hong Kong (including unlisted domestic capital stock held by domestic shareholders before overseas listing, unlisted domestic capital stock issued in China after overseas listing and unlisted shares held by foreign shareholders) to the Hong Kong Stock Exchange.

H-share Companies applying for "Full Circulation" shall put forward the application to CSRC in accordance to the administrative licensing procedure of Examination and Approval of Overseas Public Offering and Listing (Including Additional Issuance) of Joint-Stock Limited Companies. H-share companies may put forward the application of "Full Circulation" separately or simultaneously when applying for overseas refinancing. Unlisted domestic joint-stock limited companies may put forward the application of "Full Circulation" simultaneously when applying for overseas initial public offering and listing.

Loss of Share Certificates

If a registered share certificate is lost, stolen or destroyed, the relevant shareholder may apply, in accordance with the relevant provisions set out in the Civil Procedure Law, to a people's court to declare such certificate invalid. After the people's court declares the invalidity of such certificate, the shareholder may apply to the company for a replacement share certificate. A separate procedure regarding the loss of overseas listed and foreign invested share certificates is provided for in the Mandatory Provisions.

Suspension and Termination of Listing

The Company Law has deleted provisions governing suspension and termination of listing. The PRC Securities Law (2019 revision) (《中華人民共和國證券法》(2019年修訂)) has also deleted provisions regarding suspension of listing. Where listed securities fall under the delisting circumstances stipulated by the stock exchange, the stock exchange shall terminate its listing and trading in accordance with the business rules.

Where the stock exchange decides on delisting of securities, it shall promptly announce and file records with the securities regulatory authority of the State Council.

Merger and Demerger

Companies may merge through merger by absorption or through the establishment of a newly merged entity. If it merges by absorption, the company which is absorbed shall be dissolved. If it merges by forming a new corporation, both companies will be dissolved.

Securities Law and Regulations

The PRC has promulgated a number of regulations that relate to the issue and trading of shares and disclosure of information. In October 1992, the State Council established the Securities Committee and the CSRC. The Securities Committee is responsible for coordinating the drafting of securities regulations, formulating securities-related policies, planning the development of securities markets, directing, coordinating and supervising all securities related institutions in the PRC and administering the CSRC. The CSRC is the regulatory arm of the Securities Committee and is responsible for the drafting of regulatory provisions of securities markets, supervising securities companies, regulating public offers of securities by PRC companies in the PRC or overseas, regulating the trading of securities, compiling securities related statistics and undertaking relevant research and analysis. In April 1998, the State Council consolidated the two departments and reformed the CSRC.

The Interim Provisional Regulations on the Administration of Share Issuance and Trading(《股票發行與交易管理暫行條例》) deals with the application and approval procedures for public offerings of equity securities, trading in equity securities, the acquisition of listed companies, deposit, clearing and transfer of listed equity securities, the disclosure of information with respect to a listed company, investigation, penalties and dispute settlement.

On December 25, 1995, the State Council promulgated and implemented the Regulations of the State Council Concerning Domestic Listed Foreign Shares of Joint Stock Limited Companies (《國務院關於股份有限公司境內上市外資股的規定》). These regulations deal mainly with the issue, subscription, trading and declaration of dividends and other distributions of domestic listed and foreign invested shares and disclosure of information of joint stock limited companies having domestic listed and foreign invested shares.

The PRC Securities Law took effect on July 1, 1999 and was revised on August 28, 2004, October 27, 2005, June 29, 2013, August 31, 2014 and December 28, 2019, respectively. This is the first national securities law in the PRC, which is divided into 14 chapters and 226 articles regulating, among other things, the issue and trading of securities, takeovers by listed companies, securities exchanges, securities companies and the duties and responsibilities of the State Council's securities regulatory authorities. The PRC Securities Law comprehensively regulates activities in the PRC securities market. Article 224 of the PRC Securities Law provides that domestic enterprises shall comply with the relevant provisions of the State Council. to list its shares outside the PRC. Currently, the issue and trading of foreign issued shares (including H shares) are mainly governed by the rules and regulations promulgated by the State Council and the CSRC.

Arbitration and Enforcement of Arbitral Awards

The Arbitration Law of the PRC (《中華人民共和國仲裁法》) (the "Arbitration Law") was passed by the Standing Committee of the NPC on August 31, 1994, became effective on September 1, 1995 and was amended on August 27, 2009 and September 1, 2017. Under the Arbitration Law, an arbitration committee may, before the promulgation by the PRC Arbitration Association of arbitration regulations, formulate interim arbitration rules in accordance with the Arbitration Law and the Civil Procedure Law. Where the parties have by agreement provided arbitration as the method for dispute resolution, the people's court will refuse to handle the case except when the arbitration agreement is declared invalid.

The Mandatory Provisions require an arbitration clause to be included in the articles of association of an issuer. Matters in arbitration include any disputes or claims in relation to the issuer's affairs or as a result of any rights or obligations arising under its articles of association, the Company Law or other relevant laws and administrative regulations. Where a dispute or claim of rights referred to in the preceding paragraph is referred to arbitration, the entire claim or dispute must be referred to arbitration,

and all persons who have a cause of action based on the same facts giving rise to the dispute or claim or whose participation is necessary for the resolution of such dispute or claim, must comply with the arbitration. Disputes in respect of the definition of shareholder and disputes in relation to the issuer's register of shareholders need not be resolved by arbitration.

A claimant may elect for arbitration to be carried out at either the China International Economic and Trade Arbitration Commission (中國國際經濟貿易仲裁委員會) ("CIETAC") in accordance with its rules or the Hong Kong International Arbitration center ("HKIAC") in accordance with its Securities Arbitration Rules (the "Securities Arbitration Rules"). Once a claimant refers a dispute or claim to arbitration, the other party shall submit to the arbitral body elected by the claimant. If the claimant elects for arbitration to be carried out at the HKIAC, any party to the dispute or claim may apply for a hearing to take place in Shenzhen in accordance with the Securities Arbitration Rules. In accordance with the Arbitration Regulations of CIETAC (《中國國際經濟貿易仲裁委員會仲裁規則》) which was amended on November 4, 2014 and implemented on January 1, 2015, CIETAC shall deal with economic and trading disputes over contractual or non-contractual transactions, based on an agreement of the parties, including disputes involving Hong Kong based on the agreement of the parties. The arbitration commission is established in Beijing and its branches and centers have been set up in Shenzhen, Shanghai, Tianjin, Chongqing, Zhejiang, Hubei, Fujian, Shanxi, Jiangsu, Sichuan and Shandong.

Under the Arbitration Law and the Civil Procedure Law, an arbitral award is final and binding on the parties. If a party fails to comply with an award, the other party to the award may apply to the people's court for enforcement. A people's court may refuse to enforce an arbitral award made by an arbitration commission if there is any irregularity on the procedures or composition of arbitrators specified by law or the award exceeds the scope of the arbitration agreement or is outside the jurisdiction of the arbitration commission.

A party seeking to enforce an arbitral award of PRC arbitration panel against a party who, or whose property, is not within the PRC, may apply to a foreign court with jurisdiction over the case for enforcement. Similarly, an arbitral award made by a foreign arbitration body maybe recognized and enforced by the PRC courts in accordance with the principles of reciprocity or any international treaty concluded or acceded to by the PRC. The PRC acceded to the Convention on the Recognition and Enforcement of Foreign Arbitral Awards (the "New York Convention") adopted on June 10, 1958 pursuant to a resolution of the Standing Committee of the NPC passed on December 2, 1986. The New York Convention provides that all arbitral awards made in a state which is a party to the New York Convention shall be recognized and enforced by all other parties to the New York Convention, subject to their right to refuse enforcement under certain circumstances, including where the enforcement of the arbitral award is against the public policy of the state to which the application for enforcement is made. It was declared by the Standing Committee of the NPC simultaneously with the accession of the PRC that (i) the PRC will only recognize and enforce foreign arbitral awards on the principle of reciprocity and (ii) the PRC will only apply the New York Convention in disputes considered under PRC laws to arise from contractual and non-contractual mercantile legal relations.

An arrangement was reached between Hong Kong and the Supreme People's Court for the mutual enforcement of arbitral awards. On June 18, 1999, the Supreme People's Court adopted the Arrangement on Mutual Enforcement of Arbitral Awards between Mainland China and Hong Kong (《關於內地與香港特別行政區相互執行仲裁裁決的安排》), which became effective on February 1, 2000. Furthermore, the supplemental arrangements were respectively issued on November 26, 2020 and May 18, 2021. In accordance with these arrangements, awards made by PRC arbitral authorities under the Arbitration Law can be enforced in Hong Kong, and Hong Kong arbitration awards are also enforceable in the PRC.

Judicial judgment and its enforcement

According to the Arrangement on Mutual Recognition and Enforcement of Judgments in Civil and Commercial Matters by the Courts of the Mainland China and of the Hong Kong Special Administrative Region Pursuant to Agreed Jurisdiction by Parties Concerned (《最高人民法院關於內地與香港特別行政區法院相互認可和執行當事人協議管轄的民商事案件判決的安排》) promulgated by the Supreme People's Court on July 3, 2008 and implemented on August 1, 2008, in the case of final judgment, defined with payment amount and enforcement power, made between the court of China and the court of the Hong Kong Special Administrative Region in a civil and commercial case with written jurisdiction agreement, any party concerned may apply to the People's Court of China or the court of the Hong Kong Special Administrative Region for recognition and enforcement based on this arrangement. "Choice of court agreement in written" refers to a written agreement defining the exclusive jurisdiction of either the People's Court of China or the court of the Hong Kong Special Administrative Region in order to resolve dispute with particular legal relation occurred or likely to occur by the party concerned. Therefore, the party concerned may apply to the Court of China or the court of the Hong Kong Special Administrative Region to recognize and enforce the final judgment made in China or Hong Kong that meet certain conditions of the aforementioned regulations.

Shanghai-Hong Kong Stock Connect

On April 10, 2014, CSRC and Hong Kong Securities and Futures Commission (hereinafter referred to as "HKSFC") issued the Joint Announcement of China Securities Regulatory Commission and Hong Kong Securities and Futures Commission—Principles that Should be Followed when the Pilot Program that Links the Stock Markets in Shanghai and Hong Kong is Expected to be Implemented and approved in principle the launch of the pilot program that links the stock markets in Shanghai and Hong Kong (hereinafter referred to as "Shanghai-Hong Kong Stock Connect") by the Shanghai Stock Exchange (hereinafter referred to as "SSE"), the Stock Exchange, China Securities Depository and Clearing Corporation Limited (hereinafter referred to as "CSDC") and HKSCC. Shanghai-Hong Kong Stock Connect comprises the two portions of Northbound Trading Link and Southbound Trading Link. Southbound Trading Link refers to the entrustment of China securities houses by China investors to trade stocks listed on the Stock Exchange within a stipulated range via filing by the securities trading service company established by the SSE with the Stock Exchange. During the initial period of the pilot program, the stocks of Southbound Trading Link consist of constituent stocks of the Stock Exchange Hang Seng Composite Large Cap Index and the Hang Seng Composite Mid Cap Index as well as stocks of A+H stock companies concurrently listed on the Stock Exchange and the SSE. The total limit of Southbound Trading Link is RMB250 billion and the daily limit is RMB10.5 billion. During the initial period of the pilot program, it is required by HKSFC that China investors participating in Southbound Trading Link are only limited to institutional investors and individual investors with a securities account and capital account balance of not less than RMB500,000.

On November 10, 2014, CSRC and HKSFC issued a Joint Announcement, approving the official launch of Shanghai-Hong Kong Stock Connect by SSE, the Stock Exchange, CSDC and HKSCC. Pursuant to the Joint Announcement, trading of stocks under Shanghai-Hong Kong Stock Connect will commence on November 17, 2014.

On September 30, 2016, CSRC issued the Filing Provision on the Placement of Shares by Hong Kong Listed Companies with Domestic Original Shareholders under Southbound Trading Link which came into effect on the same day. The act of the placement of shares by Hong Kong listed companies with domestic original shareholders under Southbound Trading Link shall be filed with CSRC. Hong Kong listed companies shall file the application materials and approved documents with CSRC after obtaining approval from the Stock Exchange for their share placement applications. CSRC will carry out supervision based on the approved opinion and conclusion of the Hong Kong side.

1. DIRECTORS AND BOARD OF DIRECTORS**(1) Power to allocate and issue shares**

The Articles of Association does not contain clauses that authorize the Board of Directors to allocate or issue shares. The Board of Directors shall prepare suggestions for share allotment or issue, which are subject to approval by the Shareholders at the general Shareholders' meeting in the form of a special resolution. Any such allotment or issue shall be in accordance with the procedures stipulated in appropriate laws, administrative regulations and supervision rules of shares listed region.

(2) Power to dispose assets of our Company or any subsidiary

In any case that the Board of Directors intends to dispose assets, if the sum of the expected value of the fixed assets to be disposed of, and the amount or value of the value received from the fixed assets of our Company disposed of within the four months immediately preceding this suggestion for disposal exceeds 33% of the value of fixed assets of our Company indicated on the latest balance sheet extracted from the audited consolidated financial statements submitted at the Shareholders' meeting, the Board of Directors shall not dispose of or agree to dispose of the fixed assets without the approval of the Shareholders' meeting.

For the purposes of the Articles of Association, a disposition of fixed assets includes certain acts of transfer of interests in assets but does not include the provision of fixed assets as security.

The validity of the transactions with respect to the disposal of fixed assets of our Company shall not be affected by the violation of the above restrictions contained in the Articles of Association.

(3) Emoluments or compensation for Directors and Supervisors

As provided in the written contract entered between our Company and the Directors or Supervisors in connection with their emoluments, they are entitled to compensation or other payments subject to the approval of the Shareholders at the Shareholders' meeting in advance. The aforesaid emoluments include:

- i. Emoluments in respect of his service as a Director, Supervisor or senior management of our Company;
- ii. Emoluments in respect of his service as a Director, Supervisor or senior management of any subsidiary of our Company;
- iii. Emoluments in respect of other service in relation to the management of our Company and any subsidiary of our Company; and
- iv. Payment by way of compensation for loss of office or retirement from office of a Director or Supervisors.

It should be concluded in the emolument contract that where our Company is to be acquired, the Directors and Supervisors should be entitled to compensation or other payments for loss of office or retirement from office subject to the approval of the Shareholders at the Shareholders' meeting in advance.

Acquisition of our Company refers to any of the following circumstances:

- i. An offer made by any person to all Shareholders; or
- ii. An offer made by any person aiming to make the offeror to become the controlling shareholder of our Company. The definition of controlling shareholder is the same as defined in the Articles of Association.

If the relevant Director or Supervisor fails to comply with the above requirements, any payment received shall belong to the person who sells the shares in acceptance of the aforesaid offer. The Director or Supervisor shall bear all expenses arising from the distribution of such payments to the person in a proportional manner and all related expenses shall not be deducted from these payments distributed.

(4) Loans or Guarantees of Loans to Directors, Supervisors or other management personnel

Our Company shall neither provide the Directors, Supervisors or senior management of our Company or our parent company with loans or loan guarantees either directly or indirectly nor provide persons related to the above personnel with loans or loan guarantees. In the event that our Company provides loans in violation of this restriction, the person who receives the loan(s) must pay off the loan(s) immediately, regardless of the conditions of loans. Any loan guarantee provided by our Company in violation of the above requirements shall not be mandatorily enforced against us, unless under the following circumstances:

- i. The loan provider unknowingly provides loans to personnel related to the Directors, Supervisors or senior management of our Company or its parent company; or
- ii. The collateral provided by our Company is sold lawfully by the lender to the buyer in good faith.

The following circumstances are exempted from the above clauses:

- (i). Our Company provides our subsidiaries with loans or loan guarantees;
- (ii). Our Company provides any of the Directors, Supervisors or senior management with loans, loan guarantees or any other fund pursuant to the employment contracts approved at the Shareholders' meeting to pay all expenses incurred for the purpose of our Company or performing his duties owed to our Company; and
- (iii). In case that the normal scope of business of our Company covers the provision of loans or loan guarantees, our Company may provide any of the Directors, Supervisors or senior management and other related personnel with loans or loan guarantees, provided that the conditions governing the above loans or loan guarantees shall be normal commercial conditions.

(5) Provide financial assistance for acquiring the shares of the Company or shares of any subsidiary

Subject to the Articles of Association, our Company or our subsidiaries (including our affiliated enterprises) shall not provide any financial assistance at any time or in any kind to personnel that acquires or plans to acquire our shares. Such personnel include any who undertake obligations, directly or indirectly, from acquiring the shares; and our Company or any of our subsidiaries (including our affiliated enterprises) shall not provide personnel mentioned in the preceding paragraph with financial assistance at any time or in any manner, to mitigate or exempt the obligations of the above personnel.

For the purpose of the above provisions, “Financial assistance” includes, but is not limited to:

- i. Gifts;
- ii. Guarantees (including acts of the guarantor assuming liabilities or providing properties to ensure that the obligor performs the obligations), compensation (excluding compensation arising from mistakes of our Company), release or waiver of rights;
- iii. Provision of loans or signing of contracts whereby our Company performs some obligations before others, change of the parties to the loans/contracts as well as the assignment of the rights in the loans/contracts; and
- iv. Financial assistance provided by our Company in any other manner when it is insolvent, has no net assets, or will suffer significant decreases in net assets.

“Assuming obligations” includes obligator undertaking obligations by way of contract or the making of an arrangement (whether enforceable or not, and whether made on its own account or with any other persons), or changing its financial status in any other manner.

The following transactions are not deemed to be prohibited, unless prohibited by relevant laws, administrative regulations, regulations of the authorities and regulatory documents:

- i. Related financial assistance provided by our Company which is in good faith in our interest and the main purpose of the financial assistance is not to acquire our shares; or is an incidental part of a master plan of our Company;
- ii. The lawful distribution of our properties by way of dividend;
- iii. The allotment of bonus shares as shares;
- iv. Reducing the registered capital, redeeming the shares or adjusting the equity structure pursuant to the Articles of Association;
- v. Our Company granting loans within our scope of business and in the ordinary course of our business, provided that such loans shall not result in reduction in the net assets of our Company or even if the net assets are reduced, such financial assistance is paid from the profit available for distribution; and
- vi. Our Company providing the employee stock ownership plan with fund, provided that such financial assistance shall not result in reduction in the net assets of our Company or, even if the net assets are reduced, such financial assistance is paid from the profit available for distribution.

(6) Disclosure of interests in contracts, transactions or arrangements with the Company

Where a Directors, Supervisors and senior management has material interests in the contracts, transactions or arrangements that our Company has entered into or plans to enter into directly or indirectly (except for employment contracts that our Company has entered into with the Directors, Supervisors and senior management), the above personnel shall disclose the nature and degree of their interests to the Board of Directors as soon as possible no matter whether the above contracts, transactions or arrangements are subject to the approval of the Board of Directors in normal circumstances.

With respect to any contract, transaction or arrangement in which a Director or his Associates (defined in the Listing Rules) have a material interest, the Director shall not vote and shall not be included in the quorum, except for the exceptions provided in Note 1 Appendix 3 in the Listing Rules.

Unless the Directors, Supervisors and senior management who have interests have made disclosure to the Board of Directors in accordance with the above requirements and the Board of Directors approves the matters at the meeting in which they are not included in the quorum nor participate in voting, our Company shall have the right to cancel the contracts, transactions or arrangements, except where the opposite party is a party in good faith without knowledge of the acts of related Directors, Supervisors and senior management violating their obligations.

Where related personnel of the Directors, Supervisors and senior management have interests in certain contracts, transactions and arrangements, the relevant Directors, Supervisors and senior management shall be deemed to have interests.

Prior to our Company's first considering the relevant contracts, transactions or arrangements, if the Directors, Supervisors and senior management have notified the Board of Directors in writing and stated that with regard to the content of such notice, they have interest in certain contracts, transactions and arrangements thereafter. And within the scope specified by such notice, the relevant Directors, Supervisors and senior management should be considered having made disclosures which are in accordance with this Article of Association.

(7) Remuneration

Our Company shall sign written agreements with the Directors and Supervisors regarding remuneration, which shall be subject to prior approval of the general Shareholders' meeting.

(8) Appointment, Resignation and Dismissal

The Board of Directors consists of eleven Directors, at least four of whom are independent non-executive Directors. The Board of Directors has one chairman. Directors are elected at the general Shareholders' meeting. The Directors need not hold any of our shares.

The chairman of the Board shall be elected and dismissed by a vote of more than one half of the Directors. Provided that it is in compliance with relevant laws, regulations and rules as well as the regulatory rules of which the Company's shares are listed, the general Shareholders' meeting may remove any Director whose term has not expired by an ordinary resolution without affecting any claim for damages that may be made pursuant to any contract.

The chairman of the Board and other Directors all serve three-year terms. Upon expiration of the term, the Director may be re-elected. Director can be the general manager or other senior management personnel at the same time. However, the number of the Directors who are also general manager or other senior management personnel shall not be more than half of the total number of Directors. There is no provision in the Articles of Association that imposes any age limit for Directors beyond which retirement of a Director is mandatory.

None of the following persons shall serve as our Director, Supervisor or senior management:

- i. A person who has no civil capacity or has limited civil capacity;
- ii. A person who has been imposed penalty for the offense of corruption, bribery, embezzlement, larceny, or disrupting the social economic order and is within five years of the expiry date of punishment or has been deprived of political rights because of this conviction and is within five years of the expiry date of the sentence;

- iii. A person who is a former director, factory manager or general manager of a company or enterprise that is bankrupt and liquidated because of poor operation, was personally liable for the bankruptcy of such company or enterprise, and is within three years of the date of completion of bankruptcy and liquidation of such company or enterprise;
- iv. A person who has served as the legal representative of a company or enterprise whose business license was revoked or was ordered to close due to violation of laws, was personally liable, and is within three years of the date on which the business license of such company or enterprise was revoked;
- v. A person who has a relatively large sum of debt, which was not paid at maturity;
- vi. A person who is investigated by the judicial agencies for violation of criminal law and whose case is pending;
- vii. A person who is prohibited to serve leadership in a company pursuant to laws and administrative regulations;
- viii. A person who is subject to China Securities Regulatory Commission's punishment which prohibited them from entering into the securities market for a period which has not yet expired;
- ix. A person judged by the competent agencies to have violated the provisions of relevant securities laws, being involved in deceptive or dishonest acts and is within five years of the date on which the judgment was made;
- x. A person who is not a natural person; or
- xi. Any other person who is otherwise not eligible under laws, administrative regulations, regulations of the authorities, regulatory documents and other conditions set out by the relevant regulatory bodies.

The election, appointment or employment of the Directors, Supervisors or other senior management shall be invalid if such election, appointment or employment is against the Articles of Association. If the Directors, Supervisors or senior management falls into the situations provided in the above-mentioned situations during their term of office, they would be dismissed by our Company.

The validity of an act of the Directors or senior management on behalf of our Company to bona fide third parties shall not be affected by any irregularities in their appointment, election or qualifications.

(9) Borrowing powers

The Board of Directors shall be entitled to decide to borrow money within the scope of authorization by the general Shareholder's meeting or it is required according to the listing rules of the stock exchange where our Company is listed.

The Board of Directors shall be entitled to develop proposals for our Company to issue bonds and to list its Shares, and that such bond issues must be approved by the Shareholders by a special resolution at the general Shareholders' meeting.

(10) Duties

The Directors, Supervisors and senior management shall bear the obligations of good faith and diligence towards our Company. In the event of violation of obligations owed to our Company by the Directors, Supervisors and senior management, we shall have the right to take the following measures in addition to various rights and remedial measures stipulated in laws and administrative regulations:

- i. Require related Directors, Supervisors or senior management to compensate our Company for losses sustained as a result of their neglect of duty;
- ii. Cancel any contract or transaction entered into between our Company and related Directors, Supervisors or senior management as well as any contract or transaction entered into between our Company and third person when the third person knew or should have known that the Directors, Supervisors or senior management acting on behalf of our Company violated their obligations owed to our Company;
- iii. Require the relevant Directors, Supervisors or senior management to turn over the proceeds obtained from the violation of their obligations;
- iv. Recover funds collected by the relevant Directors, Supervisors or senior management that should have been collected for our Company, including but not limited to commissions;
- v. Require the relevant Directors, Supervisors or senior management to return the interest earned or that may be earned from funds that should have been paid to our Company;

When performing their duties, the Directors, Supervisors and senior management of the Company must comply with the principle of integrity and shall not put themselves in situations where their own interests may conflict with the obligations they have undertaken. This principle includes, without limitation, performing the following obligations:

- i. Acting honestly in the best interests of our Company as the starting point of any action;
- ii. Exercising powers within and not exceeding the scope of authority;
- iii. Exercising conferred discretionary powers personally without being manipulated by others; not transferring discretionary powers to other persons unless permitted by laws, administrative regulations or with the informed consent given in a general Shareholders' meeting;
- iv. Treating Shareholders of the same class equally and Shareholders of different classes fairly;
- v. Entering into contract, transaction or arrangement with our Company is not allowed, unless in line with the Articles of Association or otherwise by the approval of the general Shareholders' meeting with its full knowledge;
- vi. Seeking private gain using the properties of our Company in any manner is not allowed, unless agreed by the general Shareholders' meeting with its full knowledge;
- vii. Using one's position to take bribes or other illegal income is not allowed, nor is any form of embezzlement of our property, including, but not limited to, opportunities beneficial to our Company;
- viii. Accepting commissions associated with transactions of our Company is not allowed unless agreed by the general Shareholders' meeting with its full knowledge;

- ix. Compliance with the Articles of Association, faithfully execute one's duties and protect the Company's interests, and not to exploit one's position and power in the Company to advance one's own private interests;
- x. Not to compete with our Company in any kind unless agreed by the general Shareholders' meeting with its full knowledge;
- xi. Not to lend our Company's funds to any other person, misappropriate our funds or deposit the assets or funds of our Company in an account opened in one's own name or other names, and not to provide securities for the debt of our Shareholder or any other people using our Company's assets, unless otherwise provided by the laws, regulations or the Articles of Association;
- xii. Disclosure of confidential information relating to our Company obtained during employment without the consent of the general Shareholders' meeting with its full knowledge; unless in the interest of our Company, using such information is also not allowed; however, under the following circumstances the information may be disclosed to a court or other competent government agencies as required by:
 - (i). The provisions of the law;
 - (ii). For the public interests;
 - (iii). The interests of the Directors, Supervisors or senior management.

The relevant personnel shall return the income obtained from violation of the above provisions to our Company and shall bear the liability of compensation if our Company suffers damage.

The Directors, Supervisors and senior management may not direct the following personnel or institutions ("related personnel") to do what they are prohibited from doing:

- i. Spouses or minor children of the Directors, Supervisors and senior management;
- ii. Trustors of the Directors, Supervisors and senior management or the persons mentioned in the preceding paragraph;
- iii. Partners of the Directors, Supervisors and senior management or persons mentioned in i and ii above;
- iv. Any company under de facto control by the Directors, Supervisors and senior management individually or jointly with the persons or other directors, supervisors and senior management of companies mentioned in i, ii and iii above; and
- v. Directors, Supervisors or senior management of the controlled companies mentioned in the preceding paragraph.

The good faith obligation of the Directors, Supervisors and senior management may not necessarily cease with the termination of their terms; their obligation to keep the trade secrets of our Company in confidence shall survive the termination of their terms. Other duties may continue for such period as fairness may require depending on the time lapse between the termination and the act concerned and any circumstance and condition under which the relationships between them and the Company are terminated.

Unless otherwise provided in the Articles of Association, liabilities of Directors, Supervisors and senior management arising from the violation of specific duties may be dissolved by informed general Shareholders' meeting.

Apart from the obligations set forth in related laws, administrative regulations or the listing rules of the stock exchange where the Shares of the Company are listed, the Directors, Supervisors or senior management shall assume the following obligations for each of the Shareholders when exercising their rights and performing their responsibilities:

- i. They shall not cause our Company to operate beyond the scope of business indicated on our business license;
- ii. They shall sincerely take the best interests of our Company as the starting point of any action;
- iii. They may not deprive our Company of our assets in any manner, including, but not limited to, opportunities beneficial to our Company; and
- iv. They shall not deprive the Shareholders of personal rights and interests, including, but not limited to, the right to receive dividends and to vote, except for restructuring of our Company approved at the Shareholders' meeting pursuant to the provisions of the Articles of Association.

The Directors, Supervisors and senior management of the Company have the responsibility when exercising their rights or carrying out their obligations to act with the care, diligence and skill due from a reasonably prudent person under similar circumstances.

In the event of any loss caused to our Company as a result of violation of any laws, regulations or Articles of Association by the Directors or senior management when performing their duties in our Company, the Shareholders holding 1% or more shares separately or jointly for over 180 consecutive days may submit a written request to the Board of Supervisors to file an action with the people's court. Where supervisors violate laws, administrative regulations or the Articles of Association in their duty performance and cause loss to our Company, the Shareholders may submit a written request to the Board of Directors to file an action with the people's court.

In the event that the Board of Supervisors or the Board of Directors refuse to file an action upon receipt of the Shareholders' written request specified in the preceding paragraph, or fail to file an action within 30 days upon receipt thereof, or in the event that the failure to immediately file an action in an emergency case will cause irreparable damage to the interests of our Company, the Shareholder(s) specified in the preceding paragraph may, in their own name, directly file an action to the court for the interest of our Company.

In the event of any other person infringes upon the legitimate rights and interests of our Company and causes losses thereto, the shareholder(s) specified in this Articles of Association may file an action with the competent court pursuant to the provisions of the preceding two paragraphs.

In the event of a Director or senior management person violates laws, administrative regulations or our Company's Articles of Association, thereby damaging the interests of the Shareholder(s), the Shareholder(s) may file an action with the competent court.

2. MODIFICATION OF THE ARTICLE OF ASSOCIATION

Our Company may amend the Articles of Association based on the provisions of the laws, administrative regulations and Articles of Association.

Where the amendments to the Articles of Association passed by the general Shareholders' meetings need the examination and approval of the competent authorities, these amendments shall be submitted hereto for approval. Where the amendment of the Articles of Association involves registration, it shall be necessary to carry out the lawfully prescribed procedures for registration change.

3. VARIATION OF RIGHTS OF EXISTING SHARES OF CLASSIFIED SHARES

Any plan of our Company of changing or abolishing the rights of a classified Shareholder is subject to the approval of the general Shareholders' meeting in the form of a special resolution and the approval of the affected classified Shareholders at a separately convened the Shareholders' meeting before it can be implemented.

Changes or abolishment of the rights of a classified Shareholder due to amendment in domestic and foreign laws, administrative regulations, listing rules, and decisions made by domestic and foreign regulatory agencies in accordance with the law do not require the approval of the shareholders' meeting or classified shareholders' meeting.

Domestic shareholders of the company transferring all or part of their shares to overseas investors and listing and trading overseas, or converting all or part of the domestic shares into overseas listed shares and listing and trading on overseas stock exchanges shall not be considered that the company intends to change or abolish the rights of classified Shareholders.

The rights of a classified Shareholder shall be deemed as changed or abolished under the following circumstances:

- i. Increase or decrease the number of the classified shares, or increase or decrease the number of classified shares with equal or more voting rights, distribution rights, other privileges than this type of classified shares;
- ii. Convert all or part of the classified shares into other classes or convert another class of shares, partly or wholly, into the shares of such class;
- iii. Remove or reduce the right of the classified shares to accrued dividends generated or rights to cumulative dividends;
- iv. Reduce or remove a dividend preference or a liquidation preference attached to shares of such class;
- v. Add, remove or reduce the right of the classified shares to convert share rights, options rights, voting rights, transfer rights, and pre-emptive rights, or the right to obtain the securities of our Company;
- vi. Remove or reduce the right of the classified shares to receive funds payable of our Company in specified currencies;
- vii. Create new classified shares entitled to equal or more voting rights, distribution rights, or other privileges than the classified shares;

- viii. Restrict the transfer or ownership of the classified shares or increase such restrictions;
- ix. Issue subscription or conversion rights for this or other classified shares;
- x. Increase the rights and privileges of other classes of shares;
- xi. The restructuring plan of our Company may constitute different classes of Shareholders to assume responsibilities disproportionately in restructuring; and
- xii. Amend or abolish clauses stipulated in our Articles of Association.

Whether or not the affected classified Shareholders have voting rights at the Shareholders' meeting, in the event of matters described above from ii through viii, xi to xii, they have voting rights at the classified Shareholders' meeting, but the Shareholders that have interests at stake shall have no voting rights at the classified Shareholders' meeting. Shareholders that have interests at stake include:

- i. Where the Company makes an offer to all the Shareholders at the same ratio according to this Articles of Association or purchase their own shares through public transaction in the Stock Exchange, Shareholders that have interests at stake refer to controlling shareholders as defined in this Articles of Association;
- ii. Where our Company purchase its own shares through reaching an agreement outside the Stock Exchange and in accordance with the Articles of Association, Shareholders that have interests at stake shall mean the Shareholders who are relevant to such agreement;
- iii. In our Company's re-organization plan, Shareholders that have interests at stake shall mean Shareholders who bear liability at a rate that is lower than other Shareholders in the same class or who hold different interests with other Shareholders in the same class.

The resolution of the classified Shareholders' meeting shall be passed by votes representing more than two thirds of shareholding with voting rights attending the classified Shareholders' meeting. At least 20 Business Days before convening an annual classified Shareholders' meeting, or 15 days or 10 Business Days (the longer one would prevail, excluding the day sending the notice and the day convening the meeting) before convening an extraordinary classified Shareholders' meeting, our Company shall send a written notice to inform all registered holders of the classified shares on matters to be deliberated at the meeting, as well as the date and venue of the meeting.

For shareholders holding Domestic Shares, the notice of Shareholder's meeting could be in the form of announcement, which should be published on one or more newspapers designated by the security regulatory authority of the State Council, 20 to 25 Business Days before convening the Shareholders' meeting. All the shareholders holding Domestic Shares would be considered having received the notice regarding Shareholder's meeting once the announcement is published. For shareholders holding overseas listed foreign shares, the announcement could be published on the website designated by Hong Kong Exchange Stock or the website of our Company. All the shareholders holding overseas listed foreign shares would be considered having received the notice regarding Shareholder's meeting once the announcement is published.

Where there are special rules in the listing rules of the stock exchange where the shares are listed, the special rules prevail.

Insofar as possible, any classified Shareholders' meeting shall be held in accordance with the same procedures as those of the Shareholders' meeting, and unless otherwise provided in the Articles of Association, any clause that relates to the procedures for convening the Shareholders' meeting in the Articles of Association shall apply to classified Shareholders' meeting.

Apart from the holders of other classified shares, the holders of Domestic Shares and the holders of overseas listed foreign shares are deemed as different classified Shareholders.

The special procedures for voting by the classified Shareholders shall not apply under the following circumstances:

- i. Upon the approval by a special resolution at the general Shareholders' meeting, our Company either separately or concurrently issues Domestic Shares and overseas listed foreign shares once every 12 months, and the number of those Domestic Shares and overseas listed foreign shares to be issued shall not account for more than 20% of each of its outstanding shares;
- ii. The plan to issue Domestic Shares and overseas listed foreign shares upon the establishment of our Company is completed within 15 months of the date of approval by the securities regulatory authorities of the State Council; and
- iii. Upon the approval by the securities regulatory authorities of the State Council, the Domestic Shares and foreign shares under unlisted transactions are converted to overseas listed foreign shares which are listed and traded overseas markets.

4. SPECIAL RESOLUTIONS NEEDED TO BE ADOPTED BY ABSOLUTE MAJORITY VOTE

The resolutions of the Shareholders' meeting shall be divided into ordinary resolutions and special resolutions.

An ordinary resolution may be adopted by a simple majority of the votes held by the Shareholders (including proxies of Shareholders) attending the general Shareholders' meeting.

A special resolution can be adopted by a two-thirds majority of the votes held by the Shareholders (including proxies of Shareholders) attending the general Shareholders' meeting.

5. VOTING RIGHTS

The ordinary Shareholders have the right to attend or appoint a proxy to attend and vote at the general Shareholders' meeting. When voting at the general Shareholders' meeting, the Shareholder (including proxy) may exercise his or her voting rights in accordance with the number of shares with voting power held with each share representing one vote.

General Shareholders' meeting adopt vote by hands or open ballot. When voting at a general Shareholders' meeting, Shareholders (including their proxies) who are entitled to two or more votes are not required to vote against or in favour with their total number of votes.

When the number of dissenting votes equals the number of supporting votes, regardless of voting by ballot or show of hands, the chairman of the Board of Directors is entitled to one additional vote.

6. RULES ON GENERAL SHAREHOLDERS' MEETINGS

The general Shareholders' meetings are divided into annual general Shareholders' meetings and extraordinary general Shareholders' meetings. The annual general shareholders' meeting shall be convened once a year and be held within six months of the end of the previous fiscal year.

7. ACCOUNTING AND AUDITS

(1) Financial and accounting policies

Our Company shall develop its financial accounting policies pursuant to laws, administrative regulations and rules developed by the competent department. Where there are special rules in the listing rules of the stock exchange where the Shares are listed, the special rules would prevail.

The Board of Directors shall submit the financial reports to Shareholders, as required by the laws, rules and regulations or regulatory documents to be prepared by our Company, at every annual general Shareholders' meetings.

Apart from the PRC accounting standards and regulations, the financial statements of our Company shall also conform to international accounting standards or the accounting standards of overseas areas where the shares are listed. In the event of any major discrepancy between the financial statements prepared in accordance with the two types of accounting standards, such difference must be provided in the notes to the financial statements. As to the distribution of after-tax profits of our Company in a fiscal year, the after-tax profits indicated on the two financial reports, whichever is lower shall prevail.

Our Company shall make its financial reports available at the Company for inspection by the Shareholders 20 days before the annual general Shareholders' meeting is convened. Each Shareholder is entitled to obtain one copy of the financial report.

Our Company shall send the financial reports, together with the balance sheet and income statement or income and expenditure statement to each of the holders of overseas listed foreign shares by postage-paid mail or by the manner, including publication on the Company's website or website of the Hong Kong Stock Exchange and other websites provided by the Listing Rules revised from time to time, as allowed in laws and regulation of the region where our Company's shares are listed and the listing rules of the stock exchange where our Company's Shares are listed at least 21 days before the annual general Shareholders' meeting is convened and the recipient's address shall be the address as registered in the register of Shareholders.

The interim results or financial information published or disclosed by our Company shall at the same time be prepared in accordance with the PRC accounting standards, rules and regulations as well as international accounting standards or the accounting standards of the overseas area in which the shares are listed.

Our Company shall publish the financial reports twice in each accounting year. Interim financial reports shall be published within 60 days of the end of the first six months of a fiscal year, while the annual financial report shall be published within 120 days of the end of each accounting year.

(2) Appointment and Dismissal of Accountants

Our Company shall appoint an independent accounting firm that meets appropriate requirements of the relevant regulations of the PRC to be responsible for auditing its annual financial report and reviewing its other financial reports.

The first accounting firm of our Company can be appointed by the founding meeting before the first annual general Shareholders' meeting and the term of the appointment will expire at the close of the first annual general Shareholders' meeting. In event that the founding meeting does not exercise such power, the Board of Directors shall take it.

The term of the accounting firm appointed by our Company shall start at the close of such annual general Shareholders' meeting of the Company and continue until the close of the next annual general Shareholders' meeting.

If the position of an appointed accounting firm is vacant, the Board of Directors may appoint an accounting firm before the start of general Shareholders' meeting. However, if during the vacant period, our Company has other incumbent accounting firm, such accounting firm may take the vacant.

Except the circumstances as above said, our Company shall appoint an accounting firm by the decision of the Shareholders' meeting. The Board of Directors shall not appoint accounting firm before decisions made at Shareholders' meeting. The Shareholders may replace the accounting firm through an ordinary resolution at the general Shareholders' meeting prior to the expiration of the term of any accounting firm notwithstanding the terms and conditions of the contract howsoever entered into between our Company and the accounting firm. With respect to the compensation rights against the Company by the relevant accounting firm due to dismissal shall not be affected thereof.

8. NOTICE AND AGENDA OF GENERAL SHAREHOLDERS' MEETINGS

The general Shareholders' meeting is the authorized organ of our Company that performs duties and exercises powers in accordance with the law.

Under any of the following circumstances, the Company shall convene an extraordinary general Shareholders' meeting within two months:

- i. The number of Directors is less than the number specified in the PRC Company Law or less than two thirds of the number required in the Articles of Association;
- ii. The uncovered losses of our Company reach one-third of its total paid-in registered capital;
- iii. The Shareholders with 10% or more shares of the Company separately or jointly request to convene an extraordinary general Shareholders' meeting in writing (the number of shares shall be calculated by the day of the request);
- iv. The Board of Directors considers it necessary;
- v. The Board of Supervisors considers it necessary;
- vi. Any other circumstances stipulated in laws, administrative regulations, regulations of the authorities, the Articles of Association and the listing rules of stock exchange of the place in which our Company's Shares are listed.

In the event that the Board of Director agree to convene an extraordinary general Shareholders' meeting, the notice of convening extraordinary general Shareholders' meeting shall be issued within 5 days after the Board of Directors made a resolution. With regard to the proposal of convening an extraordinary general Shareholders' meeting made by the Board of Supervisors, if the Board of Directors made a rejection or does not respond within 10 days after it receiving the proposal, it shall be viewed as the Board of Directors is unable to or fails to perform its meeting duty of convening the general Shareholders' meeting and the Board of Supervisors may convene and preside over the meeting by its own.

Shareholders who separately or jointly hold 10% or more of the shares may request in writing to convene an extraordinary Shareholders' meeting. If the Board of Directors does not issue a notice of convening the meeting within 10 days after receiving the above written requirement, or refused to convene, the shareholders who make the request may request the Board of Supervisors in writing to convene the meeting. If the Board of Supervisors does not issue the notice about convening the meeting within 5 days after receiving the above written requirement, the shareholders who make the request could convene and preside the meeting by themselves.

In the event that the general shareholders' meeting is convened, the Board of Directors, the Board of Supervisors and shareholders who separately or jointly hold more than 3% of the shares of our Company may submit a proposal 10 days before the meeting.

When convening a general shareholders' meeting, our Company shall send a written notice 20 Business Days before it is convened. When convening an extraordinary shareholders' meeting, our Company shall send a written notice 15 days or 10 Business Days (the longer would prevail, excluding the day sending the notice and the day convening the meeting) before it is convened. Where there are special rules in the laws, rules and the stock exchange.

Our Company shall calculate the number of shares with voting power represented by the shareholders planning to attend the general shareholders' meeting in accordance with the written replies received 20 days before the meeting is convened. In the event that the number of shares with voting power represented by the shareholders attending the meeting reaches more than one half of our total number of shares with voting power, our Company may convene the general shareholders' meeting. If this number is not reached, our Company shall again inform the shareholders of the matters to be deliberated and the date and venue of the meeting within five days in the form of an announcement and then approved by announcement before the general shareholders' meeting may be convened. The extraordinary general Shareholders' meeting shall not decide on issues which are not listed in the notice.

The notice of the general shareholders' meeting shall be made in writing, including the following contents:

- i. The place, the date and the hour of the meeting;
- ii. The matters to be discussed at the meeting;
- iii. Conspicuous statement that all shareholders are entitled to attend the meeting and appoint proxy to attend and vote and that proxy need not be a shareholder;
- iv. Name and contact details of the standing contact person for affairs;
- v. Information and explanations necessary for the shareholders to exercise an informed judgment on the proposals before them. It principally includes (but is not limited to), where a proposal is made to amalgamate the Company, to repurchase shares, to reorganize the registered capital or to restructure our Company in any other way, the conditions of the proposed transaction must be provided in detail together with the proposed contract (if any), and the cause and consequence of such proposal must be properly explained;
- vi. Disclosure of the nature and extent, if any, of the material interests of any Director, Supervisor, senior management in the matter to be discussed and the effect of the proposed matter on such Director, Supervisor, or senior management in their capacity as shareholders in so far as it is different from the effect on the interests of the shareholders of the same class;
- vii. The full text of any special resolution proposed to be voted at the meeting;

- viii. The delivery date and place lodging proxy forms;
- ix. The registration date of the share of the holder entitled to attend;
- x. Other requirements specified in the laws, administrative regulations, regulations of the authorities, regulatory rules where the shares are listed and the Articles of Association, etc.

Unless otherwise provided by laws, rules, the Listing Rules, and the Articles of Association, the notice of the general shareholders' meeting shall be sent in person or by postage-paid mail to the shareholders (regardless of whether such shareholders have the right to vote at the shareholders' meeting), whereas recipient's address shall be according to the address registered with the register of shareholders. For domestic shareholders, the notice of our Shareholders' meeting may be given in the form of an announcement.

Abovementioned announcement shall be published in one or more newspapers designated by the securities governing authority of the State Council. Once the announcement is made, all domestic shareholders shall be deemed to have received the notice of the general shareholders' meeting.

Where in accordance with the requirements of laws, administrative regulations, regulations of the authorities and regulatory rules where the shares are listed and performing relevant procedures, notice sent to H share shareholders could be published on the websites designated by Hong Kong Stock Exchange and the website of our Company, as alternative to in person or by postage-paid mail. Once the announcement is published, all shareholders holding overseas listed foreign shares shall be deemed to have received the notice of the general shareholders' meeting.

The resolution of the general shareholders' meeting includes ordinary resolution and special resolution. The following matters shall be approved by the general shareholders' meeting through ordinary resolutions:

- i. Work report of the Board of Directors and the Board of Supervisors;
- ii. Plans of earnings distribution and loss make-up schemes drafted by the Board of Directors;
- iii. Appointment or dismissal of the members of the Board of Directors and the Board of Supervisors, and their payment and payment methods;
- iv. Annual budget and final account report;
- v. Annual report of the Company;
- vi. Other matters other than those approved by special resolution stipulated in the laws, administrative regulations, listing rules of the stock exchange where the shares are listed or the Articles of Association.

The following matters shall be approved by special resolution at the general shareholders' meeting:

- i. The increase or decrease of the registered capital, or the issuance of shares, warrants or other quasi-securities;
- ii. Resolutions on the issuance of debt or other securities and listing scheme;

- iii. Division, merger, dissolution and liquidation of our Company and the change of form of our Company;
- iv. Amendment of the Articles of Association;
- v. Substantial assets acquired or disposed of or security provided for an amount exceeding 30% of the total assets extracted from the latest audited consolidated financial statements of our Company within one year;
- vi. The formulation, amendment and performance of share equity incentive plan;
- vii. Repurchase of the shares of our Company; and
- viii. Other matters as required by the laws, administrative regulations, listing rules of the stock exchange where the shares are listed and the Articles of Association, and as approved by ordinary resolution of the general shareholders' meeting which are believed could materially affect our Company and need to be approved by special resolution.

In the event that any resolution of the general Shareholders' meeting or resolution of the Board of Directors violates laws or administrative regulations, any shareholder is entitled to request the court to deem it as invalid.

In the event that the convening procedure or voting formula of the shareholders meeting or meeting of the Board of Directors violates any of laws, administrative regulations or the Articles of Association, or resolution of which violates the Articles of Association, any shareholder is entitled to ask the court to overturn within 60 days after the resolution was adopted.

9. SHARES TRANSFERS

The shares of our Company holding by the funders thereof shall not be transferred within one year of the date of establishment of our Company. The shares issued before the public issuance of shares by our Company shall not be transferred within one year of the date on which the stocks of our Company are listed and traded on a securities exchange.

The Directors, Supervisors, and senior management of our Company shall declare, to our Company, information on their holdings of the shares of our Company and the changes thereto. The shares transferrable by them during each year of their term of office shall not exceed 25 percent of their total holdings of the shares of our Company. The shares that they held in our Company shall not be transferred within one year of the date on which the stocks of our Company are listed and traded. The aforesaid persons shall not transfer their shares of our Company within six months from the date of their resignation.

Where a Director, Supervisor or senior management of our Company, or a shareholder who holds 5% or more of the shares of our Company sells the shares of our Company within six months of purchasing such shares, or repurchases the shares within six months of selling such shares, the gains therefrom shall belong to our Company, and the Board of Directors of our Company shall recover such gains.

With regard to the H Shares that capital of which has been full-paid could be transferred without limitation in accordance with the Articles of Association. However, unless meeting the following conditions, the Board of Directors may refuse to recognize any transfer document without giving any reason:

- i. Document that related to any share ownership or transfer documents that may affect the ownership of the shares shall be registered and such payment shall not exceed the maximum fee provided by the Stock Exchange of Hong Kong in its Listing Rules from time to time;
- ii. The transfer documents only involve H Shares listed in Hong Kong;
- iii. The stamp duty chargeable on the transfer documents has been paid;
- iv. The relevant share certificate, and upon the reasonable request of the Board of Directors, any evidence in relation to the right of the transferor to transfer the shares has been submitted;
- v. If the shares are to be transferred to joint holders, the number of the joint holders shall not exceed four;
- vi. Our Company does not have any lien on the relevant shares; and
- vii. The shares shall not be transferred to minors or the person who is insane or is found to be of unsound mind.

Respective parts of shareholder register's revision or rectification shall be subject to the laws of region where respective parts the revised or rectified shareholder register is stored. No change may be made to the information in the register of shareholders as a result of the share transfer within 30 days before the general shareholders' meeting is convened or within five days prior to the benchmark date on which our Company has decided to distribute dividends. If there are other requirements imposed by laws, administrative regulations, departmental rules, normative documents in the PRC and the relevant stock exchange or regulatory authorities of the place where the Company's shares are listed, such requirements shall prevail.

10. RIGHTS OF OUR COMPANY TO PURCHASE OUR OUTSTANDING ISSUED SHARES

Under any of the following circumstances, our Company may submit to relevant competent authorities for approval to buy back our outstanding issued shares according to legal procedures with the approval of procedures stipulated in the Articles of Association:

- i. Reduce our Company's registered capital;
- ii. Merger with other companies which hold our shares;
- iii. Granting shares to the staff of our Company as incentives;
- iv. Requesting the Company to buy back its shares from shareholders who vote against any resolutions adopted at the general shareholders' meeting concerning the merger and division of the Company;
- v. To convert shares into bond issued by our Company which is convertible to stock of our Company;
- vi. Necessary for our Company to maintain our Company's value and Shareholders' equity; or
- vii. Other circumstances as permitted by the laws, administrative regulations, regulations of the authorities and listing rules of which the Shares of the Company are listed.

Our Company may buy back shares in any of the following ways:

- i. Making a comprehensive buyback offer in the same proportion to all shareholders;
- ii. Buying back shares through public trading on the securities exchange;
- iii. Buying back shares by an agreement outside a stock exchange;
- iv. In other ways approved by the laws, administrative regulations and other measures permitted by relevant regulatory authorities.

Where our Company buys back the shares by an agreement outside a stock exchange, it shall obtain prior approval at the general shareholders' meeting pursuant to the Articles of Association. Likewise, subject to the prior approval of the general shareholders' meeting, our Company may cancel or amend the contract signed in the aforesaid manner or waive any of its rights in the contract.

The contract that buys back the shares includes (but is not limited to) an agreement that consents to undertake the obligation to buy back the shares and obtain the rights to buy them back.

Our Company shall not transfer any contract that buys back the shares or any rights conferred under the contract.

Unless our Company has entered into the liquidation process, we must observe the following provisions for the buyback of issued shares:

- i. Where our Company buys back shares at book value, the funds shall be deducted from the book balance of our distributable earnings and the proceeds obtained from the issue of new shares to buy back the old shares;
- ii. Where our Company buys back the shares at a premium to the book value, the portion equivalent to book value shall be deducted from the book balance of our distributable earnings and the proceeds obtained from the issue of new shares made for the purpose of buying back of old shares, while the portion higher than book value shall be dealt with in the following manner:
 - (i). Where the shares bought back were issued at book value, the funds shall be deducted from the book balance of our distributable revenue;
 - (ii). Where the shares bought back were issued at a premium to the book value, the funds shall be deducted from the book balance of our distributable revenue and the proceeds obtained from the issue of new shares made for the purpose of buying back of old shares. However, the amount deducted from the proceeds obtained from the issue of new shares shall not exceed the total premium amount obtained when the shares bought back were issued or the amount in our premium account (or capital reserve account) when the old shares are bought back (including the premium amount of the issue of new shares).
- iii. The funds paid by our Company for the following purposes shall be expensed from our distributable earnings:
 - (i). To obtain the right to buy back the shares;
 - (ii). To modify contract to buy back the shares;
 - (iii). To release obligation of our Company under the share buyback contract.

- iv. After the total book value of the cancelled shares is deducted from our registered capital pursuant to the relevant provisions, the amount deducted from the distributable earnings for paying up the book value portion of the shares bought back shall be credited to our premium account (or capital reserve account).

11. POWER FOR ANY SUBSIDIARY OF OUR COMPANY TO OWN SHARES IN ITS PARENT

There are no provisions in the Articles of Association relating to ownership by subsidiary of our Company of shares in its parent.

12. DIVIDEND AND OTHER DISTRIBUTION METHODS

The Company may distribute dividends in the following manner of cash or stock.

A shareholder is entitled to receive interest with regard to payment of the shares which was paid before reminder notice. However, advance payment of the shares is not subject to any further dividend thereof.

Our Company shall appoint receiving agents on behalf of shareholders holding overseas listed foreign shares.

Receiving agents shall receive dividends and other payable funds that are distributed with respect to our overseas listed foreign shares for relevant shareholders. Receiving agents appointed by our Company shall on behalf of shareholders of shares listed in Stock Exchange shall be a trust company registered under the Trustee Ordinance of Hong Kong.

After the shareholders' meeting of our Company make a resolution on dividends distribution plan, the Board of Directors shall complete the distribution within 2 months after the convening of the shareholders' meeting.

13. SHAREHOLDER PROXIES

Any shareholder who is entitled to attend and vote at general shareholders' meeting has the right to appoint one or more persons (who may not necessarily be shareholders) as his or her shareholder proxy to attend and vote at the meeting in his or her place. Pursuant to the authorization of the shareholder, the proxy may exercise the following rights:

- i. Speak for the shareholder at the general shareholders' meeting;
- ii. Demand a poll individually or with others;
- iii. Exercise the right to vote by a show of hands or a poll, but the shareholder proxy may only exercise the right to vote by a poll when more than one proxy is appointed.

The proxy appointment shall be in writing and shall be signed by the appointor or a person duly authorized in writing. Where the appointor is a legal person, the stamp of the legal person shall be affixed, or signed by its Director or a duly authorized agent.

The power of attorney must be kept at the residential address or other location designated in the notice convening the meeting no later than 24 hours before the meeting at which the power of attorney is put to vote is convened or 24 hours before the designated time. If the power of attorney is signed by another person authorized by the appointor by means of power of attorney or other instrument of authorization, the power of attorney or other instrument must be verified by a notary. The power of attorney or other instrument verified by the notary must be kept together with the power of attorney at our residential address or other location designated at the notice convening the meeting.

A legal person shareholder should attend the meeting by its legal representatives or persons authorized by its Board of Directors or other decision-making authorities.

Any blank power of attorney form sent by the Directors to the shareholder for appointing a shareholder proxy shall allow the shareholder, according to his or her free will, to instruct the proxy to vote and provide instructions separately for matters to be put to vote on each item on the meeting agenda. The power of attorney shall specify whether the shareholder proxy could vote at his or her own discretion if the shareholder does not provide specific instructions.

The votes of the shareholder proxy given pursuant to the terms of the power of attorney shall remain valid notwithstanding the death, loss of capacity of the appointor or revocation of the proxy or of the authority under which the proxy was executed, or the transfer of the shares in respect of which the proxy is given, provided that our Company does not receive written notice concerning such matters before the related meeting is convened.

14. REVIEW THE REGISTER OF SHAREHOLDERS AND OTHER RIGHTS OF SHAREHOLDERS

Our Company shall make a register of shareholders in accordance with evidentiary documents provided by the securities registration authorities.

Pursuant to the understanding reached and agreement entered into between the competent agency in charge of securities of the PRC and the overseas securities regulatory authorities, our Company may keep the original register of the shareholders of the overseas listed foreign shares overseas and entrust an overseas entity to manage it. The original register of the shareholders of the overseas listed foreign shares listed in Hong Kong shall be kept in Hong Kong.

Our Company shall keep a copy of the register of the holders of the overseas listed foreign shares at our residential address. The overseas entrusted agency shall at all times maintain consistency between the original and copy of the register of the holders of the overseas listed foreign shares.

In case of inconsistency between the original and copy of the register of the holders of the overseas listed foreign shares, the original shall prevail.

Our Company must keep a complete register of shareholders. The register of Shareholders shall include the following:

- i. Register of shareholders kept at our residential address other than those specified in ii and iii below;
- ii. Register of the holders of our overseas listed foreign shares kept at the location of the stock exchange where such shares are listed; and
- iii. Register of shareholders kept in other locations according to the decision of the Board of Directors as required for the listing of the shares.

Different parts of the shareholders' register shall not overlap. The transfer of shares registered in a certain part of the register of shareholders shall not be registered elsewhere in the register of shareholders as long as the shares remain registered.

Any alteration or rectification to any part of the register of shareholders shall be made in accordance with the laws in the place where such part of the register of shareholders is maintained.

No change of the register of shareholders as a result of share transfer shall be made within 30 days before the general shareholders' meeting is convened or within five days prior to the record date on which our Company decides to pay dividends.

When our Company convenes the general shareholders' meeting, pays dividends, goes into liquidation or is involved in other actions that require the confirmation of identities, the Board of Directors shall fix a date as the equity registration date, upon expiration of which the shareholders whose names registered on the register of shareholders shall be the shareholders entitled to relevant equity.

Any person who objects to the register of shareholders and requests to register his or her name (title) in the register of shareholders or to remove his or her name (title) from the register of shareholders may apply to the court with jurisdiction to amend the register of shareholders.

15. RESTRICTIONS ON RIGHTS OF CONTROLLING SHAREHOLDERS

Apart from the obligations required in laws, administrative regulations, or the listing rules of the stock exchange on which our shares are listed, our Controlling Shareholders shall not make any decision that is detrimental to the interest of all or part of the shareholders on the following issues by exercising his or her shareholder voting rights:

- i. Releasing the Directors and Supervisors from the responsibility of acting honestly in the best interest of our Company;
- ii. Permitting the Directors and Supervisors (for their own or others' interests) to deprive our Company of assets in any form, including, but not limited to, any opportunity that is beneficial to our Company; and
- iii. Permitting the Directors and Supervisors (for their own or others' interests) to deprive other shareholders of their personal rights and interests, including, but not limited to, any distribution or voting right, but excluding the restructuring of the Company approved at the general shareholders' meeting pursuant to the Articles of Association.

16. PROCEDURES FOR LIQUIDATION

Under any of the following circumstances, our Company shall be lawfully dissolved and liquidated:

- i. The term of business of our Company has expired;
- ii. The general shareholders' meeting adopts a resolution to dissolve our Company;
- iii. Our Company needs to be dissolved for the purpose of merger or division;
- iv. Our Company is declared legally bankrupt as a result of failure to pay debts as they fall due;
- v. The business license is revoked, or our Company is ordered to close or be eliminated according to applicable law; or

- vi. Where our Company encounters significant difficulties in business and management, continuous survival may be significantly detrimental to the interests of the shareholders, and the difficulties may not be overcome through other means, shareholders who hold more than 10% of all voting rights of the Company's shareholders may request the People's Court to dissolve the Company.
- vii. Other circumstances that may lead to the liquidation of our Company as stipulated in the Articles of Association.

Where our Company is dissolved due to the provisions set forth in i, ii, v, vi and vii above, the liquidation team shall be established within 15 days from the date of the event leading to liquidation to commence dissolution and the personnel of the liquidation team shall consist of the persons determined by the Directors or the general shareholders' meeting. In the event the liquidation team is not established to conduct liquidation during such period, the creditors can request the people's court to appoint relevant personnel to establish the liquidation team for liquidation. In the event that our Company is dissolved in accordance with the provisions set forth in iv above, the people's court shall organize the shareholders, related agencies and professionals to form the liquidation team pursuant to relevant provisions of the law.

If the Board of Directors decides to liquidate our Company (except where our Company is liquidated after declaring bankruptcy), the Board of Directors shall state in the notice of the general shareholders' meeting convened for this purpose that the Board of Directors has performed a comprehensive investigation of the status of our Company and believes that our Company is able to pay off all of our debts within 12 months of the commencement of the liquidation.

After the resolution to liquidate our Company is adopted by the general shareholders' meeting, the powers of the Board of Directors shall terminate immediately.

In accordance with the instructions of the general shareholders' meeting, the liquidation team shall at least once a year report at the general shareholders' meeting on the income and expenditure of the liquidation team, progress of the business and liquidation of our Company, and submit a final report at the general shareholders' meeting upon completion of liquidation. Within 10 days of the establishment of the liquidation team, the creditors shall be notified and an announcement shall be published in the newspaper within 60 days. The creditors shall declare their claims to the liquidation team within 30 days of the date on which the notice is received or 45 days of the date of announcement if the notice is not received.

Creditors who declare claims shall state relevant issues related to the claims and provide proofs. The liquidation team shall carry out registration of the claims. During the period for declaration of claims, the liquidation group shall not make any repayment to the creditors.

During the liquidation, our Company shall continue to exist, but shall not carry out business activities irrelevant to the liquidation. The property of our Company shall not be distributed to any shareholder before full payments have been made out of the property according to the aforesaid provision.

Upon liquidation for the purpose of company dissolution, in the event the liquidation team finds that, after taking stock of our Company's property and preparing the balance sheet and list of property, that the assets are insufficient to pay the debts, it shall immediately apply to the people's court to declare bankruptcy.

After our Company is declared bankrupt by ruling of the people's court, the liquidation team shall turn over matters regarding the liquidation to the people's court.

Upon closure of liquidation of our Company, the liquidation team shall prepare a liquidation report, income and expenditure statement and financial record during the liquidation period, which, after being verified by a China-registered accountant, shall be submitted to our general shareholders' meeting or the people's court for recognition. Within 30 days of the date of confirmation by the shareholders' meeting or people's court, the liquidation team shall submit the above-mentioned documents to our Company registration authority and apply for cancellation of our registration and publish an announcement on our termination.

17. OTHER IMPORTANT PROVISIONS FOR OUR COMPANY OR SHAREHOLDERS

(1) General Provisions

Our Company is a permanently existing joint stock limited company.

Our Company may invest in other limited liability companies or joint stock limited company, provided that except as otherwise provided by law, the liabilities of our Company to be invested in are limited to the amount of its capital contribution and our Company could not assume joint and several liability to the invested company.

The Articles of Association regulate our Company's organization and conduct guidance and is binding on our Company, the shareholders, Directors, Supervisors and senior management. Subject to no violation of the relevant provisions of the Articles of Association, shareholders may sue shareholders; shareholders may sue the Directors, Supervisors and senior management; shareholders may sue our Company, and our Company may sue shareholders, Directors, Supervisors, general manager or other senior management.

The above said suing includes filing an action and applying for an arbitration with an arbitral institution.

(2) Share and Transfer

Our Company may increase stock capital by the following means:

- i. Issuing new shares to unspecified investors;
- ii. Placing new shares with existing shareholders;
- iii. Giving new shares to existing shareholders;
- iv. Converting the reserve funds into registered capital;
- v. Other means approved by the laws, administrative regulations and relevant regulatory authorities.

Upon approval to increase our Company's capital via an issue of new shares according to the provisions of the Articles of Association, the matter shall be dealt with in accordance with the procedures of related laws, administrative regulations of the PRC and of the Listing Rules. etc.

Our Company may decrease our registered capital and shall comply with the procedures stipulated in Company Law of the PRC, other related regulations and the Articles of Association.

If our Company decreases our registered capital, we shall prepare a balance sheet and a list of properties.

Upon approval by the competent securities department of the State Council, our Company may issue shares to domestic and overseas investors.

For the purpose of the preceding paragraph, overseas investors shall refer to investors from foreign countries and Hong Kong, Macao or Taiwan region who subscribe for shares issued by our Company; domestic investors shall refer to investors within the territory of the PRC apart from above-mentioned region who subscribe for shares issued by our Company.

Where permitted by the laws, administrative regulations and regulations of authorities, upon approval by the competent securities department of the State Council, the not listed shares of the Company can be listed and traded on an overseas stock exchange. Such domestic shares shall be in compliance with the regulatory procedures, provisions and requirements of overseas securities market after being listed and traded on an overseas stock exchange.

(3) Shareholders

The shareholders of our Company are persons lawfully holding the Company's shares and whose names (titles) are already listed in the register of shareholders. Shareholder is entitled to rights and assumes obligations pursuant to the classification and ratio of his or her shares. Shareholder holding the same classified share has the same rights and assumes the same obligations.

The rights of our ordinary shareholders are as follows:

- i. To receive distribution of dividends and other forms of benefits according to the number of shares held;
- ii. To legally require, convene, preside over, participate in or appoint a shareholder proxy to participate in and exercise corresponding right to speak and voting rights at the Shareholders' meeting;
- iii. To supervise and manage business and operational activities of our Company, provide suggestions or submit queries;
- iv. To transfer, grant and pledge the Company's shares held according to the provisions of the laws, administrative regulations and the Articles of Association;
- v. To obtain relevant information according to the provisions of the Articles of Association;
- vi. To participate in the distribution of the remaining assets of our Company according to the proportion of shares held upon our termination or liquidation;
- vii. To require our Company to acquire the shares from Shareholders voting against any resolutions adopted at the general Shareholders' meeting concerning the merger and division of the Company;
- viii. To submit a written extraordinary proposal 10 days before the meeting for shareholder(s) who separately or jointly hold(s) more than 3% of the shares of our Company; and
- ix. Other rights conferred by laws, administrative regulations, regulations of the authorities, regulatory rules where our Company's shares are listed, or the Articles of Association.

When any person is interested directly or indirectly in the shares of our Company, our Company shall not freeze or otherwise impair any of the rights attaching to any share by reason only that the person has not disclosed his interests to our Company.

The share certificates are signed by the chairman of the Board of Directors. Where the stock exchange on which our Company's shares are listed requires our general manager or other senior management to sign the share certificates, they shall also be signed by other such personnel. The share certificates shall become effective after being affixed with the stamp of our Company or print-stamped. Affixing our Company stamp to the share certificates is subject to the authorization of the Board of Directors. The signature of the chairman of the Board of Director, general manager or other senior management may also be printed. Under conditions of paperless issuance and trading, the provisions of securities administrative authorities of the region where the Company's shares listed shall apply.

If any person whose name appears in the register of shareholders or requests to register his or her name (title) in the register of shareholders loses his or her share certificates (that is, "original share certificates"), he or she may apply to our Company to reissue new share certificates for those shares.

In the event holder of Domestic shares applies to our Company for a reissue after losing the share certificates, the matter shall be dealt with pursuant to related provisions of the Company Law.

In the event a holder of overseas listed foreign shares applies to our Company for a reissue after losing the share certificates, the matter may be dealt with pursuant to the laws, rules of the stock exchange where the original register of holders of the overseas listed foreign shares is kept, or other related provisions.

If a H shareholder loses share certificates and applies to the Company for a replacement issue, the share certificates shall be issued in compliance with the following requirements:

- i. The applicant shall submit the application in the standard format designated by our Company and attach a notary certificate or legal declaration. The contents of the notary certificate or legal declaration shall include the reason for the applicant's request, circumstances and evidence of loss of share certificates, as well as a statement that nobody else may request to be registered as a shareholder with respect to the pertinent shares;
- ii. Before deciding to issue new share certificates, our Company does not receive any statement in which any person other than the applicant requests to be registered as the shareholder with respect to the shares;
- iii. If our Company decides to issue new share certificates to the applicant, we shall publish an announcement in an eligible newspaper designated by the Board of Directors indicating that we plan to reissue new share certificates. The announcement period shall be 90 days and the announcement shall be published at least once every 30 days;
- iv. Before publishing the announcement indicating that we plan to re-issue new share certificates, our Company shall submit a copy of the announcement to be published to the stock exchange on which the shares are listed and may publish the announcement after receiving a reply from the stock exchange confirming that the announcement has been displayed at the stock exchange. The period of displaying the announcement at the stock exchange is 90 days. If the registered shareholders of the related shares do not approve the application for reissue of new share certificates, our Company shall mail the copy of the announcement to be repeatedly published to the Shareholders;
- v. In the event that nobody raises any objection to the reissue of new share certificates to our Company, upon expiration of the 90-day display period of the announcement specified in iii and iv above, the new share certificates may be reissued according to the application made by the applicant;

- vi. When re-issuing new share certificates according to the Articles of Association, our Company shall immediately cancel the original share certificates and register the cancellation and replacement issue on the register of shareholders;
- vii. All expenses incurred by our Company from the cancellation of the original share certificates and replacement issue of the new share certificates shall be borne by the applicant. Before the applicant has provided reasonable security, our Company shall have the right to refuse to take any action.

(4) Shareholders Failing to be Contacted

In compliance with the provisions of related laws and regulations of the PRC, our Company may exercise expropriate right to unclaimed dividend. However, our Company can only exercise such right after the expiration of the applicable corresponding valid period which started after the distribution of dividend was declared.

Our Company may terminate sending dividend coupons by mail to any holder of the overseas listed foreign shares. However, the said termination can only be made after the holder fails to withdraw from the dividend coupons for consecutive two times or the dividend coupons cannot be delivered to the receiver and returned thereof.

In compliance with the conditions indicated below, Our Company is entitled to dispose the stock held by overseas listed foreign shareholders whom we fail to contact at first time in accordance with appropriate manner as considered by the Board of Directors:

- i. Our Company has paid dividends at least three times on these Shares within 12 years, but no one has claimed the dividends during that period;
- ii. Upon expiration of the 12-year period, our Company publishes an announcement in one or more newspaper of the Company's listing place, indicating our intention to sell the Shares and notifies the stock exchange where such Shares are listed of such intention.

(5) The Board of Directors

The Board of Directors is responsible to the general Shareholders' meeting and exercises the following powers:

- i. To convene the general Shareholders' meeting and report on work to the general Shareholders' meeting;
- ii. Implement the resolutions of the general Shareholders' meeting;
- iii. Determine the business and investment plans of our Company;
- iv. Devise the annual financial budget and closing account plans of our Company;
- v. Devise the earnings distribution and loss offset plans of our Company;
- vi. Formulate the plans for increasing or decreasing our Company's registered capital, the issuance of corporate bonds or other securities, as well as the listing of the stock of our Company;
- vii. Formulate plans for major acquisitions of the Company, the buy-back of shares of our Company, corporate merger, separation of our Company, changing the form and dissolution of our Company;

- viii. Determine such matters as the Company's external investment, purchase or sale of assets, asset pledge, external guarantee, entrusting wealth management and connected transaction within the scope authorized by the general Shareholders' meeting;
- ix. Determine such matters as investment, purchase or sale of assets, financing and connected transaction as decided by the Board of Directors pursuant to the listing rules where our Company's shares are listed;
- x. Decide on the setup of our Company's internal management organization;
- xi. Appoint or dismiss the general manager of our Company, the secretary of the Board of Directors and the Secretary of our Company; based on the nomination of the general manager, appoint or dismiss senior management of our Company such as deputy general manager (executive president), Chief financial officer (CFO) and other senior managers and determine their remuneration;
- xii. Set the basic management systems of our Company;
- xiii. Make the modification plan to the Articles of Association;
- xiv. Propose the appointment or replacement of the accounting firm that performs audits for our Company at the general Shareholders' meeting;
- xv. Attend to the work report of our Company's general manager and review the work of the general manager;
- xvi. Manage the disclosure of company information;
- xvii. Other powers and duties authorized by the laws, administrative regulations, regulations of the authorities, listing rules of the place where the shares of our Company are listed and the Articles of Association.

The above resolutions adopted by the Board of Directors, except those in vi, vii and xiii must be approved by more than a two-thirds vote of the Directors, may be approved by more than half of the votes by the Directors.

Meetings of the Board of Directors shall be attended by more than one-half of the Directors (including proxies) before the Board of Directors meeting can be convened.

(6) Independent Non-executive Director

At least one-third of member of the Board of Directors of the Company shall be the independent non-executive Directors and the amount shall not be less than four. At least one independent non-executive Director shall have applicable professional qualification or are equipped with applicable accounting or relevant financial management expertise.

(7) Secretary of the Board of Directors

Our Company shall have one secretary of the Board of Directors. The secretary of the Board of Directors must be a natural person with the requisite expertise and experience and be appointed by the Board of Directors.

(8) Board of Supervisors

Our Company shall set up a Board of Supervisors.

The Board of Supervisors consists of three Supervisors and includes one chairman. The chairman of the Board of Supervisors shall be elected and dismissed by more than a two-thirds vote of the members of the Board of Supervisors.

The Board of Supervisors shall consist of Shareholder's representatives and employee's representatives. The Supervisors assumed by the employee representatives shall be elected and dismissed democratically by the employees and shall account for no less than one-third of the Board of Supervisors of our Company.

Meetings of the Board of Supervisors shall be attended by more than half of the Supervisors before it may be convened. Resolutions of the Board of Supervisors shall require approval from two-thirds of all the Supervisors. The Supervisors serve three-year terms.

The Supervisors may, after the expiration of the term of office, be re-elected and re-appointed.

The Directors and senior management shall not also serve as Supervisors.

The Board of Supervisors is responsible to the general Shareholders' meeting and lawfully exercises the following powers:

- i. Examine the financial standing of our Company, and examine the regular reports prepared by the Board of Directors and put forward written examination opinions;
- ii. Supervise the Company's duties performing of Directors and senior management, and put forward suggestions for dismissing any Directors or senior management who are in breach of the laws, administrative regulations, the Articles of Association or resolutions of the general Shareholders' meetings;
- iii. Require the Directors and senior management to take corrective measures when their actions are detrimental to the Company's interests;
- iv. Propose to convene an extraordinary general Shareholders' meeting, and where the Board of Directors fails to perform the duties in relation, to convene or preside over the general Shareholders' meeting, to convene and preside over the general Shareholders' meeting;
- v. Submit proposals at the general Shareholders' meetings;
- vi. Bring actions against the Directors and senior management in accordance with the laws;
- vii. Investigate into any abnormalities in operation of our Company; if necessary, to engage accounting firms, law firms and other professional institutions to assist its work, and the expenses shall be borne by our Company;
- viii. Verify the financial information such as the financial reports, business reports and profit distribution plans to be submitted by the Board to the general Shareholders' meetings and, should any queries arise, to authorize, in the name of our Company, a re-examination by the certified public accountants and practicing auditors;
- ix. Other powers and duties stipulated in the Articles of Association.

The Supervisors may attend the meetings of the Board of Directors, query or provide suggestions on the resolution matters of the Board meeting.

(9) General manager

Our Company has one general manager, appointed or dismissed by the Board of Directors. The general manager of our Company is responsible to the Board of Directors and exercises the following powers:

- i. Be in charge of the producing and operational management of our Company, organize the enforcement of resolutions of the Board of Directors and report to the Board of Directors on work;
- ii. Organize the implementation of the annual operation plans and investment schemes decided by the Board of Directors;
- iii. Formulate the structure scheme of the internal management department of our Company;
- iv. Formulate the fundamental management policies of our Company;
- v. Formulate the specific management rules of our Company;
- vi. Propose the appointment or dismissal of the Company's deputy general manager (executive president) and Chief financial officer;
- vii. Appoint or dismiss other management personnel except those who shall be appointed or dismissed by the Board of Directors;
- viii. Make decisions on matters such as the company's outbound investment, asset disposal, and connected transactions with the authorization of the company's board of directors and the general meeting of shareholders;
- ix. Decide to sign regular business contracts on behalf of the company;
- x. Review incurred expenses related to company's daily running and management, and sign and issue regular administrative and business documents;
- xi. Formulate the scheme of salary, welfare, reward and punishment for the employees, and decide on the employment and dismissal of the employees;
- xii. Other responsibilities authorized by the Articles of Association and the Board of Directors.

(10) Reserves

When the annual after-tax earnings of our Company are distributed, our Company must allocate 10% of the earnings to the statutory reserve of the Company.

When the total amount of the statutory reserve exceeds 50% of our Company's registered capital, no more allocations need to be drawn.

If the Company's statutory reserve is insufficient to offset our losses during the previous year, the earnings generated during the current year must be used to make up the losses before allocating the statutory reserve in accordance with the requirements set forth above.

After allocation to the statutory reserve from the after-tax earnings of our Company, we may also allocate to the reserves at will from after-tax earnings in line with the resolution(s) adopted at the general Shareholders' meeting.

After our Company has made up for its losses and made allocations to its statutory reserve fund, the remaining profits are distributed in proportion to the number of shares held by the Shareholders, unless otherwise specified by the Articles of Association.

If the general Shareholders' meeting or Directors violates the above provisions and profits are distributed to the Shareholders before the Company makes up for losses or makes allocations to the statutory reserve fund, the profits distributed in violation of the provisions must be returned by such Shareholders to the Company.

The shares held by our Company itself shall not be subject to profit distribution.

The Company's reserves must be used only for offsetting losses of the Company, expanding the scale of business and operations or for conversion into capital to increase our capital, but the capital reserve shall not be used to offset losses of the Company.

Where the statutory reserve converses into capital, the remaining statutory reserve shall not be less than 25% of the registered capital of our Company before such conversion.

(11) Settlement of Disputes

Our Company shall comply with the following rules governing the settlement of disputes:

- i. Whenever there occur any dispute or claim between shareholders of the overseas listed foreign Shares and our Company, shareholders of foreign Shares (including shareholders of overseas listed or non-listed foreign Shares) and our Company's Directors, Supervisors, general manager or other senior management, or shareholders of the overseas listed foreign Shares and shareholders of overseas non-listed foreign shares or shareholders of domestic Shares regarding the rights or obligations relating to the affairs of our Company conferred or imposed by the Articles of Association, the Company Law or any other relevant laws and administrative regulations, such disputes or claims shall be referred by the relevant parties to arbitration.

Where the aforesaid dispute or claim of rights is referred to arbitration, the entire claim or the dispute as a whole must be referred to arbitration, and any parties who have a cause of action based on the same facts giving rise to the dispute or the claim or whose participation is necessary for the settlement of such dispute or claim, are bound by the award of the arbitration provided that such person is our Company or a shareholder of our Company, a Director, a Supervisor, general manager or other senior management.

Disputes in relation to the definition of shareholders and disputes in relation to the shareholders' register need not be resolved by arbitration;

- ii. A claimant may elect for arbitration at either the China International Economic and Trade Arbitration Commission in accordance with its rules or the Hong Kong International Arbitration Centre in accordance with its arbitration rules. Once a claimant refers a dispute or claim to arbitration, the other party must submit to the arbitral body so elected by the applicants.

If a claimant elects for arbitration at HKIAC, any party to the dispute or claim may request the arbitration to be conducted in Shenzhen in accordance with the Securities Arbitration Rules of the HKIAC;

- i. The laws of the PRC are applicable to the arbitration for the disputes or claims of rights referred to in paragraph (i) above, unless otherwise provided in the laws and administrative regulations;
- ii. The award of an arbitration body shall be final and binding on all parties.

A. FURTHER INFORMATION ABOUT OUR COMPANY**1. Incorporation**

Our Company was established as a limited liability company in the PRC on November 9, 2011 and converted into a joint stock company with limited liability on September 21, 2020.

As of the date of this prospectus, the registered office of our Company is located at Room 218, 2/F, Xinghai Building, 16 Yingshun Road, Yinghai Town, Daxing District, Beijing, the PRC, and the head office of our Company is located at 25/F, Building A, 91 Jianguo Road, Chaoyang, Beijing, the PRC. Our Company has established a principal place of business in Hong Kong at 5/F, Manulife Place, 348 Kwun Tong Road, Kowloon, Hong Kong and has been registered as a non-Hong Kong company under Part 16 of the Companies Ordinance on July 9, 2021 with the Registrar of Companies in Hong Kong. Ms. Wing Chi LAM has been appointed as the authorized representative of our Company for the acceptance of service of process and notices on behalf of our Company in Hong Kong. The address for service of process on our Company in Hong Kong is 5/F, Manulife Place, 348 Kwun Tong Road, Kowloon, Hong Kong.

As our Company was established in the PRC, our corporate structure and Articles of Association are subject to the relevant laws and regulations of the PRC. A summary of the relevant provisions of our Articles of Association is set out in “Appendix V—Summary of Articles of Association.” A summary of certain relevant aspects of the laws and regulations of the PRC is set out in “Appendix IV—Summary of Principal Legal and Regulatory Provisions.”

2. Changes in the Registered Capital of Our Company

Save as disclosed in the section headed “History and Development”, there has been no alteration in our registered capital within two years immediately preceding the date of this prospectus.

3. Changes in the Registered Capital of Our Subsidiaries

Details of the subsidiaries of our Company are set out in “Appendix I— Accountants’ Report.”

AIM Jianchi

On May 17, 2021, AIM Jianchi, owned as to 80% by our Company and 20% by Chengdu Bole Action Biological Products Co., Ltd. (成都伯樂行動生物製品有限公司), was established under the laws of the PRC with a registered capital of RMB25,000,000.

On July 4, 2022, the registered capital of AIM Jianchi increased from RMB25 million to RMB50 million.

AIM Innovative

On July 4, 2022, the registered capital of AIM Innovative Biotechnology (Shanghai) Co., Ltd. (艾美創新生物技術(上海)有限公司) (“**AIM Innovative**”) increased from RMB1 million to RMB50 million.

Save as disclosed above and in the section headed “History and Development,” there has been no alteration in the registered capital of the subsidiaries of our Company within two years immediately preceding the date of this prospectus.

4. Resolutions Passed by Our Shareholders in Relation to the Global Offering and the Conversion of Domestic Shares into H Shares

At the Shareholders' meetings of our Company held on June 9, 2021, February 16, 2022 and June 14, 2022, the following resolutions, among others, were duly passed:

- (a) the issue by our Company of H Shares of nominal value of RMB1.00 each and such H Shares be listed on the Stock Exchange;
- (b) the number of H Shares to be issued before the exercise of the Over-allotment Option shall not exceed 25% of the enlarged share capital of our Company upon completion of the Global Offering and granting the Underwriters the Over-allotment Option of no more than 15% of the above number of H Shares to be issued;
- (c) subject to the completion of the Global Offering, the conditional adoption of the Articles of Association, which shall become effective on the Listing Date;
- (d) authorization of the Board and its authorized persons to handle all matters relating to, among other things, the Global Offering, the issue and listing of the H Shares;
- (e) the amendment of the vesting conditions under the Pre-IPO ESOP;
- (f) subject to the Global Offering becoming unconditional, the granting of a general and unconditional mandate to our Directors to exercise all the powers of our Company to repurchase H Shares on the Stock Exchange and made in accordance with all applicable laws and the requirements of the Listing Rules, not more than 10% of the total number of H Shares in issue immediately following the completion of the Global Offering (without taking into account any H Shares that may be issued upon the exercise of the Over-allotment Option) and the Conversion of Domestic Shares into H Shares, such mandate to remain in effect during the period from the passing of the resolution until the earliest of (i) the conclusion of the next annual general meeting of our Company, (ii) the end of the period within which our Company is required by the Articles or any applicable laws to hold its next annual general meeting or (iii) the date on which the resolution is varied or revoked by an ordinary resolution of our Shareholders in general meeting; and
- (g) subject to the CSRC's approval, upon completion of the Global Offering, 481,111,111 Domestic Shares held by 60 existing Shareholders will be converted into H Shares on an one-to-one basis.

5. Restriction on Share Repurchases

This section sets out information required by the Stock Exchange to be included in this prospectus concerning the repurchase by our Company of its own securities.

(a) Relevant legal and regulatory requirements in Hong Kong and the PRC

The Listing Rules permits a PRC joint stock limited company to repurchase its shares that are listed on the Stock Exchange, subject to certain restrictions, the more important of which are summarized below.

Please refer to "Appendix IV—Summary of Principal Legal and Regulatory Provisions—PRC Judicial System—Repurchase of Shares" and below for details.

Shareholders' approval

All proposed repurchases of H shares by a PRC joint stock limited company with shares listed on the Stock Exchange must be approved in advance by an ordinary resolution of its shareholders in general meeting and of the holders of H shares and domestic shares at separate meetings of such holders either by way of general mandate or by specific approval of a particular transaction.

Source of Funds

Repurchases of H shares by a PRC joint stock limited company with shares listed on the Stock Exchange must be funded out of funds legally available for such purpose in accordance with the company's constitutive documents, the Listing Rules and the applicable laws and regulations of the PRC. The company may not repurchase H shares for a consideration other than cash or for settlement otherwise than in accordance with the trading rules of the Stock Exchange.

Trading restrictions

The total number of H shares which a PRC joint stock limited company with shares listed on the Stock Exchange is authorized to repurchase is H shares representing up to a maximum of 10% of the total amount of existing issued H shares of the listed company. Such listed company may not issue or announce an issue of new H shares for a period of 30 days immediately following a repurchase (other than an issue of securities pursuant to an exercise of warrants, share options or other similar instruments requiring the company to issue securities which were outstanding prior to such repurchase) without the prior approval of the Stock Exchange. In addition, such listed company is prohibited from repurchasing its H shares on the Stock Exchange if the purchase price is 5% or more than the average closing market price for the five preceding trading days on which its H shares were traded on the Stock Exchange. The Listing Rules also prohibit such listed company from repurchasing H shares if that repurchase would result in the number of listed H shares which are in the hands of the public falling below the relevant prescribed minimum percentage as required by the Stock Exchange. Such listed company is required to procure that the broker appointed by it to effect a repurchase of securities discloses to the Stock Exchange such information with respect to the repurchase as Stock Exchange may require.

Status of repurchased H shares

All repurchased H shares shall be automatically cancelled upon purchase and the relevant share certificates shall be cancelled and destroyed as soon as reasonably practicable following settlement of any such purchase. Under PRC laws, the H shares repurchased due to the decrease of registered capital of the listed company will be cancelled, and the listed company's registered capital will be reduced by an amount equivalent to the aggregate nominal value of the H shares so cancelled.

Suspension of repurchase

A PRC joint stock limited company with shares listed on the Stock Exchange may not make any repurchase of securities after inside information has come to its knowledge until such time as the information has been made publicly available. In particular, during the period of one month immediately preceding the earlier of (1) the date of the board meeting (as such date is first notified to the Stock Exchange in accordance with the Listing Rules) for the approval of such listed company's results for any year, half-year, quarter or any other interim period (whether or not required under the Listing Rules) and (2) the deadline for publication of an

announcement of a listed company's results for any year or half-year under the Listing Rules, or quarter or any other interim period (whether or not required under the Listing Rules) and ending on the date of the results announcement, such listed company may not repurchase its H shares on the Stock Exchange other than in exceptional circumstances. In addition, the Stock Exchange may prohibit a repurchase of securities on the Exchange if such listed company has breached the Listing Rules.

Procedural and reporting requirements

A PRC joint stock limited company with shares listed on the Stock Exchange is required to apply to the relevant authorities for repurchase of shares due to the reduction of the registered capital of such listed company and such repurchase shall be approved by the shareholders' meeting. Such listed company is required to cancel such repurchased H shares within 10 days following the repurchase and shall apply to the relevant authorities for change of registered capital.

Under the Listing Rules, repurchases of H shares whether on the Stock Exchange or otherwise must be reported to the Stock Exchange not later than 30 minutes before the earlier of the commencement of the morning trading session or any pre-opening session on the business day following any day on which the listed company makes a repurchase of H shares. In addition, the listed company shall include in its annual report and accounts details regarding repurchases of H shares made during the financial year under review, including the number of H shares repurchased each month, the purchase price per share or the highest and lowest price paid for all such repurchases (where relevant) and the aggregate price paid for such repurchases.

Core Connected Persons

A PRC joint stock limited company with shares listed on the Stock Exchange is prohibited from knowingly repurchasing securities on the Stock Exchange from a core connected person, that is, a director, chief executive or substantial shareholder of the listed company or any of its subsidiaries or their close associates and a core connected person is prohibited from knowingly selling his securities to the listed company.

(b) *Reasons for repurchases*

Our Company may, in accordance with the provisions set out in the applicable laws, administrative regulations, departmental rules and Article of Association, repurchase H Shares in the following circumstances:

- cancellation of shares for the reduction of its capital;
- merging with another company that holds shares in our Company;
- awarding shares to our Company's employees;
- being requested to repurchase the shares of our Company by our Shareholders who object to the resolution adopted at the Shareholders' general meeting concerning merger and division of our Company; and
- other circumstances permitted by laws and administrative regulations.

Our Directors believe that the general mandate to repurchase H Shares granted by our Shareholders gives our Company the flexibility to do so, if and when appropriate, and it is in the best interests of our Company and our Shareholders. Such repurchases may, depending on the market conditions and funding arrangement at the time, lead to an increase in the net assets and/or earnings per H Share. The number of H Shares to be repurchased on any occasion and the price and other terms upon which the same are repurchased will be decided by our Directors at the relevant time having regard to the circumstances then pertaining and in the best interests of our Company and Shareholders.

(c) Funding of repurchases

Our Directors do not propose to exercise the general mandate to such an extent as would, in the circumstances and in the opinion of our Directors, have a material adverse effect on the working capital requirements of our Company or on its gearing position.

(d) General

The exercise in full of the general mandate, on the basis of 490,825,111 H Shares in issue immediately following the completion of the Global Offering (without taking into account any H Shares that may be issued upon the exercise of the Over-allotment Option) and the Conversion of Domestic Shares into H Shares, could result in up to approximately 49,082,511 H Shares being repurchased by our Company during the period prior to the earliest occurrence of the following:

- at the conclusion of our next annual general meeting;
- on the date by which our next annual general meeting is required by the Articles or the Companies Ordinance to be held; or
- when the authority given to our Directors is revoked or varied by an ordinary resolution passed by our Shareholders in general meeting.

None of our Directors nor, to the best of their knowledge, having made all reasonable enquiries, any of their respective close associates (as defined in the Listing Rules), have any present intention, to sell any H Shares to our Company or its subsidiaries.

Our Directors have undertaken to the Stock Exchange that, so far as the same may be applicable, they will exercise the general mandate in accordance with the Listing Rules, and the applicable laws and regulations of the PRC.

If, as a result of a repurchase of H Shares, a Shareholder's proportionate interest in the voting rights of our Company increases, such increase will be treated as an acquisition for the purposes of the Takeovers Code. Accordingly, a Shareholder, or a group of Shareholders acting in concert (within the meaning of the Takeovers Code), depending on the level of increase in our Shareholders' interest, could obtain or consolidate control of our Company and become obliged to make a mandatory offer in accordance with Rule 26 of the Takeovers Code as a result of a repurchase of Shares made immediately after the listing of the H Shares on the Stock Exchange. Save as aforesaid, our Directors are not aware of any other consequences which would arise under the Takeovers Code and/or any similar applicable law, as a result of any repurchases made pursuant to the general mandate immediately after the listing of the H Shares.

No core connected person (as defined in the Listing Rules) of our Company has notified our Company that he has a present intention to sell any H Shares to our Company, or has undertaken not to do so, in the event that the general mandate is granted by our Shareholders.

6. Pre-IPO ESOP

The Pre-IPO ESOP was adopted by the Company on November 30, 2020 and was amended on February 16, 2022. The terms of the Pre-IPO ESOP are not subject to the provisions of Chapter 17 of the Listing Rules. The terms of the Pre-IPO ESOP are summarized below:

(a) Purpose

The purpose of the Pre-IPO ESOP is to establish a long-term incentive mechanism of our Company in order to attract and retain talents and to directly link the personal interests of the grantees under the Pre-IPO ESOP with those of the Shareholders, thereby promoting sustained, long-term and healthy growth of our Company.

(b) Who May Join

The eligible employees to participate in the Pre-IPO ESOP include the Directors, Supervisors, senior management, core technical personnel and core business personnel of the Company, as well as other employees as determined and approved by the Board.

(c) Maximum Number of Shares

The maximum number of underlying Shares which may be issued pursuant to the Pre-IPO ESOP is 12,106,666 Shares, which accounts for approximately 1.00% of the total issued Shares of the Company after completion of the Global Offering and Conversion of Domestic Shares into H Shares (assuming the Over-allotment Option is not exercised). The maximum number of Shares involved with the options to be granted to a grantee under the Pre-IPO ESOP shall not exceed 1% of the total outstanding share capital of our Company. As of the Latest Practicable Date, all outstanding options had been granted and no further options may be granted under the Pre-IPO ESOP.

(d) Exercise Price

The exercise price per share subject to an option is RMB6.98. In the event of any share dividend, share split, recapitalization or any other change affecting the shares or the price of a share, the Board shall make such proportionate adjustments of the exercise price in accordance with the terms of the Pre-IPO ESOP.

(e) Source of Shares

The Shares underlying the options granted under the Pre-IPO ESOP shall be the Shares privately issued by our Company to the grantees.

(f) Administration

The Shareholders' meeting is the highest authority of the Pre-IPO ESOP. The Board is the managing authority of the Pre-IPO ESOP. The Board may authorize the Remuneration Committee to handle management matters of the Pre-IPO ESOP, provided that such authorization shall be expressly stated in that resolutions of the Board and be approved by the Shareholders.

(g) Term of the Pre-IPO ESOP

The Pre-IPO ESOP took effect on November 30, 2020 and was amended on February 16, 2022 and will expire after 84 months. Subject to the termination provisions under the Pre-IPO ESOP, upon its expiry, any option that is outstanding shall remain in force according to the terms of the Pre-IPO ESOP.

(h) Date of Grant

The date on which the options are granted shall be determined by the Board, subject to approval of the Pre-IPO ESOP by the Shareholders, which shall be a trading day. All the options available under the Pre-IPO ESOP have been fully granted on November 30, 2020.

(i) Grant and Exercise of Options

On and subject to certain terms of the Pre-IPO ESOP, options can be granted to or exercised by any eligible employee, which link the grant and exercise of the options to the attainment or performance of milestones by our Company and the relevant grantee. If the performance of our Company and the relevant grantee as well as other conditions are not fulfilled in the stipulated period, the options shall be cancelled by our Company. The Company will comply with Chapter 14A and other applicable Rules when the options are granted to connected persons under the Pre-IPO ESOP.

Pursuant to the terms of the Pre-IPO ESOP, outstanding options which are lapsed will be canceled and such canceled options may not be re-granted.

(j) Rights and Obligations of our Company

- (a) Our Company has the right to interpret and implement the Pre-IPO ESOP, and evaluate the performance of the relevant grantee in accordance with the provisions of the Pre-IPO ESOP. If the performance of the relevant grantee does not fulfill the conditions under the Pre-IPO ESOP, our Company will cancel the options as stipulated in the Pre-IPO ESOP.
- (b) Our Company shall withhold and pay the personal income tax and other applicable taxes that the relevant grantee should pay in accordance with relevant tax regulations.
- (c) Our Company shall handle or engage an agent to handle all the foreign exchange management matters relating to the Pre-IPO ESOP for the relevant grantee in accordance with the provisions of the relevant foreign exchange management policies.
- (d) Our Company shall actively assist the relevant grantee on exercising the options in accordance with the relevant provisions under the Pre-IPO ESOP and relevant regulations. However, if the relevant grantee fails to exercise his options for the reasons that are attributable to the regulatory authorities, our Company shall not be liable for the losses caused to such grantee.
- (e) Our Company shall perform other rights and obligations stipulated by relevant laws and regulations.
- (f) The determination of the grantee under Pre-IPO ESOP by our Company does not mean the grantee is entitled to serve our Company, nor does it constitute any commitment to the employment period of the grantee. The employment relationship between our Company and the grantee remains subject to the employment contract signed by our Company and the grantee.

(k) Rights and Obligations of the Grantees

- (a) The grantee shall work diligently, abide by professional ethics and make contributions to the development of our Company.
- (b) The grantee can choose to exercise or not to exercise the options, and determine the number of options to exercise within the limit of vested options.
- (c) The options granted under Pre-IPO ESOP shall not be transferred, used as guarantee or repayment of debt.
- (d) When our Company distributes dividends, the grantee shall receive dividends in proportion to the underlying Shares of the options. The grantee is not entitled to voting rights in respect of the underlying Shares of the options.
- (e) The grantee has the right to exercise his options in accordance with the terms of the Pre-IPO ESOP, and to abide by the relevant obligations stipulated by the Pre-IPO ESOP.
- (f) During the validity period of the options, the grantee can exercise the options in whole or in part, but they must submit an exercise notice to our Company in time and prepare consideration payment as stipulated by the Pre-IPO ESOP.
- (g) The grantee should pay personal income tax and other taxes in accordance with the relevant tax laws and regulations for any income incurred in connection with the options granted under the Pre-IPO ESOP.
- (h) The grantee and the Company shall execute a written agreement stipulating respective rights and obligations and other related matters under such grant of options under the Pre-IPO ESOP.
- (i) The grantee shall perform other rights and obligations stipulated by relevant laws, regulations and the Pre-IPO ESOP.

(l) Outstanding Options Granted

The aggregate number of underlying Shares pursuant to the outstanding options granted under the Pre-IPO ESOP is 12,106,666 Shares. Immediately following the completion of the Global Offering and the Conversion of Domestic Shares into H Shares (assuming the Over-allotment Option is not exercised and the options granted under the Pre-IPO ESOP are not exercised), the aggregate number of Shares underlying all options granted represents approximately 1.00% of the issued Shares immediately following the completion of the Global Offering and the Conversion of Domestic Shares into H Shares.

(m) Dilutive Effect of the Outstanding Pre-IPO Share Options

Assuming the exercise of all granted and outstanding Pre-IPO Share Options and the consequential issue of 12,106,666 Shares and on the basis of 1,221,820,665 Shares, being the number of Shares in issue immediately after completion of the Global Offering and the Conversion of Domestic Shares into H Shares (assuming the Over-allotment Option is not exercised), the shareholding of our Shareholders in the Company immediately following completion of the Global Offering will be diluted by approximately 0.99%. As we recorded net loss for the year ended December 31, 2021 and the four months ended April 30, 2022, no consequent dilution effect will be resulted to the loss per Share for the year ended December 31, 2021 and the four months ended April 30, 2022.

As of the Latest Practicable Date, our Company had granted options under the Pre-IPO ESOP to 88 grantees, including 4 senior management members of our Company and 84 employees of our Group to subscribe for an aggregate of 12,106,666 Shares, representing approximately 1.00% of our Company's issued share capital immediately after completion of the Global Offering and the Conversion of Domestic Shares into H Shares (assuming the Over-allotment Option is not exercised and the options granted under the Pre-IPO ESOP are not exercised). No option under the Pre-IPO ESOP has been granted to other connected person of our Company. The following table summarizes the number of Shares of the outstanding options under the Pre-IPO ESOP granted to the Directors, Supervisors, senior management and connect persons of the Company as of the Latest Practicable Date.

Name	Position	Address	Exercise price (RMB)	Number of Shares underlying the outstanding options	Date of Grant	Vesting period	Exercise period	Consideration paid by grantees	Approximate percentage of issued Shares immediately after completion of the Global Offering and the Conversion of Domestic Shares into H Shares ⁽¹⁾
Senior Management									
Lixin NIU (牛立新)	Chief financial officer	#1-3-2, 19 Lingxi Street, Yuhong District, Shenyang, China	6.98	400,000	November 30, 2020	Note 2	Note 3	Nil	0.03%
Ling LIU (劉靈)	Secretary to the Board and chief investment officer	3-5-2, 12-4 Quanyuan Third Road, Shenhe District, Shenyang, China	6.98	400,000	November 30, 2020	Note 2	Note 3	Nil	0.03%
Fan ZHANG (張凡)	Chief research officer	No. 27, Jiangdong Road, Zhangjiang Town, Pudong New District, Shanghai, China	6.98	300,000	November 30, 2020	Note 2	Note 3	Nil	0.02%
Li MENG (孟麗)	Chief quality officer	Beijing Institute of Biological Products, No. 4, Sanjianfang Nanli, Chaoyang District, Beijing	6.98	300,000	November 30, 2020	Note 2	Note 3	Nil	0.02%
Total:				1,400,000					0.12%

Notes:

- (1) Such percentage figures are based on the assumption that the Over-allotment Option is not exercised and the options granted under the Pre-IPO ESOP are not exercised.
- (2) The options shall be vested as follows: (i) as to 30% of the aggregate number of options between December 1, 2022 and November 30, 2023; (ii) as to 30% of the aggregate number of options between December 1, 2023 and November 29, 2024; and (iii) as to 40% of the aggregate number of options between December 2, 2024 and November 30, 2027.
- (3) From the date of grant until the date falling 84 months thereafter.

The table below shows the details of options granted to our employees (other than the Directors, Supervisors, senior management and connect persons of the Company and consultant(s) of the Group) who have been granted options to subscribe for 300,000 Shares or more upon Listing under the Pre-IPO ESOP that are outstanding:

Name of grantee	Position	Address	Exercise price (RMB)	Total number of Shares underlying the outstanding options	Date of Grant	Vesting period	Exercise period	Consideration paid by grantees	Underlying Shares of the outstanding options as a percentage of issued Shares immediately after completion of the Global Offering and the Conversion of Domestic Shares into H Shares ⁽¹⁾
Dedong HU (胡德東)	Deputy General Manager of Quality Assurance Department	Room 201, Building 2, Taoyuanli, Xinqi Street, Beilun District, Ningbo, Zhejiang Province	6.98	500,000	November 30, 2020	Note 2	Note 3	Nil	0.04%
Jidong LIU (劉繼東)	Vice President of Compliance and Risk Control Department	10-1, No. 28, East Harbor Community, Jiangbei District, Chongqing	6.98	400,000	November 30, 2020	Note 2	Note 3	Nil	0.03%
Jinliang CAO (曹金良)	Quality Supervisor of Quality Control Department	Room 2402, Building 17, Huangshan Haoting, Xinqi Street, Beilun District, Ningbo, Zhejiang Province	6.98	350,000	November 30, 2020	Note 2	Note 3	Nil	0.03%
Jiale LI (李加樂)	Production Manager of Production Department	Liujiashi Village, No. 25, Fengdui Road, Fengdui Township, Ledu District, Haidong, Qinghai Province	6.98	350,000	November 30, 2020	Note 2	Note 3	Nil	0.03%
Liping HU (胡利平)	Director of Quality Management Department	No. 18, Xianqian Street, Yuelong Street, Ninghai County, Zhejiang Province	6.98	300,000	November 30, 2020	Note 2	Note 3	Nil	0.02%

									Underlying Shares of the outstanding options as a percentage of issued Shares immediately after completion of the Global Offering and the Conversion of Domestic Shares into H Shares ⁽¹⁾
Name of grantee	Position	Address	Exercise price (RMB)	Total number of Shares underlying the outstanding options	Date of Grant	Vesting period	Exercise period	Consideration paid by grantees	
Guixing LI (李貴興) . . .	Deputy General Manager of Production	4-3-2, No. 4, Quanshui B5 District, Ganjingzi District, Dalian, Liaoning Province	6.98	300,000	November 30, 2020	Note 2	Note 3	Nil	0.02%
Ju LI (李舉)	R&D Director	No. 7-60 Linjiang Avenue, Wuchang District, Wuhan	6.98	300,000	November 30, 2020	Note 2	Note 3	Nil	0.02%
Qiang LI (李強)	Deputy General Manager	Room 402, No. 10, Phase I Poly City, No. 777, Yongping West Road, Luotuo Street, Zhenhai District, Ningbo, Zhejiang Province	6.98	300,000	November 30, 2020	Note 2	Note 3	Nil	0.02%
Xin ZHANG (張欣)	Assistant to the President	1-3-4, No. 28, South Eleven West Road, Tiexi District, Shenyang	6.98	300,000	November 30, 2020	Note 2	Note 3	Nil	0.02%
Enguo ZHANG (張恩果) . . .	Chairman of the board of directors of AIM Honesty	4-5-2, No. 241-3, Huigong Street, Shenhe District, Shenyang	6.98	300,000	November 30, 2020	Note 2	Note 3	Nil	0.02%
Total:				3,400,000					0.28%

Notes:

- (1) Such percentage figures are based on the assumption that the Over-allotment Option is not exercised and the options granted under the Pre-IPO ESOP are not exercised.
- (2) The options shall be vested as follows: (i) as to 30% of the aggregate number of options during the period from 24 months to 36 months from November 30, 2020; (ii) as to 30% of the aggregate number of options during the period from 36 months to 48 months since November 30, 2020; and (iii) as to 40% of the aggregate number of options during the period from 48 months to 84 months since November 30, 2020.
- (3) From the date of grant until the date falling 84 months thereafter.

The table below shows the details of options granted to our consultant(s):

Name of grantee	Position	Address	Exercise price (RMB)	Total number of Shares underlying the outstanding options	Date of Grant	Vesting period	Exercise period	Consideration paid by grantees	Underlying Shares of the outstanding options as a percentage of issued Shares immediately after completion of the Global Offering and the Conversion of Domestic Shares into H Shares ⁽¹⁾
Fengji LUO (羅鳳基)	Consultant of the Registration Department	No. 12, Gate 2, 6/F, No. 1, Dingfuzhuang Nanli, Chaoyang District, Beijing	6.98	100,000	November 30, 2020	Note 2	Note 3	Nil	0.01%
Total:				100,000					0.01%

Notes:

- (1) Such percentage figures are based on the assumption that the Over-allotment Option is not exercised and the options granted under the Pre-IPO ESOP are not exercised.
- (2) The options shall be vested as follows: (i) as to 30% of the aggregate number of options during the period from 24 months to 36 months from November 30, 2020; (ii) as to 30% of the aggregate number of options during the period from 36 months to 48 months since November 30, 2020; and (iii) as to 40% of the aggregate number of options during the period from 48 months to 84 months since November 30, 2020.
- (3) From the date of grant until the date falling 84 months thereafter.

The table below shows the details of options granted to employees other than (i) the Directors, Supervisors, senior management and connect persons of the Company; (ii) other grantees who have been granted options to subscribe for 300,000 or more shares; (iii) consultant(s) of the Group:

Total number of grantees	Exercise price	Number of Shares underlying the outstanding options	Date of grant	Vesting period	Exercise period	Consideration paid by grantees	Approximate percentage of issued Shares immediately after completion of the Global Offering and the Conversion of Domestic Shares into H Shares ⁽¹⁾
73	6.98	7,206,666	November 30, 2020	Note 2	Note 3	Nil	0.60%

Notes:

- (1) Such percentage figures are based on the assumption that the Over-allotment Option is not exercised and the options granted under the Pre-IPO ESOP are not exercised.
- (2) The options shall be vested as follows: (i) as to 30% of the aggregate number of options during the period from 24 months to 36 months from November 30, 2020; (ii) as to 30% of the aggregate number of options during the period from 36 months to 48 months since November 30, 2020; and (iii) as to 40% of the aggregate number of options during the period from 48 months to 84 months since November 30, 2020.
- (3) From the date of grant until the date falling 84 months thereafter.

Assuming (i) the Global Offering becomes unconditional and Offer Shares are issued pursuant to the Global Offering; (ii) the Over-allotment Option is not exercised; and (iii) full issuance of Shares pursuant to all the outstanding options granted under the Pre-IPO ESOP, the shareholding and earnings per share of our Shareholders will be diluted by approximately 0.99%.

(m) Waiver and Exemption

Our Company has applied for and has been granted (i) a waiver from the Stock Exchange from strict compliance with the disclosure requirements under Rule 17.02(1)(b) and paragraph 27 of Appendix 1A to the Listing Rules; and (ii) an exemption from the Securities and Futures Commission from strict compliance with the disclosure requirements of paragraph 10(d) of Part I of the Third Schedule to the Companies Ordinance. See “Waivers from Strict Compliance with The Listing Rules and Exemptions from the Companies (Winding Up and Miscellaneous Provisions) Ordinance” for details.

7. Share Award Scheme

On June 2, 2021, the Shareholders approved the adoption of the Share Award Scheme. The Share Award Scheme has been fully executed. The terms of the Share Award Scheme are not subject to the provisions of Chapter 17 of the Listing Rules. See “History and Development—Our History—Changes in Shareholding and Corporate Form—Share Awards to Mr. Yan ZHOU.”

B. FURTHER INFORMATION ABOUT OUR BUSINESS

1. Summary of Material Contracts

We have entered into the following contracts (not being contracts entered into in the ordinary course of business) within two years preceding the date of this prospectus which are or may be material:

- (a) the Hong Kong Underwriting Agreement.

2. Intellectual Property Rights

As of the Latest Practicable Date, our Company has registered or applied for the following intellectual property rights, which are or may be material in relation to our Company's business.

(a) Trademarks

As at the Latest Practicable Date, our Company has registered the following trademarks, which we consider to be or may be material to our business:

No.	Trademark	Registration number	Registrant	Class	Place of registration	Expiry date
1.		3889671	AIM Honesty	5	The PRC	June 27, 2026
2.		3283854	AIM Honesty	5	The PRC	February 6, 2024
3.		10876659	AIM Kanghuai	5	The PRC	August 13, 2023
4.		3913109	Rong'an Bio	5	The PRC	December 6, 2026
5.		34924153	AIM Weixin	5	The PRC	July 20, 2029
6.		30890578	AIM Weixin	5	The PRC	February 20, 2029
7.		4270363	AIM Weixin	5	The PRC	October 6, 2027
8.		305654313	Our Company	16	Hong Kong	June 10, 2031
						
9.		305654304	Our Company	16	Hong Kong	June 10, 2031
						
10.		305705451	Our Company	5, 35, 41, 42	Hong Kong	August 1, 2031
						
11.		305705460AA	Our Company	5, 35	Hong Kong	August 1, 2031
						
12.		305705460AB	Our Company	41, 42	Hong Kong	August 1, 2031
						

(b) Patents

For material patents, patent applications we owned or licensed from other entities as of the Latest Practicable Date, see “Business—Intellectual Property.”

(c) Domain Names

As of the Latest Practicable Date, we had registered the following domain name which we consider to be material to our business:

<u>No.</u>	<u>Domain Name</u>	<u>Registered Owner</u>	<u>Expiry Date</u>
1.	aimbio.com	Our Company	December 17, 2026

C. FURTHER INFORMATION ABOUT OUR DIRECTORS AND SUPERVISORS**1. Particulars of Directors’ and Supervisors’ Contracts**

Pursuant to Rules 19A.54 and 19A.55 of the Hong Kong Listing Rules, we have entered into a contract with each of our Directors and Supervisors in respect of, among other things, (i) compliance of relevant laws of regulations, (ii) observance of the Articles of Association, and (iii) provisions on arbitration.

Save as disclosed above, none of the Directors or Supervisors has or is proposed to have a service contract with any member of our Group (other than contracts expiring or determinable by the relevant employer within one year without the payment of compensation other than statutory compensation).

2. Remuneration of Directors and Supervisors

Save as disclosed in “Directors, Supervisors and Senior Management” and under “Appendix I—Accountants’ Report—II Notes to the Historical Financial Information—9. Directors and Supervisors’ Remuneration”, no Director or Supervisor received other remuneration or benefits in kind from our Company in respect of each of the financial years ended December 31, 2019, 2020 and 2021 and the four months ended April 30, 2022.

D. DISCLOSURE OF INTERESTS**1. Disclosure of Interest of Directors and Supervisors**

Save as disclosed below, immediately following the completion of the Global Offering (assuming the Over-allotment Option and the options under the Pre-IPO ESOP are not exercised) and the Conversion of Domestic Shares into H Shares, none of our Directors or Supervisors has any interest and/or short position in the Shares, underlying Shares and debentures of our Company or our associated corporations (within the meaning of Part XV of the SFO) which will be required to be notified to our Company and the Stock Exchange pursuant to Divisions 7 and 8 of Part XV of the SFO (including interest or short position which they were taken or deemed to have under such provisions of the SFO) or which will be required, pursuant to section 352 of the SFO, to be entered in the register referred to therein, or which will be required, pursuant to the Model Code for Securities Transactions by Directors of Listed Issuers as set out in Appendix 10 to the Listing Rules to be notified to our Company, once the Shares are listed on the Stock Exchange.

Name	Position	Nature of interest	Number and class of Shares	Approximate percentage of interest in our Company	Approximate percentage of interest in the relevant class of Shares of our Company
Mr. Yan ZHOU ⁽¹⁾	Executive Director, chairman of the Board, chief executive officer	Beneficial interest	200,000,000 Domestic Shares	16.53%	27.82%
		Interest in controlled corporation	200,000,000 Domestic Shares	16.53%	27.82%
		Interest in controlled corporation	10,135,235 Domestic Shares	0.84%	1.41%
		Interest in controlled corporation	23,254,765 H Shares	1.92%	4.74%
Mr. Shaojun JIA ⁽²⁾	Executive Director, executive president and chief investment officer	Interest in controlled corporation	20,000,000 Domestic Shares	1.65%	2.78%
		Interest in controlled corporation	5,150,000 H Shares	0.43%	1.05%
		Interest in controlled corporation	5,160,000 H Shares	0.43%	1.05%
		Interest in controlled corporation	5,000,000 Domestic Shares	0.41%	0.70%
Mr. Jie ZHOU	Non-executive Director	Beneficial interest	40,000,000 Domestic Shares	3.31%	5.56%
Mr. Xin ZHOU	Non-executive Director	Beneficial interest	40,000,000 Domestic Shares	3.31%	5.56%
Ms. Aijun WANG ⁽³⁾	Non-executive Director	Interest in controlled corporation	25,000,000 Domestic Shares	2.07%	3.48%
		Interest in controlled corporation	25,000,000 H Shares	2.07%	5.09%

Notes:

- (1) Mr. Yan ZHOU directly owns 200,000,000 Domestic Shares. In addition to his direct shareholding in the Company, Mr. Yan ZHOU holds approximately 99.99% of the registered capital of Tibet Sincere Heart. He is also the sole shareholder of Shenyang Dongjian Yuanfang Enterprise Management Co., Ltd. (瀋陽洞見遠方企業管理有限公司), the general partner of Zhongrenxing. As such, Mr. Yan ZHOU is deemed to be interested in the Domestic Shares held by Tibet Sincere Heart and Zhongrenxing under the SFO.
- (2) Mr. Shaojun JIA is the sole shareholder of Tibet Zhiying Investment Co., Ltd. (西藏智盈投資有限公司) (“**Tibet Zhiying**”). In addition, Mr. Shaojun JIA holds 51% of the registered capital of Tibet Tongxin Capital Investment Management Co., Ltd. (西藏同信資本投資管理有限公司), which is the general partner of Gongqingcheng Everest Investment Management Partnership (Limited Partnership) (共青城珠峰投資管理合夥企業(有限合夥)) (“**Everest Investment**”) and Gongqingcheng Everest No. 2 Investment Management Partnership (Limited Partnership) (共青城珠峰二號投資管理合夥企業(有限合夥)) (“**Everest No. 2 Investment**”). As such, Mr. Shaojun JIA is deemed to be interested in the Domestic Shares held by Tibet Zhiying, Everest Investment and Everest No. 2 Investment under the SFO.
- (3) Ms. Aijun WANG is the sole director of Lhasa Meihua Biological Investment Holdings Co., Ltd. (拉薩梅花生物投資控股有限公司) (“**Lhasa Meihua**”). As such, Ms. Aijun WANG is deemed to be interested in the Domestic Shares held by Lhasa Meihua under Part XV of the SFO.

Save as disclosed in this section and in the section headed “Waivers from Strict Compliance with The Listing Rules and Exemptions from The Companies (Winding Up and Miscellaneous Provisions) Ordinance—Waiver and Exemption In Relation To the Pre-IPO ESOP—Pre-IPO ESOP”, as of the Latest Practicable Date, none of the Directors or Supervisors or their respective spouses and children under 18 years of age had been granted by the Company or had exercised any rights to subscribe for shares or debentures of the Company or any of its associated corporations.

2. Disclosure of Interests of Substantial Shareholders

For information on the persons who will, immediately following the completion of the Global Offering and the Conversion of Domestic Shares into H Shares (without taking into account any Shares which may be sold and offered upon the exercise of the Over-allotment Option), have or be deemed or taken to have an interest and/or short position in the Shares or the underlying Shares which would fall to be disclosed under the provisions of Division 2 and 3 of Part XV of the SFO, see “Substantial Shareholders.”

As of the Latest Practicable Date, Hengqin Ruifan holds 32.1821% and Hengqin Qijing holds 11.0146% of the registered capital of Liverna. See “History and Development—Corporate Structure”. Save as disclosed in this section, the sections headed “Relationship with Controlling Shareholder” and “Substantial Shareholders”, as of the Latest Practicable Date, our Directors and Supervisors are not aware of any person who will, immediately following the completion of the Global Offering and the Conversion of Domestic Shares into H Shares (without taking into accounts any Shares which may be sold and offered upon the exercise of the Over-allotment Option), be interested, directly or indirectly, in 10% or more of the nominal value of any class of share capital carrying rights to vote in all circumstances at general meetings of any member of our Group or had option in respect of such capital.

3. Disclaimers

Save as disclosed in this prospectus:

- (a) none of the Directors, Supervisors or chief executive officer of our Company has any interest or short positions in the Shares, underlying Shares or debentures of our Company or any associated corporation (within the meaning of Part XV of the SFO) which will have to be notified to us and the Stock Exchange pursuant to Divisions 7 and 8 of Part XV of the SFO (including interests and short positions which he/she is taken or deemed to have under such provisions of the SFO) or which will be required, pursuant to section 352 of the SFO, to be entered into the register referred to in that section, or which will be required to be notified to us and the Stock Exchange pursuant to the Model Code, in each case once our H Shares are listed;

- (b) none of the Directors or Supervisors nor any of the parties listed in the paragraph headed “—E. Other Information—7. Qualification of Experts” of this appendix is interested in our Company’s promotion, or in any assets which have, within the two years immediately preceding the issue of this prospectus, been acquired or disposed of by or leased to our Company, or are proposed to be acquired or disposed of by or leased to our Company;
- (c) none of the Directors or Supervisors is a director or employee of a company which is expected to have an interest in the Shares falling to be disclosed to our Company and the Stock Exchange under the provisions of Divisions 2 and 3 of Part XV of the SFO once the H Shares are listed on the Stock Exchange;
- (d) none of the Directors or Supervisors of our Company nor any of the parties listed in paragraph headed “—E. Other Information—7. Qualification of Experts” of this appendix is materially interested in any contract or arrangement subsisting at the date of this prospectus which is significant in relation to our business;
- (e) none of the parties listed in the paragraph headed “—E. Other Information—7. Qualification of Experts” of this appendix: (i) is interested legally or beneficially in any of the Shares of our Company or any shares in any of its subsidiaries; or (ii) has any right (whether legally enforceable or not) to subscribe for or to nominate persons to subscribe for the securities of our Company; and
- (f) none of the Directors or Supervisors or the respective close associates or any Shareholders (who to the knowledge of our Directors and Supervisors owns more than 5% of our issued share capital) has any interest in our five largest suppliers or our five largest customers.

E. OTHER INFORMATION

1. Estate Duty

Our Directors have been advised that no material liability for estate duty under the PRC laws is likely to fall on our Company or any of our subsidiaries.

2. Litigation

Save as disclosed in the section headed “Business—Legal Proceedings and Regulatory Compliance”, “Financial Information—Contingent Liabilities”, and under “Appendix I—37. Contingent Liabilities” and so far as our Directors are aware, no litigation or claim of material importance is pending or threatened by or against any member of our Group.

3. Joint Sponsors

The Joint Sponsors have made an application on our behalf to the Listing Committee of the Stock Exchange for a listing of, and permission to deal in, all the H Shares to be issued as mentioned in this prospectus.

All Joint Sponsors satisfy the independence criteria applicable to sponsors set out in Rule 3A.07 of the Listing Rules.

Pursuant to the engagement letter entered into between our Company and each of the Joint Sponsors, we have agreed to pay each of the Joint Sponsors a fee of US\$250,000 to act as the sponsors of our Company in connection with the Global Offering.

4. Compliance Adviser

Our Company has appointed Somerley Capital Limited as our Compliance Adviser in compliance with Rule 3A.19 of the Listing Rules.

5. Preliminary Expense

We have not incurred any material preliminary expense in relation to the incorporation of our Company.

6. Taxation of Holder of H Shares

The sale, purchase and transfer of H Shares are subject to Hong Kong stamp duty if such sale, purchase and transfer are effected on the H Share register of members of the Company, including in circumstances where such transaction is effected on the Stock Exchange. The current rate charged on each of the seller and purchaser is HK\$1.30 for every HK\$1,000 (or part thereof) of the consideration or, if higher, the fair value of the H Shares being sold or transferred. For further information in relation to taxation, see “Appendix III—Taxation and Foreign Exchange.”

7. Qualification of Experts

The qualifications of the experts, as defined under the Hong Kong Listing Rules, who have given opinions in this prospectus, are as follows:

<u>Name</u>	<u>Qualification</u>
Goldman Sachs (Asia) L.L.C.	A licensed corporation to conduct Type 1 (dealing in securities), Type 4 (advising on securities), Type 5 (advising on futures contracts), Type 6 (advising on corporate finance) and Type 9 (asset management) regulated activities under the SFO
China International Capital Corporation Hong Kong Securities Limited	A licensed corporation to conduct Type 1 (dealing in securities), Type 2 (dealing in futures contracts), Type 4 (advising on securities), Type 5 (advising on futures contracts) and Type 6 (advising on corporate finance) regulated activities under the SFO
China Securities (International) Corporate Finance Company Limited	A licensed corporation to conduct Type 1 (dealing in securities) and Type 6 (advising on corporate finance) regulated activities under the SFO
Macquarie Capital Limited	A licensed corporation to conduct Type 1 (dealing in securities), Type 4 (advising on securities), Type 6 (advising on corporate finance) and Type 7 (providing automated trading services) regulated activities under the SFO
Ernst & Young	Certified Public Accountants and Registered Public Interest Entity Auditor
Jingtian & Gongcheng	PRC Legal Advisor
China Insights Industry Consultancy Limited	Industry Consultant
S&P Law Firm	Legal advisor to our Company as to PRC laws with respect to certain litigations as referred to in “Business—Legal Proceedings and Regulatory Compliance” only

8. Consents of Experts

Each of the experts named in the paragraph headed “E. Other Information—7. Qualification of Experts” above has given and has not withdrawn its written consent to the issue of this prospectus with the inclusion of its report and/or letter and/or opinion and/or the references to its name included herein in the form and context in which it is respectively included.

None of the experts named above has any shareholding interests in any member of our Group or the right (whether legally enforceable or not) to subscribe for or to nominate persons to subscribe for securities in any member of our Group.

9. Promoters

Information of our promoters as of the time of our Company’s conversion is as follows:

No.	Name
1.	Mr. Yan ZHOU (周延)
2.	Tibet Sincere Heart
3.	Tibet Yingfeng
4.	Lhasa Meihua Biological Investment Holdings Co., Ltd. (拉薩梅花生物投資控股有限公司)
5.	Mr. Jie ZHOU (周杰)
6.	Mr. Xin ZHOU (周欣)
7.	Shenyang Xixi Enterprise Management Consulting Co., Ltd. (瀋陽茜茜企業管理諮詢有限公司)
8.	Shenyang Zongheng Tianxia Trading Co., Ltd. (瀋陽縱橫天下商貿有限公司)
9.	Yongzhou Qingteng Trading Partnership (Limited Partnership) (永州青藤貿易合夥企業(有限合伙))
10.	Zhongrenxing
11.	Mr. Tingdong YANG (楊廷棟)
12.	Tibet Ruishang Venture Capital Management Co., Ltd. (西藏睿尚創業投資管理有限公司)
13.	Gongqingcheng Everest Investment Management Partnership (Limited Partnership) (共青城珠峰投資管理合夥企業(有限合伙))
14.	Shenzhen CMB Langyao Growth Equity Investment Fund Partnership (Limited Partnership) (深圳市招銀朗曜成長股權投資基金合夥企業(有限合伙))
15.	Jiaxing Hekang Investment Partnership (Limited Partnership) (嘉興禾康投資合夥企業(有限合伙))
16.	CMB Growth II Investment (Shenzhen) Partnership (Limited Partnership) (招銀成長貳號投資(深圳)合夥企業(有限合伙))
17.	Linzhi Desheng Technology Co., Ltd. (林芝德勝科技有限公司)
18.	Mr. Guanqun SUN (孫冠群)
19.	Ms. Jing HUANG (黃靜)
20.	Shanghai Lancheng Tongliang Equity Investment Fund Partnership (Limited Partnership) (上海蘭丞同梁股權投資基金合夥企業(有限合伙))
21.	Shenzhen Tongchuang Jiaxing Investment Partnership (Limited Partnership) (深圳市同創佳興投資合夥企業(有限合伙))
22.	Shanghai Jiexuan Enterprise Management Center (上海傑玄企業管理中心)
23.	Gongqingcheng Chenxi No. 1 Le Meridien Equity Investment Partnership (Limited Partnership) (共青城晨熹一號艾美股權投資合夥企業(有限合伙))
24.	Tianjin Jingeng Biotechnology Partnership (Limited Partnership) (天津金耕生物科技合夥企業(有限合伙))
25.	Jiaxing Chenxi No. 3 Equity Investment Partnership (Limited Partnership) (嘉興晨熹三號股權投資合夥企業(有限合伙))

No.	Name
26.	Gongqingcheng Everest No.2 Investment Management Partnership (Limited Partnership) (共青城珠峰二號投資管理合夥企業(有限合夥))
27.	Yunnan Ziyongchen Investment Co., Ltd. (雲南紫雍晨投資有限公司)
28.	Tibet Pude Zhengyuan Venture Capital Co., Ltd. (西藏撲德正元創業投資有限公司)
29.	Shenzhen Hebang Zhengzhixing Asset Management Co., Ltd. (深圳和邦正知行資產管理有限公司)
30.	Tibet Zhiying Investment Co., Ltd. (西藏智盈投資有限公司)
31.	Hangzhou Puhua Yuchen Equity Investment Partnership (Limited Partnership) (杭州普華昱辰股權投資合夥企業 (有限合夥))
32.	Mr. Junping SHI (史俊萍)
33.	Qingdao Penglong Equity Investment Partnership (Limited Partnership) (青島蓬龍股權投資合夥企業(有限合夥))
34.	Mr. Xiaojun HUANG (黃曉軍)
35.	Foshan Hongtao Kexuan Equity Investment Partnership (Limited Partnership) (佛山弘陶科選股權投資合夥企業 (有限合夥))
36.	Shenzhen Fenghong Investment Co., Ltd. (深圳豐鴻投資有限公司)
37.	Tibet Zhiming Yuanyang Technology Development Co., Ltd. (西藏智明遠揚科技發展有限公司)
38.	Langma No. 25 (Shenzhen) Venture Capital Center (Limited Partnership) (朗瑪二十五號 (深圳) 創業投資中心 (有限合夥))
39.	Langma No. 23 (Shenzhen) Venture Capital Center (Limited Partnership) (朗瑪二十三號 (深圳) 創業投資中心 (有限合夥))
40.	Langma No. 24 (Shenzhen) Venture Capital Center (Limited Partnership) (朗瑪二十四號 (深圳) 創業投資中心 (有限合夥))
41.	Shanghai Lancheng Chengchun Equity Investment Fund Partnership (Limited Partnership) (上海蘭丞承春股權投資基金合夥企業 (有限合夥))
42.	Shenzhen CMB Gongying Equity Investment Partnership Enterprise (Limited Partnership) (深圳市招銀共贏股權投資合夥企業 (有限合夥))
43.	Shenzhen Tongchuang Jiazhi Investment Partnership (Limited Partnership) (深圳市同創佳致投資合夥企業 (有限合夥))
44.	Hainan Jiashui Trading Co., Ltd. (海南嘉水貿易有限責任公司)

Within the two years immediately preceding the date of this prospectus, no cash, securities or other benefit has been paid, allotted or given nor is any proposed to be paid, allotted or given to any promoters in connection with the Global Offering and the related transactions described in this prospectus.

10. No Material Adverse Change

The Directors have confirmed that there has been no material adverse change in our financial or trading position since April 30, 2022.

11. Miscellaneous

Save as disclosed in this prospectus,

(a) within the two years immediately preceding the date of this prospectus:

- (i) no share or loan capital of our Company or any of our subsidiaries has been issued or agreed to be issued, or is proposed to be fully or partly paid either for cash or a consideration other than cash;
- (ii) no share or loan capital of our Company or any of our subsidiaries is under option or is agreed conditionally or unconditionally to be put under option;

- (iii) no commissions, discounts, brokerages or other special terms have been granted or agreed to be granted in connection with the issue or sale of any share of our Company or any of our subsidiaries; and
- (iv) no commission has been paid or is payable for subscription, agreeing to subscribe, procuring subscription or agreeing to procure subscription for any share in or debentures of our Company;
- (b) there are no founder, management or deferred shares or any debentures in our Company or any of our subsidiaries;
- (c) there has not been any interruption in the business of our Group which may have or has had a significant effect on the financial position of our Group in the 12 months preceding the date of this prospectus;
- (d) our Company has no outstanding convertible debt securities or debentures;
- (e) there is no arrangement under which future dividends are waived or agreed to be waived;
- (f) there are no restrictions affecting the remittance of profits or repatriation of capital by us into Hong Kong from outside Hong Kong;
- (g) none of the equity and debt securities of our Company, if any, is listed or dealt with in any stock exchange nor is any listing or permission to deal in the securities being or proposed to be sought after;
- (h) all necessary arrangements have been made to enable the H shares to be admitted into CCASS for clearing and settlement; and
- (i) our Company currently does not intend to apply for the status of a sino-foreign joint stock limited company and does not expect to be subject to the Foreign Investment Law of the People's Republic of China (中華人民共和國外商投資法).

12. Bilingual Prospectus

The English language and Chinese language versions of this prospectus are being published separately, in reliance upon the exemption provided by section 4 of the Companies (Exemption of Companies and Prospectuses from Compliance with Provisions) Notice (Chapter 32L of the Laws of Hong Kong).

13. Binding Effect

This prospectus shall have the effect, if an application is made in pursuance hereof, of rendering all persons concerned bound by all the provisions (other than the penal provisions) of sections 44A and 44B of the Companies (Winding Up and Miscellaneous Provisions) Ordinance so far as applicable.

APPENDIX VII DOCUMENTS DELIVERED TO THE REGISTRAR OF COMPANIES AND AVAILABLE ON DISPLAY

DOCUMENTS DELIVERED TO THE REGISTRAR OF COMPANIES

The documents attached to the copy of this prospectus and delivered to the Registrar of Companies in Hong Kong for registration were: (i) a copy of the **GREEN** Application Form; (ii) the written consents referred to in the section headed “Consents of Experts” in Appendix VI to this prospectus; and (iii) copies of each of the material contracts referred to in the section headed “Summary of Material Contracts” in Appendix VI to this prospectus.

DOCUMENTS ON DISPLAY

Copies of the following documents will be published on the Stock Exchange’s website at www.hkexnews.hk and our Company’s website at www.aimbio.com during a period of 14 days from the date of this prospectus:

- (a) the Articles of Association;
- (b) the Accountants’ Report for the three years ended December 31, 2021 and the four months ended April 30, 2022 prepared by Ernst & Young, the text of which is set out in Appendix I to this prospectus;
- (c) the audited consolidated financial statements of our Group for the three years ended December 31, 2021 and the four months ended April 30, 2022;
- (d) the report on the unaudited pro forma financial information of our Group prepared by Ernst & Young, the text of which is set out in Appendix II to this prospectus;
- (e) the PRC legal opinions issued by Jingtian & Gongcheng, our legal advisor as to PRC law, in respect of general matters and the property interests of our Group;
- (f) the material contracts referred to in the section headed “Statutory and General Information—B. Further Information about Our Business—1. Summary of Material Contracts”;
- (g) the written consents referred to in the section headed “Statutory and General Information—E. Other Information—8. Consents of Experts”;
- (h) the service contracts referred to in the section headed “Statutory and General Information—C. Further Information about Our Directors and Supervisors—1. Particulars of Directors’ and Supervisors’ Contracts”;
- (i) a full list of all the grantees under the Pre-IPO ESOP;
- (j) the CIC Report, the summary of which is set forth in the section headed “Industry Overview”;
- (k) the PRC Company Law, the PRC Securities Law, the Mandatory Provisions and the Special Regulations together with their unofficial English translations; and
- (l) the legal opinion issued by S&P Law Firm, our PRC litigation counsel, in respect of certain litigations in the PRC brought against our Group.



AIM 艾美疫苗
全产业链疫苗集团