康希诺生物股份公司
CanSino Biologics Inc.

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

Stock Code: 6185

2019
ANNUAL REPORT

Contents

Corporate Information

BOARD OF DIRECTORS

Executive Directors

Dr. Xuefeng YU
(Chairman, chief executive officer and general manager)
Dr. Shou Bai CHAO
(Chief operating officer and deputy general manager)
Dr. Tao ZHU
(Chief scientific officer and deputy general manager)
Dr. Dongxu QIU
(Senior vice president and deputy general manager)

Non-executive Directors

Mr. Qiang XU
Mr. Liang LIN
Ms. Nisa Bernice Wing-Yu LEUNG
Mr. Zhi XIAO

Independent Non-executive Directors

Mr. Shiu Kwan Danny WAI
Ms. Zhu XIN
Mr. Shuifa GUI
Mr. Jianzhong LIU

AUDIT COMMITTEE

Ms. Zhu XIN *(Chairwoman)*
Mr. Shiu Kwan Danny WAI
Mr. Zhi XIAO

REMUNERATION AND ASSESSMENT COMMITTEE

Mr. Shuifa GUI *(Chairman)*
Ms. Zhu XIN
Mr. Jianzhong LIU
Dr. Shou Bai CHAO
Mr. Liang LIN

NOMINATION COMMITTEE

Mr. Jianzhong LIU *(Chairman)*
Dr. Xuefeng YU
Mr. Shiu Kwan Danny WAI
Mr. Shuifa GUI
Ms. Nisa Bernice Wing-Yu LEUNG

SUPERVISORS

Ms. Jiangfeng LI *(Chairwoman)*
Ms. Jieyu ZOU
Ms. Zhengfang LIAO

AUTHORISED REPRESENTATIVES

Dr. Xuefeng YU
Mr. Ming King CHIU

JOINT COMPANY SECRETARIES

Mr. Jin CUI
Mr. Ming King CHIU *(FCIS FCS (PE))*

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AUDITOR

PricewaterhouseCoopers
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Hong Kong

STOCK CODE

6185

COMPANY WEBSITE

www.cansinotech.com

Financial Summary

A summary of the results and of the assets and liabilities of the Group for the last four financial years is set out below:

	Year ended December 31,			
	2019	2018	2017	2016
	(Audited)	(Audited)	(Audited)	(Audited)
	RMB'000	RMB'000	RMB'000	RMB'000
Operating Results				
Revenue	**–**	1,132	–	–
Operating loss	**200,245**	(138,578)	(63,796)	(52,686)
Loss before income tax	**156,766**	(138,281)	(64,450)	(49,851)
Loss for the year and total comprehensive loss	**156,766**	(138,281)	(64,450)	(49,851)
Loss per Share				
Basic and diluted loss per share	**(0.77)**	(0.90)	(0.45)	(0.41)

	As at December 31,			
	2019	2018	2017	2016
	(Audited)	(Audited)	(Audited)	(Audited)
	RMB'000	RMB'000	RMB'000	RMB'000
Financial Position				
Non-current assets	**990,253**	574,871	439,446	179,368
Current assets	**794,245**	221,004	426,918	146,805
Total assets	**1,784,498**	795,875	866,364	326,173
Total equity	**1,470,516**	502,317	607,332	214,473
Non-current liabilities	**189,687**	186,873	146,105	84,344
Current liabilities	**124,295**	106,685	112,927	27,356
Total liabilities	**313,982**	293,558	259,032	111,700
Total equity and liabilities	**1,784,498**	795,875	866,364	326,173

Dear Shareholders,

On behalf of the Board, I am pleased to present the annual report of the Company for the year ended December 31, 2019.

2019 is a critical year for CanSinoBIO. We have been successfully listed on the Stock Exchange, and we have also embarked on our next adventure – applying for the issue of A shares and listing on the Sci-Tech Innovation Board of the Shanghai Stock Exchange. We believe these accesses to the capital markets will help us optimize our capital structure and seize more opportunities in the future.

We continued to make significant progress in our product pipeline and business operations in 2019. The NDA review for our MCV2 candidate progressed well, and the CTA for our PCV13*i* vaccine candidate was approved within expected timeline. In addition, CDE granted priority review status to the NDA for our MCV4 vaccine candidate soon after the NDA was accepted. We have also expanded our manufacturing and commercialization capabilities to support our future development.

Looking forward, 2020 will be challenging and crucial for our development. We expect to launch our licensed commercial products in this year, and we will focus on building our brands and reputation in the market. To fulfill our mission to develop, manufacture and commercialize high quality, innovative and affordable vaccines, we will continue to advance our pipeline assets through our research and development as well as collaboration with world-class business partners.

The recent outbreak and spread of the Coronavirus disease (COVID-19) Pandemic have caused an unprecedented adverse impact around the world. As a vaccine company, we have shouldered our social responsibilities and initiated the development of vaccine candidate for COVID-19. Currently we are conducting the clinical trails for the Recombinant Novel Coronavirus Disease Vaccine (Adenovirus Type 5 Vector) and we promise to do our best to bring health and hope to this world.

Last but not least, I would like to thank our shareholders for their continuous support. I would also like to express our appreciation to our employees and business partners. CanSinoBIO will continue to use our best effort to achieve the expectation of our investors. We look forward to sharing more with all of you.

Dr. Xuefeng YU
Chairman and Chief Executive Officer

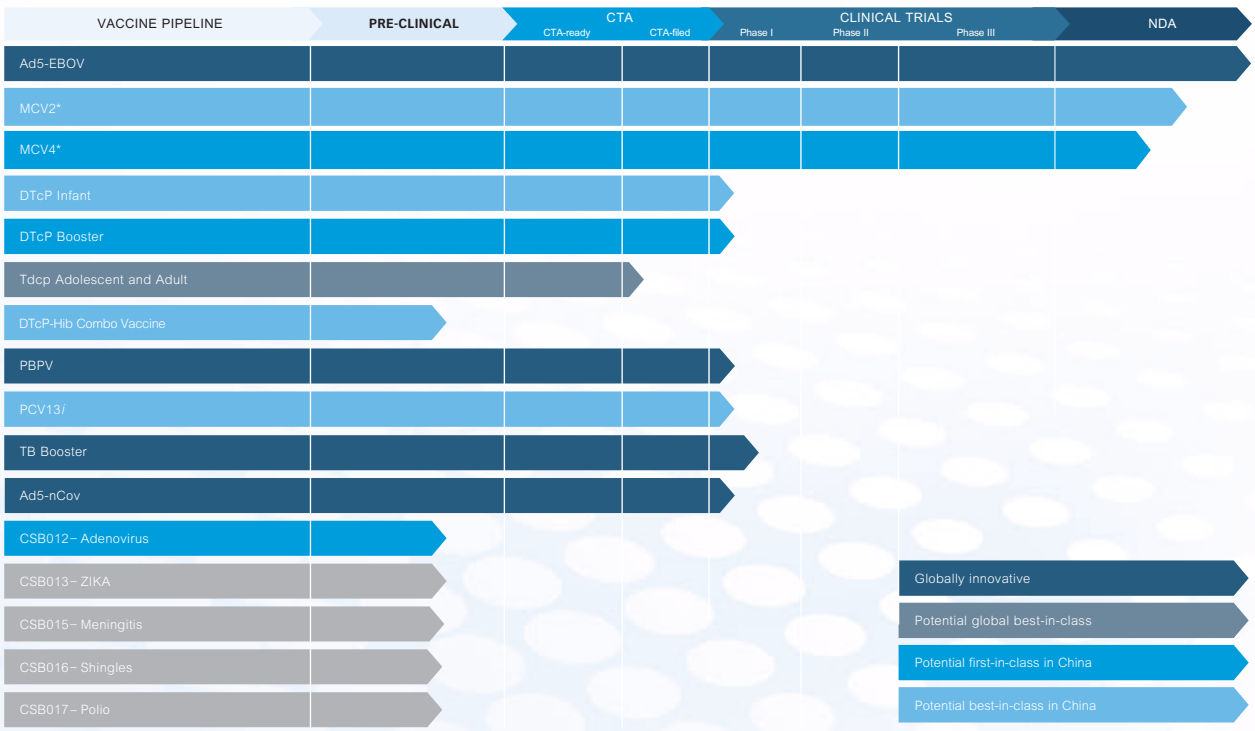
OVERVIEW

CanSino's mission is to develop, manufacture and commercialize high quality, innovative and affordable vaccines. Our mission is being fulfilled by an accomplished team of founders and senior management – world-class scientists with a record of leading the development of innovative international vaccines at global pharmaceutical companies. Other management members are also vaccine industry veterans from leading multi-national and domestic biologics companies.

Our vaccine pipeline, which is strategically designed to address China's vast and underserved market, can be summarized into three categories: (i) globally innovative vaccines to serve China's unmet medical needs (such as Ad5-EBOV, our TB Booster candidate, our PBPV candidate and our Ad5-nCoV candidate); (ii) potential first-in-class vaccines in China developed to replace the current primary vaccines with higher-quality world-class vaccines (such as our DTcP vaccine candidates and MCV4 candidate); and (iii) potential best-in-class vaccines in China developed to compete with the imported products in the PRC market (such as our PCV13*i* candidate).

We are developing 16 vaccine candidates for 13 disease areas. In addition to our three near-commercial assets covering meningococcal diseases and Ebola virus disease, we have seven vaccine candidates in clinical trial stage or CTA stage. We also have six pre-clinical vaccine candidates, including one combination vaccine candidate. To date, we have not commercialized any products, and we cannot guarantee that we will be able to successfully develop and commercialize our drug candidates.

Our product pipeline is set out below as at the date of this annual report:



* denotes a Core Product.

BUSINESS REVIEW

During the year of 2019 and up to the date of this annual report, in addition to those disclosed in the Prospectus, the Group made following significant progress with respect to its product pipeline:

- ### NDA for MCV4

  In November 2019, the NMPA has accepted our NDA for MCV4. This is our third NDA accepted by the NMPA following Ad5-EBOV and MCV2, and the first NDA for MCV4 being accepted in China. Later in December 2019, the Center for Drug Evaluation under the NMPA granted priority review status to our NDA for MCV4.

- ### CTA Approval for PCV13*i*

  We have received the CTA approval for the PCV13*i* from the NMPA in April 2019. PCV13*i* is designed to compete with a world-class standard PCV13 product for children under 2 years old. We have made improvements in the conjugate design and manufacturing processes of our PCV13 candidate based on our proprietary conjugate vaccine manufacturing know-how.

- ### Ad5-nCoV approved for clinical trial

  In March, 2020, the Recombinant Novel Coronavirus Disease Vaccine (Adenovirus Type 5 Vector), or Ad5-nCoV, a vaccine jointly developed by the Company and the Institute of Biotechnology, Academy of Military Medical Sciences, was approved for clinical trial after registration documents review.

NEAR COMMERCIAL-STAGE PRODUCTS

- ### MCV4

  Our MCV4 candidate is a potential China first-in-class vaccine preventing meningitis, and the first NDA for MCV4 being accepted in China. It is designed to be comparable to vaccines manufactured by multinational companies which are widely used in developed countries.

  Our MCV4 candidate was found to be safe and well-tolerated, and showed good immunogenicity in all age groups in the clinical trials. Compared with MPSV4 products, our MCV4 candidate has an age indication covering populations from 3 months to 6 years old, therefore covering infants below 12 months old where the incidence of meningococcal disease is the highest. Compared with MCV2 products with an age indication for population below 23 months old, our MCV4 candidate covers two additional serogroups, Y and W135, which translates to broader protection. In addition, the polysaccharides of our MCV4 candidate are free of phenol, a toxic substance, while most competitor meningococcal vaccines contain phenol.

  We obtained an umbrella CTA approval for the MCV4 candidate in December 2015. We have completed the phase III clinical trial of our MCV4 candidate, and have received the clinical trial report. We completed the NDA application package for our MCV4, and submitted for the pre-NDA meeting to the NMPA on July 5, 2019. In November 2019, the NMPA has accepted our NDA for MCV4. This is our third NDA accepted by the NMPA following Ad5-EBOV and MCV2, and the first NDA for MCV4 being accepted in China. Later in December 2019, the Center for Drug Evaluation under the NMPA granted priority review status to our NDA for MCV4. In addition, we have completed validation of our manufacturing facilities and processes. We expect to go through pre-approval inspection for licensure in 2020 and to launch our MCV4 candidate after the inspection.

- ## MCV2

Our MCV2 candidate is a potential China best-in-class bi-valent meningococcal vaccine. It is expected to compete with domestic MCV2 products marketed by well-known manufacturers in China.

Compared with the primary MCV2 products currently approved in China, our phase III clinical trial showed that our MCV2 candidate demonstrated a superior safety profile in the age group of 3 months and superior immunogenicity in the age groups of 6 to 23 months.

We obtained an umbrella CTA approval for our MCV2 candidate in December 2015, and filed the NDA for our MCV2 candidate on January 31, 2019. In addition, we have completed validation of our manufacturing facilities and processes. We expect to go through pre-approval inspection in 2020 for licensure and launch our MCV2 candidate afterwards.

- ## Ad5-EBOV

Ad5-EBOV is jointly developed by the Institute of Biotechnology, Academy of Military Medical Sciences and us. It uses adenovirus vector technology to induce the immune response. Ad5-EBOV is the first approved Ebola virus vaccine in China for emergency use and national stockpile. There is no other approved Ebola virus vaccine in China.

Compared with the current vaccine and vaccine candidates, Ad5-EBOV has advantages including (i) it has a better stability profile attributable to its freeze-dried dosage form and is approved to be stored between 2°C to 8°C for 12 months; (ii) it is an inactive non-replicating viral vector vaccine with less safety concerns; and (iii) it is a potential broad spectrum protection vaccine against the Zaire Ebola virus.

Ad5-EBOV received NDA approval in China in October 2017 only for emergency use and national stockpile. According to the NDA approval, the approved Ad5-EBOV contains 8.0×10^{10} viral particles per dose, and one dose (2 vials) is recommended for primary vaccination. The shelf life of Ad5-EBOV is 12 months. We have obtained the GMP certificate for Ad5-EBOV.

We currently do not expect Ad5-EBOV to contribute significantly to our business commercially in the future.

DRUG CANDIDATES IN THE PIPELINE

• DTcP Infant

We are developing a potential best-in-class DTcP vaccine for infants, or DTcP Infant candidate, for primary vaccination. The manufacturing process of DTaP vaccines involves co-purification of the pertussis antigens, which results in the quantities of each pertussis antigen varying from batch to batch. In contrast, each pertussis antigen of DTcP vaccines is purified individually and are subsequently combined in a defined ratio, hence ensuring a fixed and consistent composition. Compared with Pentaxim, the only DTcP vaccine in China, our DTcP Infant candidate contains three pertussis antigens as compared to two pertussis antigens, which translates to better protection.

We received the CTA approval for our DTcP Infant candidate in January 2018. We have commenced a phase I clinical trial in China and expect to conduct further clinical trials in China. Considering that we have obtained an umbrella CTA approval for this candidate and based on our experience with the clinical trials for our MCV candidates, which also received umbrella CTA approvals, we expect to complete Phase III clinical trial for our DTcP Infant candidate in 2022.

• DTcP Booster

There are no DTP booster vaccines for children in China. Our DTcP Booster candidate is a potential China first-in-class DTcP booster vaccine for children, which is designed to have the same composition as our DTcP Infant candidate and therefore has the same safety, immunogenicity and manufacturing productivity profiles.

We received CTA approval for our DTcP Booster candidate in January 2018. We have commenced a phase I clinical trial in China and expect to conduct further clinical trials in China. Considering that we have obtained an umbrella CTA approval for this candidate and based on our experience with the clinical trials for our MCV candidates, which also received umbrella CTA approvals, we expect to complete all of the clinical trials for our DTcP Booster candidate by 2021.

• Tdcp Adolescent and Adult

Tdcp vaccines for adolescents and adults are in the routine vaccination schedule of developed countries. However, there are no approved Tdcp vaccines for adolescents and adults in China. Our Tdcp Adolescent and Adult candidate is a potential global best-in-class vaccine developed to compete against world-class vaccines such as Boostrix and Adacel. As compared with the composition of our DTcP Infant candidate, our Tdcp Adolescent and Adult candidate contains a slightly higher amount of the TT antigen, and reduced amounts of pertussis antigens (FHA, PT and PRN) and the DT antigen in line with international industry standards.

In view of the recommendations of the Advisory Committee on Immunization Practices (ACIP) on the use of DTP booster vaccines in 2019, the Company believes that conducting clinical trials in North America is more in line with the company's development strategy and changed the original plan of conducting clinical trials in the European Union. We plan to conduct overseas clinical trails for our Tdcp Adolescent and Adult candidate first and then submit clinical trial applications in China by the end of 2020.

- ## PBPV

PBPV is a globally innovative pneumococcal vaccine candidate. Currently, PPV23 products and PCV13 products are all serotype-based and therefore are effective against only up to 23 pneumococcal serotypes but not able to protect against all of the 90 plus serotypes. Our PBPV candidate is not serotype-dependent. Our PBPV candidate adopts antigens that are based on the pneumococcal surface protein A, or PspA, a highly-conserved protein which is expressed by virtually all pneumococci. The results from a large global study showed that over 99% of the clinical isolates from seven different countries are classified as PspA family 1 or family 2 strains. Our in-house study also demonstrated that approximately 98% of the strains isolated in the city of Nanjing belong to PspA families 1 or 2. Therefore, our PBPV candidate has the potential to have a much broader coverage in the elderly than that offered by the current PPV23 and PCV13 products.

The CTA for our PBPV candidate was approved in October 2018. We have commenced a phase Ia clinical trial and expect to complete the phase Ia clinical trial in 2020. We will initiate a phase Ib clinical trial and/or a phase II clinical trial according to the results of the phase Ia clinical trial.

- ## PCV13*i*

We are developing a potential best-in-class improved PCV13 candidate, or PCV13*i*, which is designed to compete with a world-class PCV13 product for children under 2 years old. We have made improvements in the conjugate design and manufacturing processes of our PCV13 candidate based on our proprietary conjugate vaccine manufacturing know-how.

We received the CTA approval for the PCV13*i* from the NMPA in April 2019. We have commenced a phase I clinical trial and expect to complete phase III clinical trial in 2022.

- ## Ad5-nCoV

The Recombinant Novel Coronavirus Disease Vaccine (Adenovirus Type 5 Vector), or Ad5-nCoV, is jointly developed by our Company and the Institute of Biotechnology, Academy of Military Medical Sciences. Ad5-nCoV is a genetic engineered vaccine candidate with the replication-defective adenovirus type 5 as the vector to express SARS-CoV-2 spike protein, which intends to be used to prevent the disease caused by the novel coronavirus infection.

Ad5-nCoV was approved for clinical trial after registration documents review, and we have initiated the Phase I clinical trial.

- ## TB Booster

We are developing a globally innovative TB Booster candidate for the BCG-vaccinated population. The phase Ia clinical trial showed the Ad5Ag85A TB candidate to be safe and well tolerated, and able to boost the immunity in the BCG-vaccinated population. We obtained a world-wide exclusive license from McMaster University to develop and commercialize products in the tuberculosis field based on technology information rights owned by McMaster University related to TB Booster and its phase I clinical trial, as well as a non-exclusive sub-license to relevant adenovirus patent rights licensed to McMaster University.

Our phase Ib clinical trial is being conducted in Canada to evaluate the safety and immune responses stimulated by the TB Booster candidate in the blood and lungs, however the recruitment of eligible volunteers has progressed less than expected.

We plan to file a CTA with the NMPA if the clinical results in Canada meet our expectations. As a globally innovative vaccine candidate with two clinical trials completed overseas and selected as National Science and Technology Major Project, we believe our TB Booster candidate will qualify for priority review by the NMPA. Upon receiving CTA approval, we expect to only require bridging clinical studies prior to commencing a phase II clinical trial in 2020 because we will have overseas clinical data for our TB Booster candidate.

PRE-CLINICAL PROGRAMS WITH PROOF OF CONCEPT

We have six vaccine candidates in pre-clinical programs, including one combination vaccine candidate and five other disease-specific vaccine candidates targeting shingles, meningitis, polio, adenovirus and Zika. In particular:

- ### DTcP-Hib Combo Vaccine

  We expect to file the CTA of DTcP-Hib combo vaccine in 2020.

- ### Adenovirus Vaccine

  We have completed the construction of the pilot plant for our Adenovirus Vaccine candidate. We expect to file the CTA of Adenovirus Vaccine in 2020.

- ### Shingles Vaccine

  Shingles, also known as herpes zoster, has a high incidence rate among the elderly. It causes significant pain in patients, and therefore leads to high healthcare expenditure. We will seek to leverage our viral vector platform technology to develop a new type of shingles vaccine. We plan to request a pre-CTA meeting with the NMPA for our Shingles vaccine candidate in 2020.

- ### Meningitis B Vaccine

  Current conjugate vaccines protect against serogroups A, C, W135 and Y, which are the most frequent causes of the disease in China, but not serogroup B. Serogroup B Neisseria meningitis has become a major emerging cause of meningitis since the development of conjugate vaccines. We will seek to leverage our strengths in protein structure design to develop a meningitis B vaccine to address this emerging unmet medical need.

- ### Inactivated Polio Vaccine ("IPV")

  The global effort to eradicate polio has contributed to a high demand for IPV, for which there is currently also a supply shortage. The development of IPV will enable us to leverage our DTcP vaccine portfolio to form a combination vaccine, and compete with global blockbuster vaccines.

THE GROUP'S FACILITIES

To date, our manufacturing activities have been primarily limited to those for product registration purposes. We own and operate a commercial-scale manufacturing facility located in Tianjin city currently with a total gross floor area of approximately 38,000 m^2. The facility is designed, constructed and operated to meet international standards. Our manufacturing facility was designed to have an annual bulk production capacity of approximately 70 million to 80 million doses. We believe our current production capacity is fully capable of supporting our commercialization plans for our near-commercial candidates as well as supporting manufacturing of clinical trial materials. We also plan to construct phase II production facilities to meet the Company's production and operation needs.

Our manufacturing facility is equipped with advanced equipment and machinery include fermentation, purification, conjugation, and ultrafiltration, auto-packaging and filling machinery. Many of our major manufacturing equipment are manufactured by leading international and domestic brands.

We have completed validation of our manufacturing facilities and processes. We expect to go through pre-approval inspection for licensure for our MCV2 and MCV4 candidates in 2020.

QUALITY CONTROL

We have a comprehensive quality management system with stringent policies relating to vaccine research, development and manufacturing, details of which are further set out in the "Environmental, Social and Governance Report" in this annual report.

EMPLOYEES AND REMUNERATION POLICIES

As at December 31, 2019, the Group had 429 employees and 8 consultants in service, including 382 R&D personnel. The Company has formulated policies related to employees' remuneration, rights and interests and conducted various staff training, details of which are further set out in the "Environmental, Social and Governance Report" in this annual report.

INTELLECTUAL PROPERTY

As of December 31, 2019, the Group owned 59 trademarks, including 33 in China, six in Hong Kong, five in Taiwan, one in the European Union, one in the United States and 13 in other countries and regions. As of the same date, the Group had filed two trademark applications in China, 11 in other countries and regions and also filed trademark applications through Madrid International Trademark System.

As of December 31, 2019, the Group owned 16 patents in China, two patents in the United States and one patent in the European Union. As of the same date, the Group had filed 11 patent applications in China, one patent application in the European Union and Canada, and one patent application in the United States and the European Union.

IMPORTANT EVENTS AFTER THE END OF THE REPORTING PERIOD

On January 16, 2020, the Company submitted the application materials in respect the Proposed Issue of A Shares, including the A Share prospectus (the "A Share Prospectus"), to the Shanghai Stock Exchange, and received a letter of acceptance issued by the Shanghai Stock Exchange in respect of the Company's application for the Proposed Issue of A Shares. On March 17, 2020, the Company submitted documents in relation to the Company's response to the letter of the first round of enquiry (the "First Round Response") in respect of the Proposed Issue of A Shares. The A Share Prospectus and the First Round Response were published on the website of the Review and Approval of the Issuance and Listing of Stock on the Science and Technology Innovation Board of the Shanghai Stock Exchange at (kcb.sse.com.cn) and the website of the Company at (www.cansinotech.com).

In March 2020, the Recombinant Novel Coronavirus Disease Vaccine (Adenovirus Type 5 Vector), a vaccine jointly developed by the Company and the Institute of Biotechnology, Academy of Military Medical Sciences, was approved for clinical trial after registration documents review.

The Novel Coronavirus outbreak around the world may have an impact on our business operations, causing delays in clinical trials, construction of facilities, regulatory approvals, and even commercialization of our vaccines. It is difficult to estimate the full impact in the coming months given the dynamic nature of these circumstances. The Company will keep continuous attention on the situation and react actively to the impacts.

Save as disclosed above, there are no important events occurred after the end of Reporting Period and up to the date of this annual report.

FUTURE AND OUTLOOK

According to China Insights Consultancy Limited, in terms of sales revenue, the total size of China's vaccine market increased from RMB23.3 billion in 2014 to RMB33.6 billion in 2018, and is expected to reach RMB116.1 billion in 2030. Our mission is to develop, manufacture and commercialize high quality, innovative and affordable vaccines.

To accomplish that mission, we will continue to advance our near-commercial candidates towards the NDA approval and develop our clinical trial stage assets through our in-house research and development and medical/clinical teams. Also, we will continue to discover and develop new vaccine candidates through both in-house research and development and external collaborations. In order to support our continuous growth, we plan to establish and strengthen our commercialization infrastructure, and expand our marketing and commercialization team. We will continue to evaluate possible global collaborations and acquisitions of high-potential assets.

Cautionary Statement required under Rule 18A.08(3) of the Listing Rules: We cannot guarantee that we will ultimately develop or market our Core Products successfully.

FINANCIAL REVIEW

Revenue

We did not generate any revenue for the year ended December 31, 2019. For the year ended December 31, 2018, we recorded revenue of RMB1.1 million from research and development services we provided to an independent third party to filter and validate certain antibodies through our advanced vaccine R&D platform technologies.

Other Income

Our other income decreased slightly from RMB20.0 million for the year ended December 31, 2018 to RMB19.0 million for the year ended December 31, 2019. Our other income primarily consisted of (i) government grants to support our research and development activities and manufacturing facility construction, (ii) investment income on wealth management products that we purchased from certain reputable commercial banks, and (iii) net income from sales of vaccine components.

Selling Expenses

Our selling expenses increased from nil for the year ended December 31, 2018 to RMB5.3 million for the year ended December 31, 2019, primarily because we initiated preparation for commercialization of our vaccine candidates.

Administrative Expenses

Our administrative expenses increased by 35.9% from RMB46.2 million for the year ended December 31, 2018 to RMB62.8 million for the year ended December 31, 2019, primarily due to (i) a RMB9.1 million increase in employee benefits expenses, and (ii) a RMB5.1 million increase in consulting fee (including auditors' remuneration).

Research and Development Expenses

Our research and development expenses increased by 33.5% from RMB113.6 million for the year ended December 31, 2018 to RMB151.7 million for the year ended December 31, 2019, primarily due to (i) a RMB27.0 million increase in employee benefits expenses, and (ii) a RMB7.5 million increase in depreciation and amortisation.

The following table sets forth the components of our research and development expenses for the year indicated.

	Year ended December 31,			
	2019		2018	
	RMB'000	**%**	RMB'000	%
Employee Benefits expenses	**87,458**	**57.6**	60,411	53.2
Raw materials and consumables used	**26,557**	**17.5**	22,940	20.2
Depreciation and amortization	**18,150**	**12.0**	10,693	9.4
Testing fee	**10,628**	**7.0**	6,171	5.4
Others	**8,954**	**5.9**	13,431	11.8
Total	**151,747**	**100.0**	113,646	100.0

Finance Income – Net

Our net finance income increased significantly from RMB0.3 million for the year ended December 31, 2018 to RMB43.5 million for the year ended December 31, 2019, primarily due to (i) a RMB21.6 million increase in interest income on bank deposits, and (ii) a RMB21.6 million increase in exchange gains on foreign currency deposits.

Income Tax Expense

Our income tax expense for the years ended December 31, 2018 and 2019 was nil.

Intangible Assets

Our intangible assets were RMB32.3 million and RMB38.7 million as at December 31, 2018 and December 31, 2019, respectively, which primarily consist of capitalised clinical trial expenses.

Inventories

Our inventories comprised finished goods, raw materials and consumable materials used in the research and development of our vaccine candidates. Our inventories increased by 91.8% from RMB8.5 million as at December 31, 2018 to RMB16.3 million as at December 31, 2019, primarily due to our increased procurement of raw materials and consumable materials, reflecting our increased research and development activities and our preparation for commercialization.

Other Receivables and Prepayments

The following table sets forth the components of our other receivables and prepayments as at the dates indicated:

	As at December 31, 2019 RMB'000	As at December 31, 2018 RMB'000
Value added tax recoverable	**25,682**	12,228
Prepayments to suppliers of intangible assets and property, plant and equipment	**10,734**	2,296
Prepayments to other suppliers	**17,884**	3,132
Receivables of vaccine components sale	**–**	286
Staff advances	**–**	300
Deposits as guarantee	**75**	2,377
Receivable of investment income on wealth management products	**–**	466
Prepayments of listing expenses	**5,215**	10,210
	59,590	31,295
Less: non-current portion	**(36,476)**	(16,166)
Current portion	**23,114**	15,129

The increase in our other receivables and prepayments from RMB31.3 million as at December 31, 2018 to RMB59.6 million as at December 31, 2019 was primarily due to (i) an increase of RMB13.5 million in value added tax recoverable; (ii) an increase of RMB8.4 million in prepayments to suppliers of property, plant and equipment; and (iii) an increase of RMB14.8 million in prepayments to other suppliers, partially offset by (i) a decrease of RMB2.3 million in deposits as guarantee; and (ii) a decrease of RMB5.0 million in prepayments of listing expenses..

Trade Payables

Our trade payables mainly included payments to be paid to raw material suppliers. The following table sets forth the aging analysis of our trade payables based on invoice date as at the dates indicated:

	As at December 31, 2019 RMB'000	As at December 31, 2018 RMB'000
Within 1 year	**6,028**	6,539
Between 1 year and 2 years	**31**	–
Between 2 year and 3 years	**–**	112
More than 3 years	**112**	–
	6,171	6,651

Our trade payables decreased by 7.5% from RMB6.7 million as at December 31, 2018 to RMB6.2 million as at December 31, 2019. We did not have any material defaults in payment of trade payables for the year ended December 31, 2019.

Other Payables and Accruals

The following table sets forth the components of our other payables and accruals as at the dates indicated:

	As at December 31, 2019 RMB'000	As at December 31, 2018 RMB'000
Other payables to suppliers of property, plant and equipment	**49,187**	65,546
Payroll and welfare payable	**19,006**	12,816
Testing expenses	**1,011**	57
Accrued listing expenses	**2,173**	8,940
Deposits from suppliers	**1,800**	6
Disability benefit payable	**1,086**	712
Utilities	**895**	190
Consulting fees	**730**	1,045
Accrued taxes other than income tax	**490**	233
Interest payable	**–**	239
Rental payable	**–**	6,431
Others	**4,260**	2,294
	80,638	98,509

Our other payables and accruals decreased by 18.2% from RMB98.5 million as at December 31, 2018 to RMB80.6 million as at December 31, 2019, primarily due to (i) a decrease of RMB16.3 million in other payables to suppliers of property, plant and equipment; (ii) a decrease of RMB6.4 million in rental payable, as we recognised rental payable as lease liabilities as at December 31, 2019 according to the adoption of HKFRS 16 Leases; and (iii) a decrease of RMB6.2 million in payroll and welfare payable.

Financial Resources, Liquidity and Capital Structure

Our net current assets increased significantly from RMB114.3 million as at December 31, 2018 to RMB670.0 million as at December 31, 2019, primarily because the Company raised funds through the Global Offering. The management is confident that the Company's financial resources is sufficient for its daily operations.

The capital of the Company comprises Domestic Shares, Unlisted Foreign Shares and H Shares. Total equity attributable to owners of the Company amounted to RMB1,470.5 million as at December 31, 2019, representing an increase of 192.8% as compared with that of RMB502.3 million as at December 31, 2018. Such increase was due to the issuance of H Shares pursuant to the Global Offering.

Significant Investments, Material Acquisitions and Disposals

During the year ended December 31, 2019, we did not make any significant investments or material acquisitions or disposals of subsidiaries, associates and joint ventures.

Future Plans for Material Investments or Capital Assets

We plan to apply approximately RMB550 million from the proceeds from the Proposed Issue of A Shares to construct phase II production facilities to meet the Company's production and operation needs.

Saved as disclosed above, the Group had no other material capital expenditure plan as at the date of this annual report.

Contingent Liabilities

As at December 31, 2019, the Group was not involved in any material legal, arbitration or administrative proceedings that, if adversely determined, and did not have any contingent liabilities, that, we expected would materially adversely affect our business, financial position or results of operations.

Capital Commitments

The capital commitments of the Group as at December 31, 2019 were RMB26.3 million, representing an increase of 85.2% as compared with that of RMB14.2 million as at December 31, 2018, primarily because we initiated the construction of our manufacturing facilities for PCV13*i*.

Charge on Assets

As at December 31, 2019, certain of the Group's property, plant and equipment have been pledged as collateral under the Group's borrowing arrangements. The carrying amount of property, plant and equipment pledged as collateral were RMB261.3 million as at December 31, 2019 (December 31, 2018: RMB241.3 million).

As at December 31, 2019, certain of the Group's land use rights have been pledged as collateral under the Group's borrowing arrangements. The carrying amount of land use rights pledged as collateral were RMB 10.6 million as at December 31, 2019 (December 31, 2018: RMB 10.8 million).

Saved as disclosed above, there were no other charges on the Group's assets as at December 31, 2019.

Exchange Rate Risk

The Group mainly operates in the PRC with most of the transactions settled in RMB. The Group is not exposed to foreign exchange risk as there are no significant financial assets or liabilities of the Group denominated in the currencies other than the functional currency, except for the cash and term deposits at bank in USD and HKD which were primarily received from the investors as capital contributions.

As at 31 December 2019, if RMB strengthened or weaken by 10% against USD with all other variables held constant, loss for the year ended 31 December 2019 would increase or decrease by RMB 0.6 million (2018: RMB 0.3 million).

As at 31 December 2019, if RMB strengthened or weaken by 10% against HKD with all other variables held constant, loss for the year ended 31 December 2019 would increase or decrease by RMB 45.1 million (2018: nil).

Gearing Ratio

Gearing ratio is calculated using interest-bearing borrowings less cash and cash equivalents and term deposits with initial term of over three months, divided by total equity and multiplied by 100%. As at December 31, 2019, the Company was in a net cash position and thus, gearing ratio is not applicable.

EXECUTIVE DIRECTORS

Xuefeng YU, aged 56, is a co-Founder of our Company. Dr. Yu was appointed as an executive Director on January 13, 2009 and has served as the chief executive officer of our Company since January 2009. He is also currently a member of Nomination Committee. Dr. Yu is primarily responsible for overseeing strategic development, overall operation and management and major decision-making of our Company. In addition, Dr. Yu is also responsible for managing the commercial operations center of our Company. Dr. Yu led the introduction of a new reconstituted tuberculosis vaccine from McMaster University in Canada and the development of such vaccine was supported by the Aeras Global TB Vaccine Foundation and the Ministry of Science and Technology of the PRC. He also led the introduction of adenoviral vector production cell lines and related production technology from the National Research Institute of Canada, which laid the foundation for the development of Ad5-EBOV. Dr. Yu has more than 30 years of experience in biotech research and development. From 1988 to 1991, Dr. Yu worked as a lecturer of the biology department in Nankai University. From 1996 to 1998, Dr. Yu served as a scientist at IBEX Technologies Inc. (a company listed on Toronto Stock Exchange Venture Exchange, ticker symbol: IBT). Dr. Yu joined Sanofi Pasteur in May 1998 and was in the position of director of fermentation development in Canada when he left the company. Dr. Yu obtained a bachelor's degree in microbiology in July 1985 and a master's degree in microbiology in June 1988 from Nankai University. He received his doctorate degree in microbiology from McGill University in Canada in June 1998.

Shou Bai CHAO, aged 57, was appointed as an executive Director on June 22, 2018 and the chief operating officer on May 1, 2018. He is also currently a member of Remuneration and Assessment Committee. Dr. Chao is primarily responsible for management of daily operations and strategic development of our Company. In addition, Dr. Chao is also responsible for production management and quality control. Dr. Chao has around 33 years of experience in the biotechnology industry. Prior to joining our Company, Dr. Chao held positions at various companies and organizations, including research engineer at Institute of Process Engineering, Chinese Academy of Sciences from 1985 to 1987, research associate at industrial biotechnology centre at University of Waterloo from September 1987 to March 1992, bioprocess engineer at Philom Bios Ltd. from August 1992 to August 1993, manager of bacterial vaccines from August 1993 to April 1997 and manager of validation compliance from April 1997 to August 2000 at Sanofi Pasteur, senior manager of quality assurance technical support at Genentech Inc. from August 2000 to December 2000, assistant vice president of vaccine technology at Wyeth Pharmaceuticals from January 2001 to December 2007, vice president and senior vice president at AstraZeneca plc from January 2008 to April 2018, and president and director of the board at Chinese Biopharmaceutical Association-USA from June 2014 to June 2016. Dr. Chao obtained a bachelor's degree in inorganic chemical engineering from Jiangxi Institute of Technology (江西工學院) (currently known as Nanchang University (南昌大學)) in July 1982, and a master's degree in chemical metallurgy from Chinese Academy of Sciences (中國科學院) in July 1985. Dr. Chao graduated from the University of Waterloo in Canada with a doctorate degree in biochemical engineering in October 1992. Dr. Chao is the spouse of Dr. Mao, the co-Founder, senior vice president and deputy general manager of our Company.

Tao ZHU (朱濤), aged 47, is a co-Founder of our Company. Dr. Zhu was appointed as an executive Director on January 13, 2009 and has served as the chief scientific officer of our Company since January 2009. He is primarily responsible for leading the vaccine research and development of our Company. In addition, Dr. Zhu is also responsible for the management of regulatory and clinical affairs. Together with experts of the Institute of Biotechnology, Academy of Military Medical Sciences, Dr. Zhu led the development and pre-clinical research of the only available recombinant Ebola vaccine in China, the production of which was approved by the CFDA. He also led the combined vaccine project and PBPV project, which have been selected as one of the major science and technology projects in the National Twelfth Five-Year Plan for "Significant New Drug Creation" (國家十二五"重大新藥創製"重大科技專項). His achievements also include the establishment of a polysaccharide protein binding technology platform and development of a variety of vectors, the process development, pre-clinical research and clinical applications of several products including MCV4, and the invention of seven patents in the PRC. Dr. Zhu worked at Integrated Genomics Inc. as a scientist from December 2004 to December 2005 and joined Sanofi Pasteur in January 2006 and was in the position of senior scientist before he left the company in November 2008. Dr. Zhu received his bachelor's degree in biological science and technology in July 1995 and his master's degree in biochemical in June 1998 from Tsinghua University. He graduated from University of Pittsburgh with a doctorate degree in chemical engineering in the U.S. in April 2003 and conducted his postdoctoral research in Carnegie Mellon University in the U.S. till October 2004.

Dongxu QIU, aged 60, is a co-Founder of our Company. Dr. Qiu was appointed as an executive Director on January 13, 2009 and has served as senior vice president since January 2009. He is primarily responsible for advising on our business and strategic development of our Company. Dr. Qiu has led several rounds of financing of our Company and the technology transfers of PCV13 and PPV23. Dr. Qiu has around 25 years of experience in the biotechnology industry. From January 1993 to April 1998, Dr. Qiu was a research scientist at Biomira, Inc. From 1999 to 2000, He was associate director of product operations at Altarex Inc., responsible for analytical development and product formulation. Dr. Qiu served as head of scientific operations at ARIUS Research Inc. from 2000 to 2002, president of Asia at MDS Capital from May 2003 to September 2005, advisor at Shanghai GenePharma Co., Ltd (上海吉瑪製藥技術有限公司) from 2006 to 2009, and general manager at ChinaBio LLC from March 2007 to April 2011. Dr. Qiu is currently a director of Suzhou GenePharma Co., Ltd. (蘇州吉瑪基因股份有限公司). Dr. Qiu graduated from Shenyang Pharmaceutical College (瀋陽藥學院) currently known as Shenyang Pharmaceutical University (瀋陽藥科大學) with a bachelor's degree in pharmacy in July 1982. He obtained his doctorate degree in pharmacy from Beijing Medical University (北京醫科大學) (currently known as Peking University Health Science Center (北京大學醫學部)) in December 1987. He continued his postdoctoral research in chemical engineering at the University of Konstanz in Germany from November 1989 to April 1991 and at the University of Montreal in Canada from May 1992 to January 1993. Dr. Qiu obtained a master's degree in business administration from the University of Western Ontario in Canada in October 2000.

NON-EXECUTIVE DIRECTORS

Qiang XU (許強), aged 51, was appointed as a non-executive Director on December 31, 2011. Mr. Xu is primarily responsible for participating in formulating the Company's corporate and business strategies. From April 1998 to April 2003, Mr. Xu served as a manager of the department of investment banking at Suzhou Industrial Park State-owned Asset Management Co., Ltd. (蘇州工業園區國有資產管理有限公司). From March 2005 to March 2007, he worked at Suzhou Industrial Park Real Estate Management Co., Ltd. (蘇州工業園區地產經營管理有限公司) as a general manager of the department of investment. Mr. Xu serves as the chairman of board at Suzhou Industrial Park Asset Management Co., Ltd. (蘇州工業園區資產管理有限公司). Mr. Xu received his master's degree in business administration from the University of Hong Kong in December 2004.

Liang LIN (林亮), aged 45, was appointed as a non-executive Director on August 6, 2013. He is also currently a member of Remuneration and Assessment Committee. Mr. Lin is primarily responsible for participating in formulating the Company's corporate and business strategies. Prior to studying in China Europe International Business School (中歐國際工商學院), Mr. Lin served as assistant product manager at Beijing Merek Pharmaceutical Consulting., Ltd. till June 2007. He served as business development manager at GlaxoSmithKline (China) Investment Co., Ltd from April 2009 to April 2010. Mr. Lin served as investment director from February 2011 to March 2017 and has been a partner since March 2017 at Lilly Asia Ventures (禮來亞洲基金). He is currently a director at Shenyang Sinqi Pharmaceutical Co.,Ltd. (瀋陽興齊眼藥股份有限公司) (a company listed on the Shenzhen Stock Exchange, stock code: 300573), Sansure Biotechnology Co., Ltd. (聖湘生物科技股份有限公司), Shanghai Wei Nuo Pharmaceutical Technology Co., Ltd. (上海緯諾醫藥科技有限公司), Shenzhen Ionova Life Science Co., Ltd. (深圳市原力生命科學有限公司), 2Health Bioscience Inc. and Beijing Kawin Technology Share-Holding Co., Ltd. (北京凱因科技股份有限公司). Mr. Lin received a bachelor's degree in chemical and pharmaceutical technology in July 1996 and a master's degree in medicinal chemistry in June 1999 from China Pharmaceutical University (中國藥科大學). Mr. Lin obtained his master degree in business administration from China Europe International Business School in March 2009.

Nisa Bernice Wing-Yu LEUNG (梁穎宇), aged 49, was appointed as a non-executive Director on September 16, 2015. She is also currently a member of Nomination Committee. Ms. Leung is primarily responsible for participating in formulating the Company's corporate and business strategies. Ms. Leung was co-founder and executive director at Biomedic (HK) Limited from 2003 to 2007 and has been a partner at Qiming Development (HK) Limited since December 2007. She has been a director at Gan & Lee Pharmaceutical Holdings Ltd. (甘李藥業股份有限公司) since March 2010, at Zhejiang Nurotron Nerve Electronic Technology Co., Ltd. (浙江諾爾康神經電子科技股份有限公司) since March 2014, at Berry Oncology Co., Ltd. (福建和瑞基因科技有限公司) since May 2018, at Venus Medtech (Hangzhou) Inc. (杭州啟明醫療器械股份有限公司) (a company listed on the Stock Exchange, stock code: 2500) since July 2009 and at Zai Lab Limited (a company listed on Nasdaq, ticker symbol: ZLAB) since 2014. In addition, Ms. Leung was a director at Chengdu Berry Genomics Co., Ltd. (成都市貝瑞和康基因技術股份有限公司), a company listed on Shenzhen Stock Exchange (stock code:000710), from September 2013 to June 2017. Ms. Leung was appointed as the Justice of the Peace (太平紳士) in June 2016 by the Government of the Hong Kong Special Administrative Region. Ms. Leung received her bachelor's degree in management from Cornell University in May 1992 and her master's degree in business administration from Stanford University in June 2001.

Zhi XIAO (肖治), aged 41, was appointed as a non-executive Director on June 28, 2019. He is also currently a member of Audit Committee. Mr. Xiao is primarily responsible for participating in formulating the Company's corporate and business strategies. Mr. Xiao has been the managing director of SDIC Fund Management Co., Ltd. (國投創新投資管理有限公司) since 2016. Mr. Xiao has been serving as a director of Zhejiang Novus Pharmaceuticals Co., Ltd. (浙江創新生物有限公司), a director of Dizal (Jiangsu) Pharmaceutical Co., Ltd. (迪哲(江蘇)醫藥有限公司), a director of TINAVI Medical Technologies Co.,Ltd. (北京天智航醫療科技股份有限公司) (a company delisted from the National Equities Exchange and Quotations on April 1, 2019), and an independent non-executive director of Guangdong Great River Smarter Logistics Co., Ltd. (廣東宏川智慧物流股份有限公司) (a company listed on the Shenzhen Stock Exchange, stock code: 002930). Mr. Xiao received his bachelor's degree in veterinary medicine from China Agricultural University and his master of business administration degree from Tsinghua University

INDEPENDENT NON-EXECUTIVE DIRECTORS

Shiu Kwan Danny WAI (韋少琨), aged 56, was appointed as an independent non-executive Director on June 22, 2018, with the appointment to take effect upon Listing. He is also currently a member of Audit Committee and Nomination Committee. Mr. Wai is primarily responsible for supervising and providing independent judgement to the Board. Mr. Wai served as analyst at The MAC Group, Inc. (Hong Kong) (currently part of the Capgemini Group) from July 1987 to September 1990 and financial analyst at Postal Buddy Corporation in the U.S. from 1992 to 1994. He was assistant manager, manager, assistant director and director of the Corporate Finance Department at Jardine Fleming Holdings Limited (Hong Kong) (currently part of JPMorgan Chase & Co.) and vice president in the Mergers & Acquisitions Department at JPMorgan Securities (Asia Pacific) Limited from September 1994 to May 2002. He served as executive director, managing director and head of Asia in the Global Healthcare Group at the Investment Banking Department of UBS AG (Hong Kong) from May 2004 to October 2015. He served as adviser at UBS AG Hong Kong Branch from February 2018 to January 2020 and was an independent non-executive director of Shanghai Fosun Pharmaceutical (Group) Co., Ltd. (上海復星醫藥(集團)股份有限公司) (a company listed on the Shanghai Stock Exchange, stock code: 600196, and the Hong Kong Stock Exchange, stock code: 2196), from June 2016 to June 2019. Mr. Wai received his bachelor's degree in social sciences in November 1987 from the University of Hong Kong and a master's degree in business administration in June 1992 from the John E. Anderson Graduate School of Management at the University of California, Los Angeles.

Zhu XIN (辛珠), aged 51, was appointed as an independent non-executive Director on June 22, 2018, with the appointment to take effect upon Listing. She is also currently the chairwoman of the Audit Committee and a member of Remuneration and Assessment Committee. Ms. Xin is primarily responsible for supervising and providing independent judgement to the Board. From 2006 to 2014, Ms. Xin held senior management positions at several companies, including vice-president at Hopson Development Holdings Limited (合生創展集團有限公司)(a company listed on the Stock Exchange, stock code: 754), executive director and executive vice president of China Aoyuan Property Group Limited (中國奧園地產集團) (a company listed on the Stock Exchange, stock code: 3883), where she was primarily responsible for financing, accounting and auditing, and chief financial officer at Logan Property Holdings Company Limited (龍光地產控股有限公司) (a company listed on the Stock Exchange, stock code: 3380). From May 2015 to March 2017, she served as the executive vice president of YIHE Real Estate Holdings Limited (頤和地產集團). Ms. Xin has abundant experience in accounting, auditing and corporate finance management. She has been a member of CPA Australia since October 2010. Ms. Xin received a bachelor's degree in accounting from Renmin University of China in July 1990 and a master's degree in business administration in international management from International College of Auckland Institute of Studies in December 1999.

Shuifa GUI (桂水發), aged 55, was appointed as an independent non-executive Director on November 29, 2019. He is also currently the chairman of Remuneration and Assessment Committee and a member of Nomination Committee. Mr. Gui is primarily responsible for supervising and providing independent judgement to the Board. Mr. Gui has been serving as chief financial officer at Ucloud Technology Co., Ltd. (優刻得科技股份有限公司) (a company listed on Shanghai Stock Exchange, stock code: 688158) since June 2018, and as director, chief financial officer and secretary of the board at Ucloud Technology Co., Ltd. since July 2018. Mr. Gui has been director of several companies, including executive director of Shanghai Shiniu Asset Management Co., Ltd. (上海師牛資產管理有限公司) since February 2013, director of Shanghai Tunnel Engineering Co., Ltd. (上海隧道工程股份有限公司) (a company listed on Shanghai Stock Exchange, stock code: 600820) since December 2018, independent non-executive director of Shanghai Mechanical & Electrical Industry Co., Ltd. (上海機電股份有限公司) (a company listed on Shanghai Stock exchange, stock code: 600835) since May 2018, director of Shanghai Zhengshi Intelligent Technology Co., Ltd. (上海證識智能科技有限公司) since June 2018, director of Wuhan Yintai Technology Power Co., Ltd. (武漢銀泰科技電源股份有限公司) since December 2014, and independent non-executive director of Linkage Software Co., Ltd. (蘇州工業園區凌志軟件股份有限公司) (a company listed on The National Equities Exchange And Quotations Co., Ltd., stock code: 830866) since April 2019. Mr. Gui worked at Shanghai University of Finance and Economics (上海財經大學) and served as a teaching associate from July 1989 to December 1993. He served as business manager of Listing Department at Shanghai Stock Exchange from January 1994 to December 1997 and served as deputy director and director of Marketing Development Department from January 1998 to September 2001. From October 2001 to December 2011, he served as deputy general manager, chief financial officer and secretary of the board at Orient Securities Co., Ltd.(東方證券股份有限公司) (a company listed on Hong Kong Stock Exchange (stock code: 03958) and Shanghai Stock Exchange (stock code: 600958)). He served as chairman of the board at China Universal Asset Management Co., Ltd. (匯添富基金管理有限公司) from October 2004 to April 2012. From April 2012 to August 2017, he served as president at Landgent Group Co., Ltd. (樂成集團有限公司). From September 2017 to May 2018, he served as deputy general manager at E-Capital Transfer Co., Ltd. (證通股份有限公司). Mr. Gui obtained his bachelor's degree in accounting from Shanghai University of Finance and Economics in June 1989. He received his master's degree in business management from the University of Hong Kong in September 2004. He has been a member of the Chinese Institute of Certified Public Accountants (中國註冊會計師協會) since April 1998.

Jianzhong LIU (劉建忠), aged 56, was appointed as an independent non-executive Director on November 29, 2019. He is also currently the chairman of Nomination Committee and a member of Remuneration and Assessment Committee. Mr. Liu is primarily responsible for supervising and providing independent judgement to the Board. Mr. Liu has been serving as vice president at Yingu Holdings Group Co., Ltd. (銀谷控股集團有限公司) since January 2012, as dean of Zhongyi (Beijing) Vaccine and Health Institute (中義(北京)健康研究院) since July 2016, as general manager and executive director at Zhongyi (Taizhou) Pharmaceutical Technology Co., Ltd. (中義(泰州)醫藥科技有限公司) since February 2018 and as general manager and executive director at Mianzhu Yingu Rose Trading Co., Ltd. (綿竹銀谷玫瑰商貿有限公司) since November 2015. Mr. Liu served as chief of Disease Control Division of the General Administration of Quality Supervision, Inspection and Quarantine (國家質量監督檢驗檢疫總局) from July 1989 to June 2003. From July 2003 to December 2011, he served as director of Scientific Affairs Department at Sanofi Pasteur, the vaccines division of the pharmaceutical company Sanofi S.A. Mr. Liu obtained his bachelor's degree in medicine from Peking University Health Science Center (北京大學醫學部) in June 1989. He received his master's degree in health sciences from Curtin University in Australia in March 1998.

SUPERVISORS

Ms. Jiangfeng LI (李江峰), aged 43, was appointed as a Supervisor and the chairwoman of the Board of Supervisors on November 29, 2019. Ms. Li has been serving as managing director of medical health investment department at Fortune Venture Capital Co., Ltd. (深圳市達晨財智創業投資管理有限公司) since March 2011. Ms. Li has been director of several companies, including Pharmapack Technologies Corporation (廣州珐瑪珈智能設備股份有限公司) since October 2011, Guangzhou Sunjava Medical Information Industry Co., Ltd. (廣州市三甲醫療信息產業有限公司) since June 2015, Guangdong Launca Medical Device Technology Co., Ltd. (廣東朗呈醫療器械科技有限公司) since September 2015, Shanghai Akmpath Biotechnology Co., Ltd.(上海菲爾紹阿克曼生物科技有限公司) since August 2018, Shanghai OPM Biosciences Co., Ltd. (上海奧浦邁生物科技有限公司) since October 2018, Shanghai Akmpath Medical Laboratory Co., Ltd. (上海阿克曼醫學檢驗所有限公司) since October 2018. She has also been supervisor of Shenzhen Kairuikang Information Technology Co., Ltd. (深圳市凱瑞康信息技術有限公司) and Guangdong OptoMedic Technologies Inc. (廣東歐譜曼迪科技有限公司) since January 2016 and August 2016, respectively. Ms. Li served as investment manager at Guangzhou Technology Venture Capital Co., Ltd.(廣州科技創業投資有限公司) from February 2004 to August 2007. She served as investment director at Guangzhou Hiway Capital Co., Ltd. (廣州海匯投資管理有限公司) from August 2007 to March 2011. Ms. Li obtained her bachelor's degree in biochemistry and molecular biology from Nankai University (南開大學) in July 1999. She received her master's degree in biochemistry and molecular biology from Nankai University in July 2002.

Jieyu ZOU (鄒潔羽), aged 30, was appointed as a Supervisor on June 14, 2016. Ms. Zou joined Lilly Asia Ventures (禮來亞洲基金) in June 2015, where she served as an investment manager, a senior investment manager, a vice president and has been an executive director since September 2019. From February 2014 to April 2015, Ms. Zou served as an investment manager at Fosun Hightech Group Co., Ltd. (復星高科技集團有限公司) and was responsible for investment project management. From 2012 to 2014, Ms. Zou served as a research associate at Michael Allen Company, where she was primarily responsible for providing consulting services. Ms. Zou graduated from Peking University with a bachelor's degree in biology in July 2010. She received a master of public health degree from Yale University in May 2012.

Zhengfang LIAO (廖正芳), aged 35, was appointed as an employee Supervisor on December 15, 2016. She joined our Company in June 2010 as an administrative assistant and was appointed as a project manager in June 2013 and the manager of project department in March 2014. Ms. Liao was appointed as senior manager of executive office in October 2018. Prior to joining our Company, Ms. Liao served as a project executive at China Foundation for Poverty Alleviation (中國扶貧基金會) from July 2008 to May 2010. Ms. Liao graduated from Minzu University of China (中央民族大學) with a bachelor's degree in biotechnology in July 2008.

SENIOR MANAGEMENT

Helen Huihua MAO, aged 58, is a co-Founder of our Company. Dr. Mao was appointed as senior vice president on January 13, 2009. She is primarily responsible for international regulatory affairs. Dr. Mao served as senior vice president of quality operations and head of quality of our Company and established quality management systems to meet CFDA, WHO, USFDA and EU GMP regulations for vaccine research & development, clinical trial materials manufacturing and commercialization. Dr. Mao has over 25 years of experiences in pharmaceutical and biologics research & development, technology transfer, quality and regulatory compliances. Prior to joining our Company, she held various positions with increased responsibilities, including development engineer at Albright & Wilson Americas from October 1990 to July 1999, facilities and equipment qualification specialist at Apotex from May 2000 to May 2001, project manager and director of quality at Wyeth Pharmaceuticals, Inc. from July 2001 to April 2005 and director of quality at Endo Pharmaceuticals plc from June 2006 to May 2011. She is also an adjunct professor at Tianjin University of Sciences and Technology. Dr. Mao graduated from Jiangxi Institute of Technology (江西工學院) (currently known as Nanchang University ("南昌大學")) with a bachelor's degree in chemical engineering in July 1982. She obtained a master degree in chemical engineering and a doctorate degree in chemical engineering from Chinese Academy of Sciences (中國科學院) in October 1984 and August 1988 respectively. Dr. Mao conducted her postdoctoral research in the University of Waterloo in Canada from December 1988 to September 1990. Dr. Mao also obtained a master of business administration degree from Villanova University in 2009. Dr. Mao is the spouse of Dr. Chao, an executive Director, chief operating officer and deputy general manager of our Company.

Jing WANG (王靖), aged 39, was appointed as chief financial officer of the Company on March 27, 2020 and has been the secretary of the Board since February 2017. Ms Wang joined our Company in June 2012 and took several positions before she was appointed as chief financial officer. Ms. Wang has led the successful IPO of our Company on the Stock Exchange and the establishment of our financing, financial management, human resources and administration systems. Ms. Wang completed pre-IPO fundraising of approximately RMB743 million in aggregate. From July 2005 to May 2012, Ms. Wang worked at several subsidiaries of Tasly Holding Group Co., Ltd. (天士力控股集團有限公司), where she was responsible for business development of pharmaceutical products including vaccines in domestic and overseas markets. From March 2002 to June 2005, Ms. Wang worked at Sinochem Tianjin Import and Export Corporation (中化天津進出口公司). Ms. Wang obtained her master's degree in engineering from Peking University in January 2011.

JOINT COMPANY SECRETARIES

Jin CUI (崔進), aged 33, was appointed as the joint company secretary of our Company on March 28, 2019. He joined our Company in May 2016 as the executive manager of corporate strategy department, primarily responsible for strategic research, business development and financial management. He has also been the assistant to the chief executive officer of our Company and was responsible for assisting the president of our Company in the daily operation of business strategy from March 2017 to October 2018. Mr. Cui was appointed as head of securities affairs department in October 2018, responsible for capital operations, information disclosure and assisting the secretary of the Board in investor relations. Mr. Cui served as an executive director of investment banking at Tianjin Branch of JZ Securities Co., Ltd. (九州證券股份有限公司) from August 2015 to April 2016. From June 2012 to July 2015, Mr. Cui worked at Tianjin Equity Exchange (天津股權交易所), where he was responsible for trading management and project management. Mr. Cui graduated from Tianjin University of Finance and Economics (天津財經大學) with a bachelor's degree in actuarial and risk management in June 2009. He obtained his master's degree in international financial analysis from University of Glasgow in December 2011.

Ming King CHIU (趙明璟), aged 43, was appointed as the joint company secretary of our Company on March 28, 2019. Mr. Chiu currently serves as an executive director of corporate services of Vistra Corporate Services (HK) Limited. He has over 10 years of experience in the company secretarial field. Mr. Chiu has been an associate member of the Institute of Chartered Secretaries and Administrators and the Hong Kong Institute of Chartered Secretaries ("HKICS") since 2003 and became a fellow member of the HKICS since September 2015. He is also a holder of the Practitioner's Endorsement Certificate issued by HKICS. He has been a member of the Membership Committee and Professional Services Panel of HKICS and a council member of HKICS. Mr. Chiu obtained a bachelor of arts from University of Toronto in Canada in June 1999 and received a master of arts degree in professional accounting and information systems from City University of Hong Kong in November 2003.

CORPORATE GOVERNANCE PRACTICES

The Company is committed to maintaining high standards of corporate governance to safeguard the interests of the shareholders of the Company and enhance its corporate value. The Company has adopted with all the applicable provisions of the CG Code as set out in Appendix 14 to the Listing Rules.

The board is of the view that throughout the Reporting Period, the Company has complied with all the applicable principles and code provisions as set out in the CG Code, except for code provision A.2.1 and E.1.2, details will be set out below.

DIRECTORS' AND SUPERVISORS' SECURITIES TRANSACTIONS

The Company has adopted the Model Code for Securities Transactions by Directors of Listed Issuers (the "Model Code") as set out in Appendix 10 to the Listing Rules. The Company has confirmed that, having made specific enquiry of all the Directors, all Directors and Supervisors have complied with the Model Code during the Reporting Period.

The Company has also established written guidelines (the "Employees Written Guidelines") on terms no less exacting than the Model Code for securities transactions by relevant employees who are likely to possess inside information of the Company in respect of their dealings in the Company's securities. No incident of non-compliance of the Employees Written Guidelines by the relevant employees was noted by the Company during the Report Period.

BOARD OF DIRECTORS

Board Composition

As at the date of this annual report, the board comprises four executive Directors, four non-executive Directors and four independent non-executive Directors, namely:

Executive Directors

Dr. Xuefeng YU *(Chairman, chief executive officer and general manager)*
Dr. Shou Bai CHAO *(Chief operating officer and deputy general manager)*
Dr. Tao ZHU *(Chief scientific officer and deputy general manager)*
Dr. Dongxu QIU *(Senior vice president and deputy general manager)*

Non-executive Directors

Mr. Qiang XU
Mr. Liang LIN
Ms. Nisa Bernice Wing-Yu LEUNG
Mr. Zhi XIAO

Independent non-executive Directors

Mr. Shiu Kwan Danny WAI
Ms. Zhu XIN
Mr. Shuifa GUI
Mr. Jianzhong LIU

The biographical information of the Directors and the relationships between the members of the Board are disclosed under the section headed "Directors, Supervisors and Senior Management" on pages 19 to 26 of this annual report.

Chairman and Chief Executive

Under code provision A.2.1 of the CG Code, the roles of chairman and chief executive should be separate and should not be performed by the same individual. Dr. Yu acts as the chairman of the Board and continues to act as the chief executive officer and general manager of the Company since the Listing Date. Dr. Yu has assumed the role of chief executive officer and general manager of the Company since our commencement of business, the Board considers it beneficial to the business prospect and operational efficiency of the Company.

The Board believes that this structure will not impair the balance of power and authority between the Board and the management of the Company, given that: (i) decision to be made by the Board requires approval by at least a majority of the Directors; (ii) Dr. Yu and the other Directors are aware of and undertake to fulfil their fiduciary duties as Directors, which require, among other things, that he acts for the benefit and in the best interests of the Company and will make decisions for the Company accordingly; and (iii) the balance of power and authority is ensured by the operations of the Board which comprises experienced and high caliber individuals who meet regularly to discuss issues affecting the operations of the Company. Moreover, the overall strategic and other key business, financial, and operational policies of the Company are made collectively after thorough discussion at both Board and senior management levels.

The Board will continue to review the effectiveness of the corporate governance structure of the Company in order to assess whether separation of the roles of chairman of the Board and chief executive officer is necessary.

Therefore, the Board considers that the deviation from code provision A.2.1 of the CG Code is appropriate in such circumstances and the existing arrangements are beneficial and in the interests of the Company and its shareholders as a whole.

Independent Non-executive Directors

During the Reporting Period, the Board at all times met the requirements of the Listing Rules relating to the appointment of at least three independent non-executive Directors representing one-third of the Board with one of whom possessing appropriate professional qualifications or accounting or related financial management expertise.

The Company has received written annual confirmation from each of the independent non-executive Directors in respect of his/her independence in accordance with the independence guidelines set out in Rule 3.13 of the Listing Rules. The Company is of the view that all independent non-executive Directors are independent.

Appointment, Re-election and Removal of Directors

Each of the executive Director, non-executive Director and independent non-executive Directors of the Company has entered into a service contract with the Company for a specific term. The non-executive Director and independent non-executive Directors have been appointed till the expiration of the term of the current Board and unless it is terminated by either the Company or such Director. The term of appointment of each Director is subject to retirement by rotation and re-election at general meeting in accordance with the Articles and the Listing Rules.

The Company may, in accordance with the Articles of Association, by ordinary resolution remove any Director before the expiration of his/her term of office notwithstanding anything to the contrary in the Articles of Association or in any agreement between the Company and such Director.

Where vacancies on the Board exist, the Nomination Committee evaluates skills, knowledge and experience required by the Board, and identifies if there are any special requirements for the vacancy. The Nomination Committee identifies appropriate candidates and convenes Nomination Committee meeting to discuss and vote in respect of the nominated Directors, and recommends candidates for Directors to the Board.

The Nomination Committee considers candidates with individual skills, experience and professional knowledge that can best assist and facilitate the effectiveness of the Board.

The Nomination Committee takes the policy on Board diversity of the Company into consideration when it considers the balance of composition of the Board as a whole.

The Company has established a Director Nomination policy. As evaluating and determining the candidates of Directors, the Nomination Committee and the Board of Directors shall consider the following factors: personal characters; professional qualifications, skills, knowledge, and experience related to the Group's business and strategy; willing to devote sufficient time to fulfill the duties of the Directors and members of the special committees of the Board of Directors; whether their appointment is in compliance with the requirements of the Listing Rules (including the independence requirements of independent non-executive Directors); whether their appointment is in compliance with the Company's Board diversity policy and any measurable targets adopted by the Nomination Committee to diversify the members of the Board.

Responsibilities of the Directors

The Board should assume responsibility for leadership and control of the Company; and is collectively responsible for directing and supervising the Company's affairs.

The Board directly, and indirectly through its committees, leads and provides direction to management by laying down strategies and overseeing their implementation, monitors the Group's operational and financial performance, and ensures that sound internal control and risk management systems are in place.

All Directors, including non-executive Directors and independent non-executive Directors, have brought a wide spectrum of valuable business experience, knowledge and professionalism to the Board for its efficient and effective functioning.

The independent non-executive Directors are responsible for ensuring a high standard of regulatory reporting of the Company and providing a balance in the Board for bringing effective independent judgement on corporate actions and operations.

All Directors have full and timely access to all the information of the Company and may, upon request, seek independent professional advice in appropriate circumstances for discharging their duties to the Company.

The Board reserves for its decision on all major matters relating to policy matters, strategies and budgets, internal control and risk management, material transactions (in particular those that may involve conflict of interests), financial information, appointment of directors and other significant operational matters of the Company. Responsibilities relating to implementing decisions of the Board, directing and co-ordinating the daily operation and management of the Company are delegated to the management.

Directors' and Officers' Liabilities Insurance

The Company has arranged appropriate insurance cover for Directors' and officers' liabilities in respect of legal actions against Directors, officers and senior management of the Company arising out of corporate activities.

Continuous Professional Development of Directors

All Directors should participate in continuous professional development to develop and refresh their knowledge and skills to ensure their contribution to the Board remains informed and relevant.

Every newly appointed Director should receive formal, comprehensive and tailored induction on the first occasion of his/her appointment to ensure appropriate understanding of the business and operations of the Company and full awareness of Director's responsibilities and obligations under the Listing Rules and relevant statutory requirements.

During the Reporting Period, the Directors were regularly briefed on the amendments to or updates on the relevant laws, rules and regulations. Internally-facilitated briefings for Directors would be arranged and reading material on relevant topics would be provided to Directors where appropriate. All Directors are encouraged to attend relevant training courses at the Company's expenses.

During the Reporting Period, each of the Directors has attended the training courses conducted by the legal adviser of the Company. The content of such training related to the duties of directors and on-going obligations of listed companies.

BOARD COMMITTEES

The Board has established three committees, namely the Audit Committee, the Remuneration and Assessment Committee and the Nomination Committee. All Board committees of the Company are established with specific written terms of reference which deal clearly with their authorities and duties. The terms of reference of the Board committees are posted on the Company's website and the Stock Exchange's website and are available to shareholders upon request.

Audit Committee

The Company established the Audit Committee with written terms of reference in compliance with Rule 3.21 of the Listing Rules and the Corporate Governance Code as set out in Appendix 14 to the Listing Rules. The Audit Committee consists of three members, namely Mr. Zhi XIAO, Mr. Shiu Kwan Danny WAI and Ms. Zhu XIN. Ms. Zhu XIN has been appointed as the chairwoman of the Audit Committee, and is the independent non-executive Director holding the appropriate professional qualifications.

The primary duties of the Audit Committee are to review and supervise the financial reporting process and internal control system of the Company, oversee the audit process, review and oversee the existing and potential risks of the Company and perform other duties and responsibilities as assigned by the Board. The Audit Committee has met all the applicable responsibilities and duties as prescribed under the Listing Rules.

The Audit Committee held three meetings during the Reporting Period, the attendance record of the committee members is set out below. The following is a summary of work performed by the Audit Committee during the Reporting Period:

- reviewed the interim results and report, the Group's financial and accounting policies and practices and the scope of audit and appointment of auditors;
- reviewed the financial controls system and engagement of non-audit services; and
- reviewed the risk management and internal control systems and internal audit function and discussed with the management and internal audit on their findings

The Audit Committee also met twice the external auditors of the Company.

Remuneration and Assessment Committee

The Company established the Remuneration and Assessment Committee with written terms of reference in compliance with Rule 3.25 of the Listing Rules and the Corporate Governance Code as set out in Appendix 14 to the Listing Rules. The Remuneration and Assessment Committee consists of five members, namely Dr. Shou Bai CHAO, Mr. Liang LIN, Ms. Zhu XIN, Mr. Shuifa GUI and Mr. Jianzhong LIU. Mr. Shuifa GUI has been appointed as the chairman of the Remuneration and Assessment Committee. The primary duties of the Remuneration and Assessment Committee are to establish and review the remuneration policy and structure for the Directors and senior management and make recommendations on employee benefit arrangement. The Remuneration and Assessment Committee has met all the applicable responsibilities and duties as prescribed under the Listing Rules.

The Remuneration and Assessment Committee held a meeting during the Reporting Period, the attendance record of the committee members is set out below. The following is a summary of work performed by the Remuneration and Assessment Committee during the Reporting Period:

- made recommendations to the Board on the remuneration package of the individual executive Directors and senior management
- made recommendations to the Board on the terms of the service contracts of the executive Directors
- reviewed and made recommendations to the Board on the remuneration of the non-executive Directors
- reviewed and made recommendations to the Board on the Company's policy and structure for the remuneration of all Directors and senior management
- reviewed the performance of duties of Directors and senior management of the Company and conducted annual performance appraisals on them

Details of the Directors' remuneration are set out in Note 36(a) to the consolidated financial statements.

The remuneration of the senior management (other than Directors) of the Group by band for the year ended December 31, 2019 is set out below:

Remuneration bands	Number of senior management
RMB1,000,001 to 2,000,000	1
RMB2,000,001 to 3,000,000	1

Nomination Committee

The Company established the Nomination Committee with written terms of reference in compliance with the Corporate Governance Code as set out in Appendix 14 to the Listing Rules. The Nomination Committee consists of five members, namely Dr. Xuefeng YU, Ms. Nisa Bernice Wing-Yu LEUNG, Mr. Shiu Kwan Danny WAI, Mr. Shuifa GUI and Mr. Jianzhong LIU. Mr. Jianzhong LIU has been appointed as the chairman of the Nomination Committee. The primary duties of the Nomination Committee are to make recommendations to our Board on the appointment and removal of Directors of our Company. The Nomination Committee has met all the applicable responsibilities and duties as prescribed under the Listing Rules.

The Nomination Committee held two meetings during the Reporting Period the attendance record of the committee members is set out below. The following is a summary of work performed by the Nomination Committee during the Reporting Period:

- assess the independence of the independent non-executive Directors
- considered and/or made recommendations to the Board on the re-election of directors and selection and recommend candidates for directorship
- reviewed the structure, size and composition of the Board

In assessing the Board composition, the Nomination Committee would take into account various aspects as well as factors concerning Board diversity as set out in the Company's Board diversity policy, including but not limited to gender, age, cultural and educational background, professional qualifications, skills, knowledge and industry and regional experience etc. The Nomination Committee would discuss and agree on measurable objectives for achieving diversity on the Board, where necessary, and recommend them to the Board for adoption.

In identifying and selecting suitable candidates for directorships, the Nomination Committee would consider the candidate's character, qualifications, experience, independence (for appointment of Independent Non-executive Directors), and Board diversity aspects, where appropriate, before making recommendation to the Board.

Corporate Governance Function

The Board is responsible for performing the functions set out in the code provision D.3.1 of the CG Code.

The Board had reviewed the following issues during the Report Period:

- the Company's policies and practices on corporate governance, compliance with legal & regulatory requirements
- training and continuous professional development of Directors and senior management
- code of conduct and compliance manual (if any) applicable to employees and directors
- the Company's compliance with the CG Code and disclosure in the Corporate Governance Report

Board Meetings and Directors' Attendance Records

Regular Board meetings should be held at least four times a year involving active participation, either in person or through electronic means of communication, of a majority of the Directors.

Apart from regular Board meetings, the Chairman also held meetings with the independent non-executive Directors without the presence of other Directors during the Reporting Period.

During the year, the Board held eight meetings and the attendance record of the Directors at the Board and Board Committee meetings and the general meetings of the Company held during the year ended December 31, 2019 is set out in the table below:

ATTENDANCE RECORDS OF MEETINGS

	Number of Meetings Attended/Eligible to attend					
Name of Director	Board	Audit Committee	Remuneration and Assessment Committee	Nomination Committee	Annual General Meeting	Other General Meeting
Dr. Xuefeng YU	8/8	N/A	N/A	2/2	0/1	1/1
Dr. Shou Bai CHAO	8/8	N/A	1/1	N/A	1/1	1/1
Dr. Tao ZHU	8/8	N/A	N/A	N/A	1/1	1/1
Dr. Dongxu QIU	8/8	N/A	N/A	N/A	0/1	1/1
Mr. Qiang XU	8/8	N/A	N/A	N/A	0/1	0/1
Mr. Liang LIN	8/8	N/A	1/1	N/A	1/1	0/1
Ms. Nisa Bernice Wing-Yu LEUNG	8/8	N/A	N/A	2/2	0/1	0/1
Mr. Zhi XIAO *(appointed on June 28, 2019)*	5/5	2/2	N/A	N/A	N/A	1/1
Mr. Shiu Kwan Danny WAI	6/6	3/3	N/A	2/2	0/1	0/1
Ms. Zhu XIN	6/6	3/3	1/1	N/A	0/1	1/1
Mr. Shuifa GUI *(appointed on November 29, 2019)*	2/2	N/A	N/A	N/A	N/A	N/A
Mr. Jianzhong LIU *(appointed on November 29, 2019)*	2/2	N/A	N/A	N/A	N/A	N/A
Dr. Luis BARRETO *(resigned on November 29, 2019)*	4/4	N/A	1/1	2/2	0/1	0/1
Dr. Pierre Armand MORGON *(resigned on November 29, 2019)*	4/4	N/A	1/1	2/2	0/1	0/1
Dr. Zheng YIN *(resigned on June 28, 2019)*	3/3	1/1	N/A	N/A	0/1	N/A

Under code provision E.1.2 of the CG Code, the chairman of the board should attend the annual general meeting. Dr. Yu, the chairman of the Board, had not attended the annual general meeting of the Company held on June 28, 2019, because he travelled to the Democratic Republic of the Congo in response to the outbreak of Ebola virus. He delegated the duty of attending the annual general meeting to the chief operating officer of the Company, who the chairman considered a suitable person for taking up such duty. The chairman will use his best endeavours to attend all future shareholders' meetings of the Company.

INTERNAL CONTROL AND RISK MANAGEMENT

The Board acknowledges its responsibility for the risk management and internal control systems and reviewing their effectiveness. Such systems are designed to manage rather than eliminate the risk of failure to achieve business objectives, and can only provide reasonable and not absolute assurance against material misstatement or loss.

The Board has the overall responsibility for evaluating and determining the nature and extent of the risks it is willing to take in achieving the Company's strategic objectives, and establishing and maintaining appropriate and effective risk management and internal control systems.

The Audit Committee assists the Board in leading the management and overseeing their design, implementation and monitoring of the risk management and internal control systems.

The Company has developed and adopted various risk management procedures and guidelines with defined authority for implementation by key business processes and office functions. All departments conducted internal control assessment regularly to identify risks that potentially impact the business of the Group and various aspects including key operational and financial processes, regulatory compliance and information security.

The management, in coordination with department heads, assessed the likelihood of risk occurrence, provided treatment plans, monitored the risk management progress, and reported to the Audit Committee and the Board on all findings and the effectiveness of the systems. The management has reported to the Board and the Audit Committee on the effectiveness of the risk management and internal control systems for the Reporting Period.

The Board, as supported by the Audit Committee as well as the management, reviewed the risk management and internal control systems, including the financial, operational and compliance controls, for the Reporting Period, and considered that such systems are effective and adequate. The annual review also covered the financial reporting and internal audit function and staff qualifications, experiences and relevant resources.

The Company has developed its disclosure policy which provides a general guide to the Company's Directors, officers, senior management and relevant employees in handling confidential information, monitoring information disclosure and responding to enquiries. Control procedures have been implemented to ensure that unauthorized access and use of inside information are strictly prohibited.

DIRECTORS' RESPONSIBILITIES FOR THE FINANCIAL STATEMENTS

The Directors acknowledge their responsibility for preparing the financial statements of the Company for the year ended December 31, 2019.

The Directors are not aware of any material uncertainties relating to events or conditions that may cast significant doubt upon the Company's ability to continue as a going concern.

The statement of the independent auditor of the Company about their reporting responsibilities on the financial statements is set out in the Independent Auditor's Report on pages 79 to 83 of this annual report.

AUDITOR'S REMUNERATION

During the Reporting Period, the remuneration paid or payable to the Company's auditors, in respect of their audit and non-audit services was as follows:

	RMB'000
Audit services	6,250
Other assurance services	100
Non-audit services	119
Total	6,469

COMPANY SECRETARY

The Company has appointed, externally, Mr. Ming King CHIU as the joint company secretary of the Company. Mr. Chiu's primary contact with the Company is Dr. Yu, the executive Director and the Chairman of the Board. Mr. Jin CUI, another joint company secretary of the Company, who is also the deputy director of our securities affairs department of the Company.

During the year ended December 31, 2019, both Mr. Chiu and Mr. Cui undertook not less than 15 hours of relevant professional training in compliance with Rule 3.29 of the Listing Rules.

SHAREHOLDERS' RIGHTS

Rights to convene Extraordinary General Meeting

As one of the measures to safeguard Shareholders' interests and rights, the Shareholders are encouraged to participate at the general meetings of the Company and to vote thereat. An annual general meeting of the Company shall be held each year and at the place as may be determined by the Board. Each general meeting, other than an annual general meeting, shall be called an extraordinary general meeting.

The annual general meeting of the Company will provide a forum for the Board and the Shareholders to communicate. The Board will answer questions raised by Shareholders at the annual general meeting.

Pursuant to Article 106 of the Articles of Association, extraordinary general meetings shall be convened on the requisition of two or more Shareholders holding, at the date of written requisition, 10% or more of the paid up capital of the Company having the right of voting at general meetings. Such requisition shall be made in writing to the Board for the purpose of requiring an extraordinary general meeting to be called by the Board for the transaction of any business specified in such requisition. Such meeting shall be held as soon as possible. If the Board fails to give notice of meeting within 30 days of the receipt of the aforesaid written requisitions, the requisitionist(s) himself (themselves) may do so in the same manner, and all reasonable expenses incurred in convening and holding a meeting by the requisitionist(s) as a result of the failure of the Board shall be borne by the Company and the same shall be deducted from outstanding payments due to the directors who are in fault of their duties.

Procedures for a Shareholder of the Company to propose a person for election as a Director

Subject to the Articles of Association and the Company Law of the PRC (中華人民共和國公司法) (as amended from time to time), the Directors shall be elected by the general meeting.

Article 121 of the Articles of Association provides that written notice concerning proposed nomination of a director candidate and indication of the candidate's intention to accept the nomination shall be sent to the Company seven (7) days before the shareholders' general meeting is convened. When calculating the time limit of the notice, the date of the meeting and the day on which the notice is given shall be excluded.

Right to Put Enquires to the Board

For putting forward any enquiries to the Board of the Company, shareholders may send written enquiries to the Company by mail to Headquarters: 401-420, 4th Floor, Biomedical Park, 185 South Avenue, TEDA West District, Tianjin, PRC, or; Hong Kong: Room 1901, 19/F, Lee Garden One, 33 Hysan Avenue, Causeway Bay Hong Kong or by email to ir@cansinotech.com.

COMMUNICATION WITH SHAREHOLDERS

The Company has established a range of communication channels between itself and its Shareholders, investors and other stakeholders. These include (i) the publication of interim and annual reports and/or dispatching circulars, notices, and other announcements; (ii) the annual general meeting or extraordinary general meeting providing a forum for Shareholders to raise comments and exchanging views with the Board; (iii) updated and key information of the Group available on the Company's website and the Stock Exchange's website; (iv) the Company's website offering communication channel between the Company and its stakeholders; and (v) the Company's H share registrar in Hong Kong serving the Shareholders in respect of all share registration matters.

Change in Constitutional Documents

The Articles of Association of the Company took effective on the Listing Date and amended on April 15, 2019 and November 29, 2019, respectively. Save as the above mentioned, there were no significant changes in the constitutional documents of the Company for the year ended December 31, 2019.

Policies relating to Shareholders

The Company has in place a shareholders' communication policy to ensure that shareholders' views and concerns are appropriately addressed. The policy is regularly reviewed to ensure its effectiveness.

The Company has adopted a policy on payment of dividends pursuant to code provision E.1.5 of the CG Code, such details has also set out in its Articles of Association and summarized as follows:

The Company may distribute dividends in one of the following forms (or in both forms):

(1) cash;

(2) shares.

As for cash dividends and other payments to domestic shareholders, the Company shall pay in RMB, and such payments to holders of foreign shares will be denominated and declared in Renminbi and paid in foreign currency. Foreign currency required by the Company to pay cash dividends and other monies to holders of foreign shares shall be obtained in accordance with the relevant provisions on foreign exchange administration of the state.

Subject to the applicable law and the Articles of Association, any future determination to pay dividends will be based on a number of factors, including the Company's future operations, capital requirements, general financial condition and other factors that the Board may deem relevant.

I. ABOUT THE REPORT

(I) Basis of Preparation

This report aims to reflect the performance of the CanSino Biologics Inc. (hereinafter referred to as "CanSinoBIO", "the Company", "Company" or "We") on Environmental, Social and Governance ("ESG") for 2019 on an objective and fair basis. It is recommended to read the part on governance in conjunction with the Corporate Governance Report contained in this annual report. The Report is prepared in compliance with the Environmental, Social and Governance Reporting Guide (the "ESG Reporting Guide") set out in Appendix 27 to the Listing Rules.

The Report takes into full consideration the main areas of concern for stakeholders and the Company's business features. It aims to help stakeholders and other readers understand the Company's ESG policies, initiatives and performance, and to enhance communication and understanding between various stakeholders and the Company.

The Report abides by the "comply or explain" provisions set out in the ESG Reporting Guide.

(II) Scope of Report

Unless otherwise specified, the Report covers the period from 1 January 2019 to 31 December 2019 ("the reporting period"). The scope disclosed in the Report is the major production and operation location of the Company, namely the office building and manufacturing facility located in Tianjin, China.

(III) Source of Information

The information and cases in the Report was extracted mainly from the Company's statistical reports, relevant documents and internal communication documents. The Company undertakes that there is no false record or misleading statement in this report, and assumes liabilities for the authenticity, accuracy and completeness of its contents.

II. ESG MANAGEMENT

(I) ESG Management Concept

Committing to our original aspiration of bringing "health, hope and promises" to the world, CanSinoBIO adheres to the mission of "develop, manufacture and commercialize high quality, innovative and affordable vaccines". We specialize in the development, manufacturing and commercialization of high-quality vaccines for human use. Taking providing solutions for the prevention of communicable diseases and infectious diseases around the world as our responsibility, we are committed to contributing to the cause of global public health.

We understand that effective ESG management is critical to meeting stakeholders' expectations and improving the performance of the Company. The Company's Board of Directors is responsible for reviewing its ESG strategies and reporting, and overseeing ESG work and important ESG-related issues to ensure that the Company's core values are reflected in these strategies and the ESG-related risk management and internal control systems are operated appropriately and effectively.

During the reporting period, based on our own business features, we continued to optimize the organizational system and the management system for corporate social responsibility and environmental protection issues, and further clarified the responsibilities of each department, which enhanced the Company's overall ESG management. We actively improved our ESG performance through continuous inspection and system optimization. We vigorously promoted a culture of environmental protection and fulfilling corporate social responsibility among all employees and intensified the integration of ESG concepts into the Company's operations, thus facilitated the sustainable development of the Company.

(II) Communication with Stakeholders and Identification of Material Aspects

We believe that understanding about the demands of stakeholders can help the Company determine its long-term development direction and move towards a more sustainable future. The Company has built various channels for proactive and honest communications with stakeholders.

The main stakeholders, their concerns and communication channels we have identified are listed in the table below:

Main stakeholders	Key ESG concerns	Major communication channels
Governments and regulators	Employment, supply chain management, product responsibility, anti-corruption and community investment	Policy consultations, incident reporting, information disclosure and participation in government agencies' meetings
Shareholders and investors	Employment, product responsibility and anti-corruption	Shareholders' meetings, regular announcements and official websites
Employees	Employment, health and safety, development and training and labor standards	Quarterly meetings, employee activities, face to face interviews, opinion collection boxes, and mid-year/ year-end summary conference
Customers and users	Product responsibility and anti-corruption	Information disclosure, official public accounts and service hotline
Suppliers	Supply chain management and anti-corruption	Supplier inspection and supplier meetings
Media and NGOs (Non-Governmental Organizations)	Emissions, use of resources, environmental and natural resources, employment, supply chain management and product responsibility	Social media, official websites, press conferences and exchanges
Community	Emissions, use of resources, environmental and natural resources, and community investment	Community interaction, public welfare programs, poverty alleviation activities and social media

During the reporting period, based on various communication channels and in conjunction with the Company's operations, we identified "product responsibility" and "employment" as the most material aspects. The other important concerns included "environmental management", "development and training", "health and safety" and "supply chain management" while the other relevant concerns being "labor standards", "anti-corruption" and "community investment".

(III) Social Recognitions and Honors

The Company has obtained various honors and awards since its establishment. The major recognitions and awards attained during the reporting period are listed in the table below:

Awards
New High-tech Enterprise Certificate
Tianjin Gazelle Enterprise Excellence Innovation Award
Technology Leading Enterprise of Tianjin
Technology Innovative Pharmaceutical Enterprise with the Most Growth Potential in China
Pharmaceutical industry leader at 70th Anniversary of P.R.China
China's Top 100 Innovative Pharmaceutical Enterprises 2019
Top 10 Asia Pacific's Most Innovative Pharmaceutical Enterprises by Clarivate Analytics

III. ENVIRONMENT

(I) Environment management

We are in compliance with relevant environmental laws and regulations including the Environmental Protection Law of the People's Republic of China《中華人民共和國環境保護法》, the Law of the People's Republic of China on the Prevention and Control of Environmental Noise Pollution《中華人民共和國環境噪聲污染防治法》, the Law of the People's Republic of China on Prevention and Control of Water Pollution《中華人民共和國水污染防治法》, the Law of the People's Republic of China on Solid Waste Pollution Prevention《中華人民共和國固體廢物污染環境防治法》, and the Law of the People's Republic of China on the Prevention and Control of Air Pollution《中華人民共和國大氣污染防治法》in strictly fulfilling our environmental responsibilities.

Based on the Company's operation and production characteristics, we have established an environmental management system, including the usage and management of chemicals, the treatment and management of wastes and the treatment of laboratory wastes and waste liquid. We have a specified Environmental, Health and Safety (EHS) Department, which leads the Company's overall environmental management and system implementation and responsibilities in enhancing employees' awareness of environmental protection.

Our impact on the environment and natural resources is mainly from resource consumption and emissions from offices and production. We take appropriate measures to regulate the use of resources and the treatment processes of emissions, promote energy conservation and emission reduction, apply technical re-engineering, and focus on environmental performance in operation and production processes, seeking to achieve environment protection.

During the reporting period, we had no reported violation against any Chinese environmental law or regulation.

(II) Use of Resources

The resources used mainly include power, natural gas and running water for our operation and production. In order to fully utilize the resources and mitigate impacts on the natural environment, we promote lean management, advocate the concept of green office, optimize technical skills and improve the efficiency of the usage of the resource.

In terms of the use of power, we are replacing incandescent lights with LED luminaries and the temperature of air-conditioners in office is set at 26 degrees Celsius in summer. We optimize the use of pure steam generators and air-conditioning equipment in the workshop according to production needs to improve energy efficiency.

In terms of the use of natural gas, we adjust the power of gas boilers during the idle period, reform the main network of outdoor steam to reduce heat loss and to improve the usage efficiency of gas.

In terms of the use of water resources, we optimized the operation parameters of water purification machine to reduce water loss. We enhanced employee's awareness of water conservation and advocate the recycling of resources, and strengthened the daily maintenance of water facilities and pipelines so as to prevent any leakage.

Key Performance Indicators for Use of Resources[1]

Indicator	2019KPI
Total energy consumption[2] (MWh)	38,144.88
Direct energy consumption, including:	
Natural gas (MWh)	23,574.88
Indirect energy consumption, including:	
Electricity (MWh)	14,570.00
Energy consumption per floor area (MWh per square meter)	7.48
Total water consumption[3] (tonnes)	229,196.00
Water consumption per floor area (tonnes per square meter)	44.94

Notes:

(1) The increase of use of resources during the reporting period is due to the increase in the number of employees, the scale of process verification and equipment verification compared with the previous year. During the reporting period, we have not yet commercialized any products. Packaging material is not applicable for us.

(2) Total energy consumption is calculated based on the total power and natural gas consumption and the conversion factors in the National Standards of People's Republic of China General Principles for Calculation of the Comprehensive Energy Consumption (GB/T 2589-2008).

(3) Our water resources come from the municipal water supply, and we do not encounter problem in sourcing suitable water resources for our operations.

(III) Emissions

The main emissions of the Company include Greenhouse Gas ("GHG") and NOx. GHG mainly comes from the use of purchased power and the burning of natural gas in office and production process. NOx mainly comes from the burning of natural gas at production site. We reduce the emissions by improving the usage efficiency of natural gas.

Wastewater of the Company mainly includes industrial and domestic wastewater, which is treated by the wastewater treatment plant affiliated to the production plants. It is discharged into the municipal pipe network after meeting the local discharge standards. We have installed wastewater monitors to monitor the key indicators in wastewater and to ensure that discharge concentration of the key indicators meet national and regional discharge standards.

Non-hazardous wastes mainly come from domestic wastes relating to office activities. We have entered into an agreement with the environmental protection department of the development zone for collecting our domestic wastes and other non-hazardous wastes for harmless treatment. In addition, we advocate the reuse of office paper to reduce non-hazardous wastes.

Hazardous wastes mainly include non-organic and organic waste liquid, heavy metal liquid, empty reagent bottles, waste drugs, carcasses, animal's beddings, contaminated wastes in labs, engine oil, contaminated wastes by engine oil and ion exchange resin. We have developed a system for treating hazardous wastes and have a special temporary warehouse in adjacent to the production plants for central collection, classification, pre-treatment and storage of the wastes. We have entered into an agreement on the treatment of the hazardous wastes with agents who are qualified for collection, storage and treatment of hazardous wastes. The agents will process all the hazardous wastes on a regular basis. During the pre-treatment stage, we dismantle paper packaging materials of the waste drugs to reduce hazardous wastes.

Key Performance Indicators for Emissions[1]

Indicator	2019KPI
Total GHG emissions[2] (Scope 1 and 2) (tCO_{2e})	14,996.70
Direct GHG emissions (Scope 1), including:	
Natural gas (tCO_{2e})	4,609.75
Indirect GHG emissions (Scope 2), including:	
Power (tCO_{2e})	10,386.95
GHG emissions per floor area (tCO2e per square meter)	2.94
Total oxynitride emissions (tonnes)	1.44
Total hazardous waste (tonnes)	44.46
Total non-hazardous waste[3] (tonnes)	33.25
Total hazardous waste per floor area (tonnes per square meter)	0.0087
Total non-hazardous waste per floor area (tonnes per square meter)	0.0065
Wastewater (tonnes)	164,845.60
Chemical oxygen demand (tonnes)	5.91
Ammonia nitrogen[4] (tonnes)	0.75

Notes:

(1) The increase of emission during the reporting period is due to the increase in the number of employees, the scale of process verification and equipment verification compared with the previous year.

(2) GHG inventories include carbon dioxide, methane and nitrous oxide, mainly produced from the purchased power and fuels. GHG emissions are presented in carbon dioxide equivalents and are calculated based on the 2017 Baseline Emission Factors for Regional Power Grids in China for CDM and CCER projects issued by the Ministry of Ecology and Environment and the 2006 IPCC Guidelines for National Greenhouse Gas Inventories issued by the Intergovernmental Panel on Climate Change (IPCC).

(3) The non-hazardous wastes mainly come from the domestic wastes in office activities and such wastes are treated by the environmental protection department of the development zone. As the non-hazardous wastes cannot be measured separately, we estimate the wastes in accordance with the First National Census on Pollution Sources – Manual for Waste Generation and Discharge Coefficients in Urban Households.

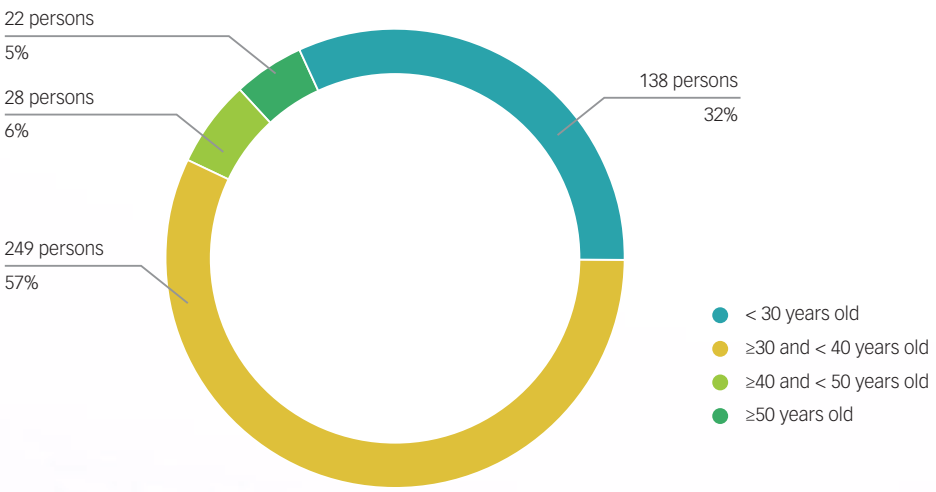
(4) We have further improved the statistical reporting data on ammonia nitrogen in the reporting period.

IV. EMPLOYMENT AND LABOR STANDARDS

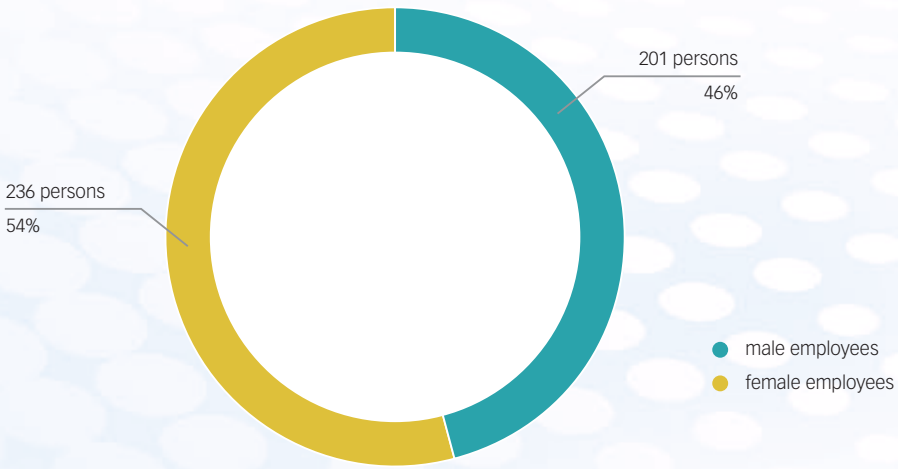
We consider that equal development to the growth of our employee is equally important to the success of the Company. We strive to create a comfortable and harmonious workplace and vigorously promote employee's development by safeguarding their rights and interests, caring for their health and safety and conducting employee trainings.

As of the end of the reporting period, we have 429 employees and 8 consultants in service.

We have a diverse and energetic team:



TOTAL WORKFORCE BY AGE



TOTAL WORKFORCE BY GENDER

(I) Employment and Labor Standards

In strict accordance with relevant laws and regulations such as the Labor Law of the People's Republic of China (《中華人民共和國勞動法》), the Labor Contract Law of the People's Republic of China (《中華人民共和國勞動合同法》) the Provisions on Prohibition of Child Labor (《禁止使用童工規定》), the Regulation on Work-Related Injury Insurance (《工傷保險條例》) and the Special Rules on the Labor Protection of Female Employees (《女職工勞動保護特別規定》), we strictly forbid the employment of child labor and incidents of forced labor. During the reporting period, the Company did not have cases of child labor and forced labor.

We have developed an internal management system to manage such affairs as recruitment, dismissal, remuneration, welfare, performance and promotion (see below).

1. Recruitment and Dismissal

We have developed a recruitment management system to standardize the recruitment process and prepare recruitment plans based on the Company's annual business plan and development strategy. We recruit talent who meet the Company's development demands through on-line social recruitment, campus recruitment, special job fairs, internal referral and internal self-recommendation. We are committed to creating a diverse and equal working environment and avoiding sexual, ethnic and religious or any other discrimination in the course of recruitment.

We sign standard labor/service contract with all employees on a voluntary basis and both parties are fully aware of their rights and obligations. We are in strict accordance with relevant laws and regulations and have developed a standard process for handling employee's resignation. Instructions for the termination of employment are detailed in the labor contract and the Employee Handbook.

- Expand the scope of campus recruitment to attract talents

  In 2019 campus recruitment, we expanded the scope of recruitment activities to multiple provinces across the country to recruit talent from universities. Taking the autumn recruitment in 2019 as an example, we carried out campus recruitment activities at 17 colleges and universities in 7 cities over a 2 months period, and conducted in-depth communication with applicants through mutual selection meeting, lectures and special job fairs. At the same time, we also demonstrated the Company's strengths to college teachers and students through campus promotion activities such as corporate open days, to improve our influence in colleges and universities.

2. Remuneration and Welfare

We have developed a remuneration and welfare management system that provides employees with competitive remuneration and pay social and housing fund for employees in strict accordance with relevant laws. We have provided a diverse welfare system, including stock incentives, year-end performance bonus, meals and shuttles, festival gifts for important festivals, heatstroke prevention subsidy, winter heating allowance, "monthly star" commendation and paid annual leave and benefits that are above the legal standard. In addition, we provide health and accident insurance for interns who are not entitled to statutory work-related injury insurance based on practical conditions.

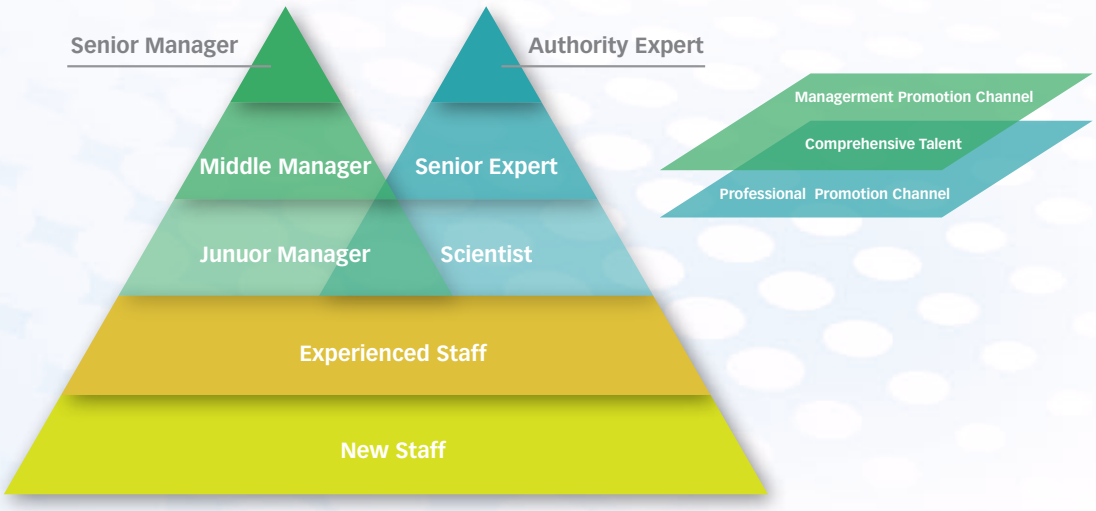
We are committed to protecting the rights and interests of female employees. In order to provide healthy, quiet and comfortable working conditions for nursing employees, we have built a special bay care room, in which the interior is designed as a separate compartment with sofas and shades.

- CanSinoBIO monthly star

  Since June 2019, we have launched the "CanSinoBIO Monthly Star" project to praise and reward employees for outstanding performance in their daily work, promote enthusiasm in employees to participate in their work, fully exploit potentialities, help employees to develop good work habits and promote a positive corporate culture. The "CanSinoBIO Monthly Star" project received positive response from employees, and 224 nominations were made during the reporting period.

3. Assessment and Promotion

We provide a dual development channel including management development and professional development for employees, providing a fair, open and competitive processes. We encourage them to select suitable pathways to achieve personal and corporate development based on their own abilities and interests. We have developed a performance management system, and conduct comprehensive annual performance assessment for all employees to assess their working results and capabilities in an objective and impartial manner. Through such measures, we help employees summarize their success and failures in work as well as determine their future goals and areas for improvement.



Career development channel

4. Communication

We have established a variety of internal communication channels to strengthen connections between management and employees and among employees. At the company level, we hold quarterly, mid-year and year-end summary meetings basis timely to communicate Company trends with employees in a timely manner. We set up complaint boxes and mailboxes to receive employee's opinions and suggestions. At the departmental level, we provide open communication channels for employees including regular department meetings, performance communications, one-to-one communications, and new employee's adaptation plans.

5. Work-Life Balance

We promote efficient work and encourage employees to fulfil their work duties within working hours. We have developed an attendance management system to manage employee's working hours, specify the principles of overtime compensation, to assure employee's rest hours.

We focus on combining work and leisure by organizing regular employee activities such as, parent-child day, sports day, birthday party, Christmas party, family day, etc., to help them relieve work pressure, enrich spare time, and enhance team cohesiveness and sense of belonging. During the reporting period, we have organized a series of theme activities:

- Family day

On October 19, 2019, we organized a family day event in Tianjin Happy Valley Theme Park with the theme of "Family Participation, Unlimited Fun". More than 600 employees and their family members participated in the event. During the event, the Company gave parent-child gift packages to the participating families, and organized wonderful programs and games. Taking this opportunity, the Company hoped that each employee could balance work and life and enjoy the happiness and warmth brought by their small families while enjoying the sense of work accomplishment and satisfaction brought by CanSinoBIO.

- Christmas party

Before the Christmas, the "Christmas Party" event with the imprint of CanSinoBIO culture came on schedule. The Company's management "dressed up" as Santa Claus, provided festival cakes and sent wishes to employees. We also prepared a wide variety of dishes so that employees can feel the festive atmosphere after their busy work. The event enhanced the communication between colleagues and team cohesion.

(II) Health and safety

We strive to provide a healthy and safe working environment for employees, in strict accordance with relevant laws and regulations including the Labor Law of the People's Republic of China《中華人民共和國勞動法》, the Fire Control Law of the People's Republic of China《中華人民共和國消防法》, and the Regulation on Work-Related Injury Insurance《工傷保險條例》and industrial norms.

We have developed a systematic safety management system, including potential risk identification and management, production management, fire control, education and training, emergency response and accident management, have designated EHS Department to manage and control risks relating to occupational health and safety and taken effective measures to ensure the orderly operation of the system. We have established standard operating procedures at all critical safety locations (such as labs, switching rooms, and warehouses) and job positions (such as position in early R&D, fermentation, and cell culture), and for all critical safety factors (such as gas cylinders, chemicals and wastes and waste liquid in labs). All equipment and facilities need to be legally completed relevant registration, and the operators have obtained relevant operating qualifications.

We have taken various measures to mitigate safety risks: (i) all fire-fighting devices are configured in accordance with the latest national fire codes; (ii) assign special personnel and install CCTV for uninterrupted monitoring and management, for the purposes of quick response and treatment in the case of any emergency; (iii) equip each building with emergency medical kits and escape route maps; (iv) conduct safety trainings and organize emergency drills for all employees on an annual basis to help them acquire safe production skills and improve their safety awareness and abilities to respond to emergencies; and (v) equip with professional anti-terrorism equipment, carry out counter-terrorism training and emergency drills for security vendors, comprehensively improve their anti-terrorism capabilities and emergency response capabilities to social emergencies.

Considering the nature of our business, the Biosafety Level of the Company is Level 2. We have developed and implemented relevant guidelines on work safety in accordance with relevant Chinese laws and regulations concerning storage, management, disposal and the use of viruses and bacteria, such as the Regulation on the Bio-safety Management of Pathogenic Microbe Labs《病原微生物實驗室生物安全管理條例》. These guidelines include those relating to the recording and inspection of batches of viruses and bacteria, a multi-departmental approval process to obtain viruses and bacteria from our inventory, as well as the safe disposal of viruses and bacteria. We possess qualified bio-labs, workshops and production plants in safety level P2 and conduct safety inspections on a regular basis. All operations concerning bio-safety in daily business are conducted in qualified labs with bio-safety cabinets. The bio-active wastes and solutions produced in the tests and production are inactivated by steam at high temperatures and are handed over to the EHS department for disposal (in compliance with relevant regulations) as hazardous wastes. Employees in equipment operation and animal research are all equipped with relevant qualifications and are required to wear appropriate safety equipment during operation. Employees exposed to viable bacteria and viruses are also required to receive appropriate vaccines to ensure their safety.

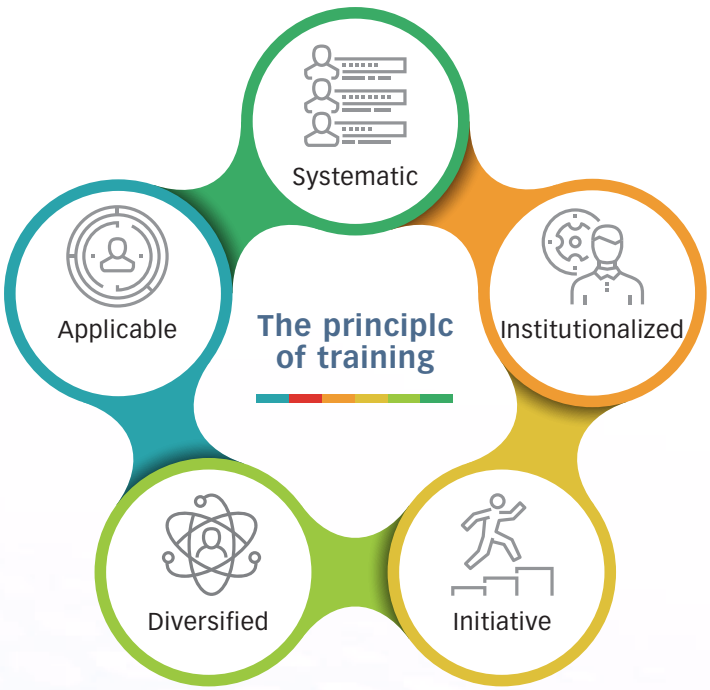
In addition, we provide pre-employment physical examinations and regular in-service physical examinations for employees to help them learn about their physical health.

During the reporting period, the Company did not have reported cases of work-related injuries or fatalities.

(III) Training and Development

We encourage our employees to improve their comprehensive capabilities and achieve self-worth in their development. To this end, we are committed to creating an atmosphere of "continuous learning" and "continuous sharing". We provide employees with professional development resources and comprehensive training courses with an aim to promote diversified development.

We have a training management system and have established a training system centered on the principles of "systematic, institutionalized, initiative, diversified, and applicable."



- Systematic: Employee training is a full-featured, all-encompassing systematic work throughout employees' career.
- Institutionalized: Establish and improve the training management system; routinize and institutionalize training to ensure effective implementation.
- Initiative: Emphasize employee engagement and interaction; leverage employee initiative.
- Diversified: Employee training take into account the level and type of the trainee, providing diversified training content and form.
- Applicable: Take practical condition into consideration, closely combine training with different job characteristics based on the development of the enterprise and the circumstances of employees.

Through various channels of training including internal training, expatriate training and online correspondence training, we strive to meet the training needs of our employees during their onboarding phase and employment, encouraged self-advancement and self-training, and continuously upskill our employees at all levels.

We help new employees quickly fit into the Company by offering induction training and on-the-job training. Such training courses include introduction of company profiles, company systems, product knowledge, safety awareness, quality awareness, IT operations, department training, and job-specific training.

We believe that conducting job duties the best learning opportunities for employees. We provide a variety of training courses tailored to different positions to enhance employees' professionalism and professional competence, which include business knowledge build-up, GMP awareness enhancement, office skills training, and comprehensive quality improvement. We strive to enhance future talent's management cap ability. Through the implementation of the "Outstanding talent plan", we have formulated comprehensive learning and development programs to help middle management become more excellent.

During the reporting period, the Company's training programs have covered all employees. The average training time per employee was 23 hours.

Ability training of middle management

Quality training of staff

V. SUPPLY CHAIN MANAGEMENT

During the reporting period, our major suppliers included equipment suppliers, raw material suppliers and service providers. Adhering to the procurement principle of "fair, just and open", we have implemented standardized supplier management, and maintained stable business relationship with them.

(I) Supplier selection and access

We have established operating procedures such as "Procurement Management Regulations" and "Inquiry and Bidding Processes" to regulate the bidding and procurement processes. Each quarter, the purchaser summarizes the procurement requirements of each department and formulates a procurement plan. The plan shall be reviewed by the plan maker, the head of the Procurement Department, the director of the Supply Chain Department, the head of the Finance Department, the Chief Operating Officer (COO) and the Chief Executive Officer (CEO).

Our selection of suppliers is mainly made through tendering, inquiry and single-source procurement. We promoted "sunshine procurement". Normally we select or invite 3 or more potential suppliers with relevant capabilities for comparison or bidding in the sourcing stage, and select the most qualified suitable supplier. All bulk purchases are done through a tender process. Any single-source purchase application will be reviewed by the department head, the head of the Procurement Department, the director of the Supply Chain Department, the COO and the CEO depending on the threshold.

During the supplier acceptance process, we investigate and evaluate suppliers, and strictly review their background, relevant qualifications and other legal compliance information to ensure that they have relevant capabilities and sound credit records.

(II) Supplier management

We have maintained a list of qualified suppliers and established "Supplier Management Procedures" for managing and evaluating them on a regular basis. In the first quarter of each year, we conduct rating on suppliers' basic strength, product quality, cooperation performance and after-sales service. According to the scoring results, different cooperation modes are adopted, and unqualified suppliers will be immediately removed from the list.

We focus on ESG risk management of our suppliers. For raw material suppliers, we conducted on-site audits to assess their management in product and production safety, health and environmental protection, as well as on-site control of production materials. For construction projects, we signed safe construction management agreements, civilized construction management agreements and finished products protection agreements with suppliers to specify the safety and environmental responsibilities and obligations of both parties.

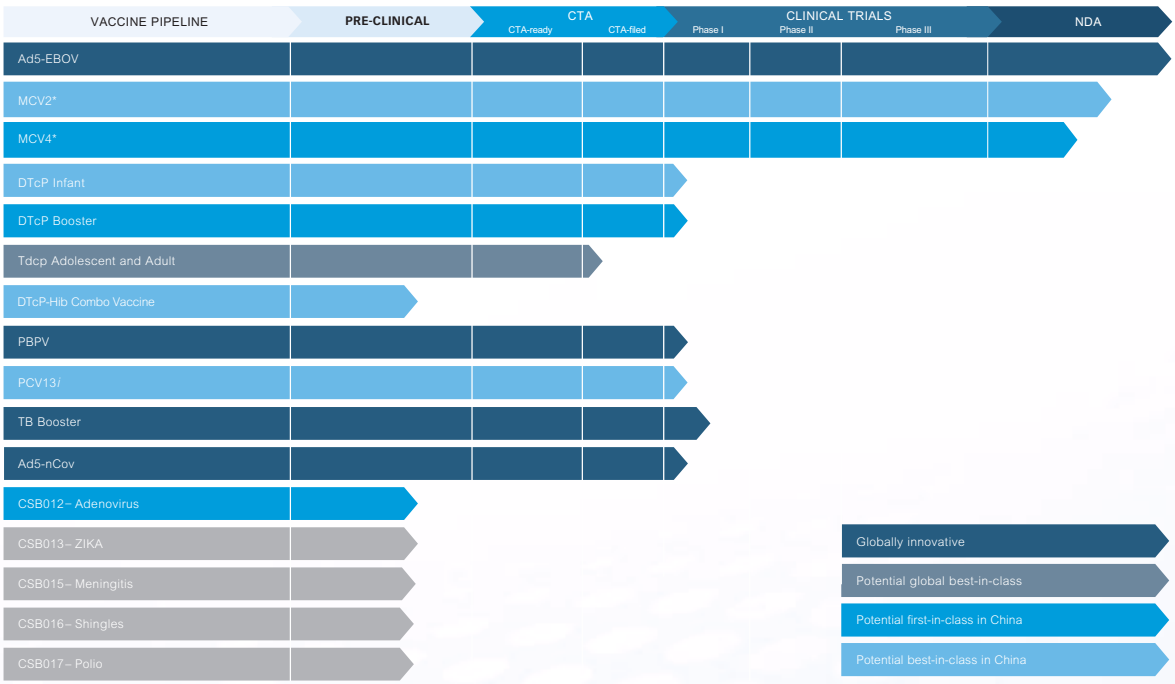
(III) Clinical trial partner management

We choose third-party pharmaceutical R&D contract outsourcing service organizations (CROs), which have rich experience and good reputation in the field of vaccine clinical research and have good cooperative relations with research institutions, as partners. We closely monitor and manage the cooperative CROs, including but not limited to: (i) requiring them to strictly abide by the Good Clinical Practice for Drug Trials (GCP)《藥物臨床試驗質量管理規範》, Guidelines for Quality Control of Vaccine Clinical Trials (Trial) 《疫苗臨床試驗質量管理指導原則(試行)》 and other related regulations; (ii) requiring them to carry out work in strict accordance with the requirements of the Clinical Trial Program《臨床試驗方案》; (iii) conducting audits; and (iv) conducting timely and strict review on the work documents provided.

VI. PRODUCT RESPONSIBILITY

Our vaccine pipeline can be summarized into three categories: (i) globally innovative vaccines (such as Ad5-EBOV, our TB Booster candidate, our PBPV candidate and our Ad5-nCoV candidate); (ii) potential first-in-class vaccines in China (such as our DTcP vaccine candidates and MCV4 candidate); and (iii) potential best-in-class vaccines in China developed to compete with the imported products in the PRC market (such as our PCV13i candidate).

As at the date of this report, we are developing 16 vaccine candidates for 13 disease areas. In addition to our three near-commercial assets covering meningococcal diseases and Ebola virus disease, we have seven vaccine candidates in clinical trial stage or CTA stage. We also have six pre-clinical vaccine candidates, including one combination vaccine candidate. The following table summarizes our vaccine product line:



(I) Quality Control

The production of our vaccine products for commercial sales complies with relevant laws and regulations including Drug Administration Law of the People's Republic of China《中華人民共和國藥品管理法》, Regulations for the Implementation of the Drug Administration Law of the People's Republic of China《中華人民共和國藥品管理法實施條例》, Vaccine Administration Law of the People's Republic of China《中華人民共和國疫苗管理法》, Measures for Supervision and Administration of Drug Manufacturing《藥品生產監督管理辦法》, Measures for the Administration of Lot Release of Biological Products《生物製品批簽發管理辦法》,Regulation of Vaccine Storage and Transportation《疫苗儲存和運輸管理規範》, Regulation on the Administration of Circulation and Vaccination of Vaccines《疫苗流通和預防接種管理條例》, Regulation on the Management of On-site Verification for Drug Registration《藥品註冊現場核查管理規定》, Administrative Measures for Drug Recalls《藥品召回管理辦法》, Principles of Risk Assessment for On-site Inspection of Pharmaceutical Manufacturers《藥品生產企業現場檢查風險評定原則》, and GMP《藥品生產質量管理規範》and its appendices.

To ensure compliance with GMP, pharmacopoeia and other applicable laws and regulations, the Company has established a comprehensive quality management system that meets international standards and covers all aspects from vaccine development to production. We continuously improve and regularly review the quality management system to maintain the suitability, adequacy and effectiveness of the system. Major quality issues are promptly documented and reported to senior management for review. We also conduct formal risk assessments and provide explanation in accordance with the standards and procedures under our quality management system and policies.

We have a Quality Center and designate the person in charge responsible for the Company's overall quality management. The Quality Center consists of four departments: Quality Assurance Department, Quality Control Department, Verification Department and Quality Compliance Department. The Quality Assurance Department is responsible for the establishment and maintenance of quality management procedures. The Quality Control Department is responsible for sampling, inspecting and verifying the raw materials, packaging materials, intermediate products and finished products according to the prescribed methods, and is responsible for confirming and verifying the inspection methods to ensure that the composition, content, purity and other elements of all materials and products conform to established quality standards. The Verification Department is responsible for establishing and maintaining the confirmation and verification system for plant facilities and equipment as well as the verification system for production process in their implementation. The Quality Compliance Department is responsible for follow-up and implementation of relevant laws and regulations and the communication with the state on product approval and releases.

Our R&D facilities are designed according to industry standards to ensure R&D and production quality. Our GMP pilot plants in our R&D center have passed EMA's QP inspection. In addition, The Company has basically built a commercial-scale production plant, whose design, construction and operation meet international standards.

(II) Product Safety

We value product safety and comply with relevant laws and regulations such as Administrative Measures for the Reporting and Monitoring of Adverse Drug Reactions《藥品不良反應報告和監測管理辦法》. We have established a drug alert management system. We have established a special division with full-time staff and set up the "Administrative Procedures for Reporting and Monitoring of Adverse Drug Reactions" to standardize the Company's management procedures of the reporting and monitoring of adverse drug reactions so that the information on adverse drug reactions can be objectively analyzed, feedback and evaluated. The system can effectively control drug risks and ensure public drug safety.

(III) Products Complaints and Recall Procedures

As of the end of the reporting period, we have not commercialized any products. However, we have established a product complaint and response process and a recall procedure in accordance with relevant regulations including the Administrative Measures for Drug Recalls《藥品召回管理辦法》and GMP.

We have established "Complaint Management Procedures for Products in the Market", to build a product complaint handling process in order to ensure that customer complaints can be handled in a timely and effective manner. We find out the root cause of product defects through investigation and analysis, formulate corresponding corrective and preventive measures, and continuously improve product quality to meet public needs.

During the reporting period, we had no reported customer complaint nor did we have any product recall.

(IV) Research and Development

As a leading vaccine development company, we have built up strong R&D capabilities and are committed to developing, manufacturing and commercializing high quality, innovative and affordable vaccines. We have developed four platform technologies covering key advanced technologies in vaccine development, including: (i) Proteoglycan protein conjugation technology; (ii) Protein structure design and recombinant technology; (iii) Adenovirus-based viral vector vaccine technology; and (iv) Formulation technology. These platform technologies lay the foundation for the research and development of vaccines. Moreover, our platform technologies complement each other and produce a synergistic effect for our research and development efforts, enabling us to develop vaccines in a cost-effective manner and build a comprehensive portfolio of vaccine products.

We have established "Management Regulations for the R&D Project Establishment", which regulates our R&D projects from all aspects including establishment and review, cost budget, R&D and clinical cooperation agreement signing and management process, testing and acceptance, product development and protection of R&D projects.

The Company's R&D is mainly self driven. We have an in-house R&D team that participates in all stages of product development, including early POC (Proof of Concept) research, process development, quality standard determination, pharmacodynamic research and safety evaluation, clinical trials, NDA (New drug marketing authorization application) materials submission and new drug approval. In addition, the Company commissions certain R&D testing activities to independent third-party cooperation agencies. These testing activities mainly include safety evaluation, compatibility studies for vaccine and packaging materials, and antigen structure testing.

As of the end of the reporting period, our internal R&D team consisted of 136 employees, of whom 68.4% hold post graduate certificate or above and 97.8% hold bachelor degree or above, with a major in biology, medicine or pharmacology. During the reporting period, our total R&D expenses reached approximately RMB152 million.

In 2019, we signed a collaboration agreement on the R&D of "bacterial ghosts" (BGs) vaccine with the Austrian biotechnology company BRID-C, one of the global leaders in BGs technology to promote technological exchanges. The parties shall collaborate with one another to explore BGs as standalone adjuvant to the Company's vaccines, and bacterial antigen expressing directly in E. coli carrier BGs to produce new vaccines.

(V) Intellectual Property Rights

We understand the importance of intellectual property rights (IPRs) to our business and are committed to IPR development and protection. We actively seek patent protection for our vaccines and vaccine candidates and filed additional patent applications, when appropriate, to cover certain antigens, strains, formulation and production process in accordance with IPR-related laws in China and in other jurisdictions including the Trademark Law of the People's Republic of China《中華人民共和國商標法》and the Patent Law of the People's Republic of China《中華人民共和國專利法》.

We have a special IPR committee to manage and review patent development, patent applications, patent awards and publication of scientific papers. At the same time, the Company signed cooperation agreements with a number of professional IPR and trademark offices. We have professional IPR lawyers/agents to provide professional advices on the Company's intellectual property and handle IPR applications on our behalf.

We manage the IPR risks of throughout the process of our business. We sign the "Intellectual Property and Non-Disclosure Agreement" and the "Confidentiality and Non-Competition Restriction Agreement" with our employees, to provide stipulations regarding intellectual property rights, trade secret protection, confidentiality obligations and non-competition restrictions. When we enter into cooperation with third-party companies on technology or other areas, we stipulate detailed IPR clauses, and clarify the ownership of IPRs on the cooperation agreement, and we also sign confidentiality agreement with the companies in the early stage of cooperation to protect the Company's IPRs from infringement.

We raise our employees' awareness against IPR risks through training and publicity. We respect and encourage originality, and have internal systems such as the "Procedures for the Administration of Patents and Research Papers" and the "Invention Reward Programs" to encourage employees to invest in and protect innovations.

We also respect other parties' IPRs. Prior to the introduction of new products, the establishment of new projects and the use of new technologies, the Company will conduct global IPR searches on products and technologies to evaluate IPR risks. We review new recruitment to identify any obligations of confidentiality or non-competition restrictions between the candidate and the third-party company. Further in any large procurement contracts or technical cooperation agreement signed by the Company, the contractual counterparty is obliged to fulfill promises of "no existence of infringement of others' IPR" to prevent companies from directly or indirectly infringing on the IPRs of others.

During the reporting period, we developed patent portfolio and newly obtained 10 invention patent licenses (among them, 4 new authorized patent licenses and 6 transferred authorized patent licenses). As of the end of the reporting period, we owned 16 patents in China and 2 patent in the United States. In addition, we had filed multiple PCT patent applications in China, the United States, EU and Canada. Furthermore, we obtained a sole and exclusive license from McMaster University with respect to our TB Booster vaccine and Phase I Clinical Trials.

As of the end of the reporting period, we owned 59 trademarks including 33 trademarks in China, 6 in Hong Kong, 5 in Taiwan, 1 in EU, 1 in the United States and 13 in other countries.

(VI) Privacy and Data Protection

We protect the information security of our company and the privacy of our customers through technical means. We have an independent data center and a local area network, and assign computers and work mailboxes for all employees with encryption measures implemented for transmission of documents through network to protect information leakage.

All office documents of the Company are encrypted to prevent information leakage. We have signed confidentiality agreements with all employees detailing the employee's responsibility for the Company's trade secret protection and liability for breach of contract. We also promote employees on their confidentiality obligations by issuing Employee Handbook.

We have signed confidentiality agreements with our suppliers and partners, requiring each of their employees, managers, affiliates and external technical consultants to comply with confidentiality obligations to protect customer information.

We strictly abide by the Good Clinical Practice for Drug Trials (GCP) 《藥物臨床試驗質量管理規範》 and Guidelines for Quality Management of Vaccine Clinical Trials (Trial) 《疫苗臨床試驗質量管理指導原則(試行)》 to protect clinical data and other private information of clinical trial subjects. During the reporting period, our clinical research on vaccines was reviewed by the Medical Ethics Committee and completed by the cooperative disease prevention and control institutions, the sample testing units, the statistical units and the CROs. We do not have direct access to any privacy information of the subjects other than those necessary data for the research. In addition, we require partners to conduct clinical trials in strict accordance with relevant laws and regulations, closely monitor and manage the clinical trial process, to ensure data security and reduce data leakage risks by including confidentiality clauses in collaboration agreements and conducting regular audits of partners.

During the reporting period, we did not encounter any major information leakage, theft or loss of customer and subject information.

(VII) Advertising and Publicity

We strictly abide by the relevant regulations on drug advertisements in the Administrative Measures for the Classification of Prescription Drugs and Over-the-Counter Drugs (Trial) 《處方藥與非處方藥分類管理辦法(試行)》 and the Measures for the Examination of Pharmaceutical Advertisements 《藥品廣告審查辦法》 when managing advertising and publicity work. During the reporting period, we have not yet commercialized any products, and hence have not conducted any advertisement of our products to the general public.

VII. ANTI-CORRUPTION

We advocate the creation of an ethical and honest working environment and strictly abide by relevant laws and regulations including the Anti-Unfair Competition Law of the People's Republic of China (《中華人民共和國反不正當競爭法》) and the Company Law of the People's Republic of China (《中華人民共和國公司法》).

We require our employees to follow the code of professional ethics and prohibit employees of obtaining profits from any economic illegal activities. We have issued the Employee Handbook and set internal rules and reporting procedures to prevent employees from directly or indirectly giving or receiving gifts that exceed normal courtesy to or from customers and other business service entities. These rules and procedures also clarify that employees have the obligation to report any form of violation of the law such as money laundering and corruption.

We value moral hazard management involved in procurement activities. We have signed anti-corruption agreements with all of our suppliers, urging them to work with us to build a just and fair cooperation environment to avoid commercial bribery and corruption. We encourage suppliers to report fraud and offer rewards for authentic reports. We have maintained records of blacklist for corruption to monitor suppliers with major violations. Business collaboration with such suppliers will be terminated or subject to restrictions, should they be blacklisted.

We have online and offline complaints and reporting channels, including telephone, email and mail. We disclose these channels and designate special personnel to manage each channel, receive corruption complaints and protect the privacy of whistle-blowers. Any risk that may affect the Company will be notified to management as soon as they are being identified. Employees will receive disciplinary measures such as written warnings, suspension, demotion and dismissal for violation depending on the severity of the matters. We will pursue legal actions for against any criminal violations.

During the reporting period, we did not have any reported major bribery, extortion, fraud or money laundering case.

VIII. COMMUNITY INVESTMENT

We strive to communicating and building harmonious relations with surrounding communities, and actively identify their public welfare needs and organize medical and biological science education activities that fit with our business features.

- Popularization of scientific knowledge

  In order to increase the general public's knowledge on the field of vaccines and biomedicine, we use our production park as a vivid science popularization base, and establish a special vaccine knowledge exhibition hall open to universities and social organizations.

  During the reporting period, we invited students from Universities in Tianjin, government staff and social organizations to visit the exhibition hall, laboratories and production plants to popularize knowledge in the fields of biomedicine and vaccines.

- Public welfare lectures

We actively participate in industry exchanges, university interactions, sharing vaccine knowledge and research results:

We introduce vaccine knowledge to disease control and vaccination doctors at the "National Vaccine and Health Conference" held in Nanjing in April 2019 to keep them informed of industry trends.

We shared the views on the situation of China's vaccine industry at the "Human Vaccine Industry Summit" held in Xiamen in June 2019.

We jointly held a three-day vaccine and immunization forum with Nankai University in October 2019, sharing the most cutting-edge research results in the field of vaccines and immunization from multiple perspectives, and actively communicating with teachers and students on-site.

APPENDIX: HONG KONG STOCK EXCHANGE ESG REPORTING GUIDE CONTENT INDEX

ESG Guide			Correspondent Chapters
Environmental	A1 Emissions	General Disclosure	3.1 Environmental Management 3.3 Emissions
		A1.1 The types of emissions and respective emissions data.	3.3 Emissions
		A1.2 Greenhouse gas emissions in total (in tonnes) and, where appropriate, intensity (e.g. per unit of production volume, per facility).	3.3 Emissions
		A1.3 Total hazardous waste produced (in tonnes) and, where appropriate, intensity (e.g. per unit of production volume, per facility).	3.3 Emissions
		A1.4. Total non-hazardous waste produced (in tonnes) and, where appropriate, intensity (e.g. per unit of production volume, per facility).	3.3 Emissions
		A1.5 Description of measures to mitigate emissions and results achieved.	3.3 Emissions
		A1.6 Description of how hazardous and non-hazardous wastes are handled, reduction initiatives and results achieved.	3.3 Emissions
	A2 Use of Resources	General Disclosure	3.1 Environment Management 3.2 Use of Resources
		A2.1. Consumption by type (e.g. electricity, gas or oil) in total (kWh in '000s) and intensity (e.g. per unit of production volume, per facility).	3.2 Use of Resources
		A2.2 Water consumption in total and intensity (e.g. per unit of production volume, per facility).	3.2 Use of Resources
		A2.3 Description of energy use efficiency initiatives and results achieved.	3.2 Use of Resources
		A2.4 Description of whether there is any issue in sourcing water that is fit for purpose, water efficiency initiatives and results achieved.	3.2 Use of Resources
		A2.5 Total packaging material used for finished products (in tonnes) and, if applicable, with reference to per unit produced.	During the reporting period, we have not yet commercialized any products. Packaging materials is not applicable for the Company.

ESG Guide			Correspondent Chapters
	A3 The Environment and Natural Resources	General Disclosure	3. Environment
		A3.1 Description of the significant impacts of activities on the environment and natural resources and the actions taken to manage them.	3. Environment
Social	B1 Employment	General Disclosure	4.1 Employment and Labor Standard
		B1.1 Total workforce by gender, employment type, age group and geographical region.	4.1 Employment and Labor Standard
		B1.2 Employee turnover rate by gender, age group and geographical region.	The Company plans to refine management and disclose in the future.
	B2 Health and Safety	General Disclosure	4.2 Health and Safety
		B2.1 Number and rate of work-related fatalities.	During the reporting period, the Company did not have reported cases of work-related injuries or fatalities.
		B2.2 Lost days due to work injury	The Company plans to refine management and disclose in the future.
		B2.3 Description of occupational health and safety measures adopted, and how they are implemented and monitored.	4.2 Health and Safety
	B3 Development and Training	General Disclosure	4.3 Training and Development
		B3.1 The percentage of employees trained by gender and employee category (e.g. senior management, middle management).	The Company plans to refine management and disclose in the future.
		B3.2 The average training hours completed per employee by gender and employee category.	The Company plans to refine management and disclose in the future.

ESG Guide			Correspondent Chapters
	B4 Labor Standards	General disclosure	4.1 Employment and Labor Standards
		B4.1 Description of measures to review employment practices to avoid child and forced labor.	4.1 Employment and Labor Standards
		B4.2 Description of steps taken to eliminate such practices when discovered.	During the reporting period, the Company did not have cases of child labor and forced labor.
	B5 Supply Chain Management	General Disclosure	5. Supply Chain Management
		B5.1 Number of suppliers by geographical region.	The Company plans to refine management and disclose in the future
		B5.2 Description of practices relating to engaging suppliers, number of suppliers where the practices are being implemented, how they are implemented and monitored.	5. Supply Chain Management
	B6 Product Responsibility	General Disclosure	6. Product Responsibility
		B6.1 Percentage of total products sold or shipped subject to recalls for safety and health reasons.	During the reporting period, the Company had no product recall.
		B6.2 Number of products and service related complaints received and how they are dealt with.	6.3 Products Complaints and Recall Procedures
		B6.3 Description of practices relating to observing and protecting intellectual property rights.	6.5 Intellectual Property Rights
		B6.4 Description of quality assurance process and recall procedures.	6.1 Quality Control
		B6.5 Description of consumer data protection and privacy policies, how they are implemented and monitored.	6.6 Privacy and Data Protection

ESG Guide			Correspondent Chapters
	B7 Anti-corruption	General disclosure	7. Anti-Corruption
		B7.1 Number of concluded legal cases regarding corrupt practices brought against the issuer or its employees during the reporting period and the outcomes of the cases.	During the reporting period, the Company did not have any reported major bribery, extortion, fraud or money laundering case.
		B7.2 Description of preventive measures and whistle-blowing procedures, how they are implemented and monitored.	7. Anti-Corruption
	B8 Community Investment	General Disclosure	8. Community Investment
		B8.1 Focus areas of contribution (E.g. education, environmental concerns, labor needs, health, culture, sport).	8. Community Investment
		B8.2 Resources contributed (e.g. money or time) to the focus area.	8. Community Investment

The Board is pleased to present this Report of the Directors together with the consolidated financial statements of the Group for the year ended December 31, 2019.

PRINCIPAL ACTIVITIES

The principal activities of the Company are development, manufacture and commercialization of high quality, innovative and affordable vaccines. There were no significant changes in the nature of the Company's principal activities during the Reporting Period.

BUSINESS REVIEW AND RESULTS

A review of the business of the Group during the Reporting Period is provided in the section headed "Business Review" under "Management Discussion and Analysis" of this annual report. An analysis of the Group's performance during the Reporting Period is provided in the section headed "Financial Review" under "Management Discussion and Analysis" of this annual report.

The results of the Group for the Reporting Period are set out in the Consolidated Financial Statements on pages 84 to 141 of this annual report.

FINAL DIVIDENDS

The Directors do not recommend a final dividend for the Reporting Period.

IMPORTANT EVENTS AFTER THE END OF THE REPORTING PERIOD

Save as disclosed in the section headed "Management Discussion and Analysis – Business Review – Important Events after the End of the Reporting Period", no important events affecting the Company occurred since the reporting period and up to the date of this annual report.

RESEARCH AND DEVELOPMENT ACTIVITIES

A review of the research and development activities of the Company during the Reporting Period is provided on pages 6 to 11 in "Management Discussion and Analysis" of this annual report.

PRINCIPAL RISKS AND UNCERTAINTIES FACING THE GROUP

The following are parts of the key risks and uncertainties identified by the Group:

Risks relating to our financial prospects:

- We have incurred significant losses since our inception and anticipate that we will continue to incur losses for the next several years and may never achieve or maintain profitability.
- We may need to obtain substantial additional financing to fund our operations, and a failure to obtain necessary capital when needed would force us to delay, limit, reduce or terminate our product development or commercialization efforts.
- Our financial prospects depend on the successful development and approval of our clinical-stage and pre-clinical stage vaccine pipeline.

- We may face substantial competition in the market for vaccines.
- We have a limited operating history, which may make it difficult to evaluate our current business and predict our future performance.

Risks relating to development, clinical trials and regulatory approval of our vaccine candidates:

- We may be unable to obtain regulatory approval for our vaccine candidates, and we may not be able to identify, discover or in-license new and suitable vaccine candidates.
- Vaccine development involves a lengthy and expensive process with uncertain outcomes, and results of earlier clinical trials may not be predictive of results of later-stage clinical trials.
- We may not be able to comply with ongoing regulatory obligations and continued regulatory review even if we receive regulatory approval for our vaccine candidates.

Risks relating to commercialization of our vaccine and vaccine candidates:

- We may not be able to be successfully prequalified by local governments of our target provinces or secure subsequent product orders.
- Our sales may be adversely affected by the recession or eradication of the infectious diseases that our vaccines target and the availability of alternative vaccines or treatment technologies.
- We have limited experience in commercializing vaccine candidates in China, and any failure to perform proper quality control and quality assurance would have a material adverse effect on our business and financial results.
- We may fail to obtain regulatory approval in any targeted jurisdictions outside of China and face variety of risks associated with international operations.

Risks relating to our operations:

- We have engaged in in-licensing and collaboration arrangements to develop and commercialize a number of vaccine candidates, and may continue to seek strategic partnerships and collaborations or enter into additional licensing arrangements in the future, which is subject to risks.
- Our business depends on the use of raw materials, and a decrease in the supply, or an increase in the cost of these raw materials could materially and adversely affect our business, financial condition and results of operation.
- Changes in government regulations or in practices relating to the vaccine industry and compliance with new regulations may result in additional costs.
- We could be unsuccessful in obtaining or maintaining adequate intellectual property protection for one or more of our vaccine candidates.
- We are at risk of governmental actions detrimental to our business, such as product seizure, resumed price controls and additional regulations.
- We benefit from certain preferential tax and financial incentives, the expiration of or changes to which could adversely affect our profitability.

- Our reputation is important to our business success. Negative publicity may adversely affect our reputation and business prospect.
- Any disruption to our continuous use of properties for our business and operations could adversely affect our business and results of operations.
- The outbreak of the Novel Coronavirus may have an impact on our business operations, such as causing delays in clinical trials, regulatory inspections and launch of vaccine products.

However, the above is not an exhaustive list. Investors are advised to make their own judgment or consult their own investment advisors before making any investment in the Shares.

MAJOR CUSTOMERS AND SUPPLIERS

For the Reporting Period,

(i) the Group's largest supplier accounted for 10.41% (2018: 14.93%) of its total purchases, and the five largest suppliers accounted for 31.75% of its total purchases (2018: 37.90%); and

(ii) The Group did not generate any revenue for the year ended December 31, 2019. In 2018, we recorded a revenue of RMB1.1 million, all of which was generated from providing research and development services to an Independent Third Party to filter and validate certain antibodies through our advanced vaccine R&D platform technologies.

None of the Directors or any of their close associates or any Shareholders (which, to the best knowledge of the Directors, own more than 5% of the Company's issued share capital) had any interest in the Group's five largest customers and suppliers.

PROPERTY, PLANT AND EQUIPMENT

As of the date of this annual report, we had a construction in progress, the details of which are as follows:

Address and Postal Code	Stage of Completion	Expected Completion Date	Planned Use	Gross Floor Area	Interest Held by the Company
No.16 Xinwei Road, West District, Tianjin Development Zone (天津開發區西區新維路16號), 300457	Approximately 98%	In the second half of 2020	Manufacturing and commercialization of vaccines	Approximately 38,000 square meters	100%

Details of movements in the property, plant and equipment of the Group during the Reporting Period are set out in note 15 to the consolidated financial statements.

SUBSIDIARY

Details of the subsidiary of the Company as of December 31, 2019 are set out in note 37 to the consolidated financial statements.

SHARE CAPITAL

Details of movements in the share capital of the Company during the Reporting Period are set out in note 24 to the consolidated financial statements.

RESERVES

Details of movements in the reserves of the Company during the Reporting Period are set out in the Consolidated Statement of Changes in Equity on page 86 of this annual report.

DISTRIBUTABLE RESERVES

As at December 31, 2019, the Company did not have any distributable reserves.

BANK AND OTHER BORROWINGS

Particulars of bank and other borrowings of the Group as at December 31, 2019 are set out in note 28 to the consolidated financial statements.

SHARE INCENTIVES

During the Reporting Period, the Company did not adopt any share incentive plan.

EQUITY-LINKED AGREEMENTS

No equity-linked agreements that will or may result in the Company issuing shares or that require the Company to enter into any agreements that will or may result in the Company issuing shares were entered into by the Company during the Reporting Period or subsisted at the end of the Reporting Period.

DIRECTORS AND SUPERVISORS

The Directors and Supervisors who held office during the Reporting Period and up to the date of this report were:

Executive Directors
Dr. Xuefeng YU *(Chairman)*
Dr. Shou Bai CHAO
Dr. Tao ZHU
Dr. Dongxu QIU

Non-Executive Directors
Mr. Qiang XU
Mr. Liang LIN
Ms. Nisa Bernice Wing-Yu LEUNG
Mr. Zhi XIAO (appointed on June 28, 2019)
Dr. Zheng YIN (resigned on June 28, 2019)

Independent non-executive Directors
Mr. Shiu Kwan Danny WAI
Ms. Zhu XIN
Mr. Shuifa GUI (appointed on November 29, 2019)
Mr. Jianzhong LIU (appointed on November 29, 2019)
Dr. Luis BARRETO (resigned on November 29, 2019)
Dr. Pierre Armand MORGON (resigned on November 29, 2019)

Supervisors
Ms. Jieyu ZOU
Ms. Zhengfang LIAO
Ms. Jiangfeng LI (appointed on November 29, 2019)
Mr. Jixiang ZHU (resigned on November 29, 2019)

Dr. Yin tendered his resignation as a non-executive Director and a member of the Audit Committee with effect from June 28, 2019 due to his other work commitments. Dr. Barreto tendered his resignation as an independent non-executive Director, a member of the Remuneration and Assessment Committee and a member of the Nomination Committee and with effect from November 29, 2019 due to other work engagement. Dr. Morgon tendered his resignation as an independent non-executive Director, the chairman of the Remuneration and Assessment Committee and a member of the Nomination Committee, with effect from November 29, 2019 due to other work engagement. Mr. Zhu tendered his resignation as chairman of the board of Supervisors with effect from November 29, 2019, due to other work engagement.

DIRECTORS' AND SUPERVISORS' BIOGRAPHICAL DETAILS

Details of directors and supervisors are set out in "Director, Supervisors and Senior Management" of this annual report. Save as disclosed in that section, up to the date of this report, there were no changes to information which are required to be disclosed by Directors and Supervisors pursuant to paragraphs (a) to (e) and (g) of Rule 13.51(2) of the Listing Rules.

DIRECTORS' AND SUPERVISORS' SERVICE CONTRACTS

Details of Directors' and Supervisors' service contracts set out in "Appointment, Re-election and Removal of Directors" section of the Corporate Governance Report. Some Directors and Supervisors will be proposed for re-election at the forthcoming annual general meeting, and the Company did not sign any relevant unexpired service contracts with them which are not determinable by us within a year without payment of any compensation (other than statutory compensation).

DIRECTORS' AND SUPERVISORS' RIGHTS TO ACQUIRE SHARES OR DEBENTURES

None of the Directors, Supervisors or any of their respective associates was granted by the Company or its subsidiaries any right to acquire shares in, or debentures of, the Company or its subsidiary, or had exercised any such right during the Reporting Period.

COMPETING INTEREST AND OTHER INTEREST

None of the Directors or the Supervisors or any entity connected with them has any material interest, either directly or indirectly, in any contract, transaction or arrangement of significance to the Company's business to which the Company, any of its holding companies, any of its subsidiaries, fellow subsidiaries was a party subsisted at the end of the year or at any time during the Reporting Period.

During the Reporting Period, none of the Directors and their respective associates had an interest in a business which causes or may cause any significant competition with the business of the Company and any other conflicts of interest which any such person has or may have with the Company.

During the Reporting Period, the Group has not entered into any contract of significance with the Controlling Shareholders (other than the service contracts of Directors and senior management).

INDEPENDENCE OF INDEPENDENT NON-EXECUTIVE DIRECTORS

The Company has received a confirmation of independence pursuant to Rule 3.13 of the Listing Rules from each of the independent non-executive Directors considers such Directors to be independent in accordance with Rule 3.13 of the Listing Rules.

MANAGEMENT CONTRACTS

No contracts concerning the management and administration of the whole or any substantial part of the business of the Company were entered into or existed during the Reporting Period.

REMUNERATION POLICY

The Remuneration and Assessment Committee of the Company was set up for reviewing the Company's emolument policy and structure for all remuneration of the Directors and senior management of the Company, having regard to the Company's operating results, individual performance of the Directors and senior management and comparable market practices.

REMUNERATION OF DIRECTORS AND FIVE INDIVIDUALS WITH HIGHEST EMOLUMENTS

Details of the emoluments of the Directors and five highest paid individuals are set out in notes 36(a) and 9(b) to the consolidated financial statements.

None of the Directors waived or agreed to waive any remuneration and there were no emoluments paid by the Group to any of the Directors as an inducement to join, or upon joining the Group, or as compensation for loss of office.

CORPORATE GOVERNANCE

The Company is committed to maintaining high standard of corporate governance to safeguard the interests of the Shareholders, enhance corporate value, formulate its business strategies and policies, and enhance its transparency and accountability.

The Company has adopted the code provisions of the CG Code as its own code of corporate governance. The CG Code has been applicable to the Company with effect from the Listing Date and was not applicable to the Company during the period from January 1, 2019 to March 27, 2019.

The Board is of the view that the Company has complied with all applicable code provisions of the CG Code since the Listing Date up to the date of this annual report, except for the following:

In respect of code provision A.2.1 of the CG Code, the roles of chairman and chief executive officer of the Company are not separate and are both performed by Dr. Yu. The Board believes that this structure will not impair the balance of power and authority between the Board and the management of the Company, given that: (i) decision to be made by our Board requires approval by at least a majority of our Directors; (ii) Dr. Yu and the other Directors are aware of and undertake to fulfil their fiduciary duties as Directors, which require, among other things, that he acts for the benefit and in the best interests of our Company and will make decisions for our Company accordingly; and (iii) the balance of power and authority is ensured by the operations of the Board which comprises experienced and high caliber individuals who meet regularly to discuss issues affecting the operations of the Company. Moreover, the overall strategic and other key business, financial, and operational policies of our Company are made collectively after thorough discussion at both Board and senior management levels. The Board will continue to review the effectiveness of the corporate governance structure of our Company in order to assess whether separation of the roles of chairman of the Board and chief executive officer is necessary.

Under code provision E.1.2 of the CG Code, the chairman of the board should attend the annual general meeting. Dr. Yu, the chairman of the Board, had not attended the annual general meeting of the Company held on June 28, 2019 because he traveled to the Democratic Republic of the Congo in response to the outbreak of Ebola virus. He delegated the duty of attending the annual general meeting to the chief operating officer of the Company, who the chairman considered a suitable person for taking up such duty. The chairman will use his best endeavors to attend all future shareholders' meetings of the Company.

ENVIRONMENTAL, SOCIAL AND GOVERNANCE

The Company is committed to achieving improvement in environmental performance and complying with the relevant environmental protection regulations and rules.

The environmental, social and governance report of the Company prepared in accordance with Appendix 27 of the Listing Rules is set out on pages 38 to 63 of this annual report.

COMPLIANCE WITH THE MODEL CODE FOR SECURITIES TRANSACTIONS

The Company has adopted the Model Code as its own code of conduct regarding securities transactions by the Directors and Supervisors.

Having made specific enquiry of all Directors and Supervisors, all of them have confirmed that they have complied with the Model Code throughout the period from the Listing Date to the date of this annual report. No incident of non-compliance of the Model Code by the employees who are likely to be in possession of inside information of the Company was noted by the Company.

DIRECTORS', SUPERVISORS' AND CHIEF EXECUTIVE'S INTERESTS AND SHORT POSITIONS IN SHARES, UNDERLYING SHARES AND DEBENTURES OF THE COMPANY

As at December 31, 2019, the interests and short positions of the Directors, Supervisors and chief executive of the Company in the Shares, underlying Shares and debentures of the Company or its associated corporations (within the meaning of Part XV of the SFO) as recorded in the register required to be kept pursuant to Section 352 of the SFO; or as otherwise notified to the Company and the Stock Exchange pursuant to the Model Code were as follows:

Interests in shares or underlying shares of the Company

Name of Director	Capacity/Nature of interest	Number and class of Shares	Approximate % of total shareholding interest in our Company	Approximate % of the relevant class of Shares[1]
Dr. Yu	Beneficial owner, Interest of a party to an agreement regarding interest in the Company[2]	34,598,400 H Shares (L) 16,724,200 Unlisted Foreign Shares (L) and 17,874,200 Domestic Shares (L)	15.54% 7.51% 8.03%	26.08% 18.59% 19.86%
Dr. Zhu	Beneficial owner, Interest of a party to an agreement regarding interest in the Company[2], Interest in a controlled corporation[3]	34,598,400 H Shares (L) 16,724,200 Unlisted Foreign Shares (L) 25,855,425 Domestic Shares (L)	15.54% 7.51% 11.61%	26.08% 18.59% 28.73%
Dr. Qiu	Beneficial owner, Interest of a party to an agreement regarding interest in the Company[2]	34,598,400 H Shares (L) 16,724,200 Unlisted Foreign Shares (L) 17,874,200 Domestic Shares (L)	15.54% 7.51% 8.03%	26.08% 18.59% 19.86%
Dr. Chao	Interest of spouse[4]	11,924,700 H Shares (L) 4,409,500 Unlisted Foreign Shares (L)	5.36% 1.98%	8.99% 4.90%
Ms. Nisa Bernice Wing-Yu	Interest in a controlled corporation[5]	13,036,538 H Shares (L)	5.86%	9.83%

Notes:

(1) Unlisted Foreign Shares and Domestic Shares are of the same class of Shares.

(2) Pursuant to the Concert Party Agreement.

(3) Dr. Zhu is the sole general partner of Tianjin Qianyi Enterprise Management Partnership (Limited Partnership) (天津千益企業管理合夥企業(有限合夥)) ("**Tianjin Qianyi**"), Tianjin Qianrui Enterprise Management Partnership (Limited Partnership) (天津千睿企業管理合夥企業(有限合夥)) ("**Tianjin Qianrui**") and Tianjin Qianzhi Enterprise Management Partnership (Limited Partnership) (天津千智企業管理合夥企業(有限合夥)) ("**Tianjin Qianzhi**"), which hold 1.56%, 1.48% and 0.54% of the issued share capital of our Company, respectively. Therefore, Dr. Zhu is deemed to be interested in the Shares held by Tianjin Qianyi, Tianjin Qianrui and Tianjin Qianzhi, all of which are Domestic Shares.

(4) Dr. Chao is the spouse of Dr. Mao, one of our Controlling Shareholders. Therefore, Dr. Chao is deemed to be interested in the Shares in which Dr. Mao is interested in as a beneficial owner under the SFO.

(5) Ms. Nisa Bernice Wing-Yu Leung's shareholding in Qiming Corporate GP IV, Ltd increased from 25% to 33.33% on July 12, 2019 due to the exit of one of the shareholders by way of share repurchase, as a result Qiming Corporate GP IV, Ltd is a corporation controlled by Nisa Bernice Wing-Yu Leung and therefore she is deemed to be interested in the H Shares in the Company via the controlled corporations.

Save as disclosed above, as at December 31, 2019, to the best knowledge of the Directors, Supervisors or chief executive of the Company, none of the Directors, Supervisors or chief executive of the Company had interests or short positions in the Shares, underlying Shares and debentures of the Company or its associated corporations as recorded in the register required to be kept, pursuant to Section 352 of the SFO; or as otherwise notified to the Company and the Stock Exchange pursuant to the Model Code.

SUBSTANTIAL SHAREHOLDERS' INTERESTS AND SHORT POSITIONS IN SHARES AND UNDERLYING SHARES OF THE COMPANY

As at December 31, 2019, so far as it was known to the Directors or chief executive of the Company, the following persons (other than the Directors and chief executive of the Company) had interests and/or short positions in the Shares or underlying Shares as recorded in the register required to be kept by the Company under section 336 of the SFO.

Interests in shares or underlying shares of the Company

Name of substantial Shareholder	Capacity/Nature of interest	Number and class of Shares	Approximate % of total shareholding interest in our Company	Approximate % of the relevant class of Shares[1]
Dr. Mao	Beneficial owner, Interest of a party to an agreement regarding interest in the Company	34,598,400 H Shares (L) 16,724,200 Unlisted Foreign Shares (L) 17,874,200 Domestic Shares (L)	15.54% 7.51% 8.03%	26.08% 18.59% 19.86%
Shi Yi	Interest in a controlled corporation	26,035,562 H Shares (L)	11.69%	19.62%
LAV Management Company, Limited	Investment Manager	22,468,362 H Shares (L)	10.09%	16.94%
The Capital Group Companies, Inc.	Interest in a controlled corporation	13,611,500 H Shares (L)	6.11%	10.26%
Lilly Asia Ventures Fund II, L.P.	Interest in a controlled corporation	13,140,000 H Shares (L)	5.90%	9.90%
LAV Spring (Hong Kong) Co., Limited	Beneficial owner	13,140,000 H Shares (L)	5.90%	9.90%
Kuang Duane Ziping	Interest in a controlled corporation[2]	13,036,538 H Shares (L)	5.86%	9.83%
Rieschel Gary Edward	Interest in a controlled corporation[2]	13,036,538 H Shares (L)	5.86%	9.83%
Qiming Corporate GP IV, Ltd.	Interest in a controlled corporation	13,036,538 H Shares (L)	5.86%	9.83%

Name of substantial Shareholder	Capacity/Nature of interest	Number and class of Shares	Approximate % of total shareholding interest in our Company	Approximate % of the relevant class of Shares[1]
Qiming GP IV, L.P.	Interest in a controlled corporation	13,036,538 H Shares (L)	5.86%	9.83%
Qiming Venture Partners IV, L.P.	Interest in a controlled corporation	13,036,538 H Shares (L)	5.86%	9.83%
QM29 Limited	Beneficial owner	13,036,538 H Shares (L)	5.86%	9.83%
OrbiMed Capital LLC	Investment Manager	8,918,200 H Shares (L)	4.01%	6.72%
SDIC Fund Management Company Ltd. (國投創新投資管理有限公司)	Investment Manager	8,855,336 Domestic Shares (L)	3.98%	9.84%
Future Industry Investment Fund (Limited Partnership) (先進製造產業投資基金(有限合夥))	Beneficial owner	8,855,336 Domestic Shares (L)	3.98%	9.84%
Chen Fei	Interest in a controlled corporation	7,709,454 Domestic Shares (L)	3.46%	8.57%
Shanghai Li Yi Investment Management Partnership (Limited Partnership) (上海禮頤投資管理合夥企業(有限合夥))	Investment manager	7,709,454 Domestic Shares (L)	3.46%	8.57%
Shanghai Liyao Investment Management Co., Ltd (上海禮曜投資管理有限公司)	Investment manager	7,709,454 Domestic Shares (L)	3.46%	8.57%
Worldwide Healthcare Trust PLC	Beneficial owner	6,917,000 H Shares (L)	3.11%	5.21%

Name of substantial Shareholder	Capacity/Nature of interest	Number and class of Shares	Approximate % of total shareholding interest in our Company	Approximate % of the relevant class of Shares[1]
Shanghai Li'an Venture Capital Investment Center (Limited Partnership) (上海禮安創業投資中心（有限合夥))	Beneficial owner	4,600,000 Domestic Shares (L)	2.07%	5.11%

Notes:

(1) Unlisted Foreign Shares and Domestic Shares are of the same class of Shares.

(2) Each of Kuang Duane Ziping's and Rieschel Gary Edward's shareholding in Qiming Corporate GP IV, Ltd increased from 25% to 33.33% on July 12, 2019 due to the exit of one of the shareholders by way of share repurchase, as a result Qiming Corporate GP IV, Ltd is a corporation controlled by each of Kuang Duane Ziping and Rieschel Gary Edward and therefore they are deemed to be interested in the H Shares in the Company via the controlled corporations.

Save as disclosed above, as at December 31, 2019, to the best knowledge of the Directors, Supervisors or chief executive of the Company, none of the substantial Shareholders of the Company had interests or short positions in the Shares and underlying Shares of the Company or its associated corporations as recorded in the register required to be kept, pursuant to Section 336 of the SFO.

USE OF PROCEEDS FROM LISTING

The H Shares were listed on the Main Board of the Stock Exchange on the Listing Date. The Company received net proceeds (after deduction of underwriting commissions and related costs and expenses) from the IPO and the exercise of over-allotment option of approximately HK$1,309.8 million, equivalent to approximately RMB1,122.3 million. The table below sets out the planned applications of the net proceeds and actual usage up to December 31, 2019:

Use of proceeds	Planned applications (RMB million)	Percentage of total net proceeds (%)	Actual usage up to December 31, 2019 (RMB million)	Unutilized net proceeds as at December 31, 2019 (RMB million)
Research and development and commercialization of MCV candidates	505.1	45%	27.7	477.4
Research and development of DTcP candidates	224.5	20%	36.2	188.3
Research and development of other key products	168.3	15%	68.4	99.9
Continued research and development of our pre-clinical vaccine candidates	112.2	10%	45.9	66.3
Working capital and other general corporate purposes	112.2	10%	49.8	62.4
Total	1,122.3	100%	228	894.3

Based on our estimates, we currently intend to apply the unutilized net proceeds in accordance with the plan described in the Prospectus.

PURCHASE, SALE OR REDEMPTION OF THE LISTED SECURITIES OF THE COMPANY

The Company had not purchased, sold or redeemed any of the Company's listed securities during the Reporting Period.

CONTINUING CONNECTED TRANSACTION

The Group has no non-exempt continuing connected transactions for the year ended December 31, 2019.

RELATED PARTY TRANSACTIONS

During the year ended December 31, 2019, the Group did not have any significant transactions with related parties (2018: nil).

PRE-EMPTIVE RIGHTS

There are no provisions for pre-emptive rights under the Articles of Association or the relevant laws of the PRC that would oblige the Company to offer new Shares on a pro rata basis to existing Shareholders.

TAX RELIEF AND EXEMPTION

The Directors are not aware of any tax relief and exemption available to the Shareholders by reason of their holding of the Company's listed securities. If any of the Shareholders is unsure about the taxation implications of purchasing, holding, disposing of, dealing in, or the exercise of any rights in relation to the Shares, he or she is advised to consult an expert.

COMPANY'S COMPLIANCE WITH RELEVANT LAWS AND REGULATIONS

During the year under review, the Company has complied with the relevant laws and regulation that have a significant impact on the Company, including but not limited to the Companies Ordinance, the Listing Rules, the Securities and Futures Ordinance, Company Law of the People's Republic of China《中華人民共和國公司法》, Pharmaceutical Administration Law of the People's Republic of China《中華人民共和國藥品管理法》, Measures for the Supervision over and Administration of Pharmaceutical Production《藥品生產監督管理辦法》, Provisions for Drug Registration《藥品註冊管理辦法》, Vaccine Administration Law of the People's Republic of China《中華人民共和國疫苗管理法》and their rules for implementation.

PERMITTED INDEMNITY PROVISION

During the year under review and as at December 31, 2019, the Company has purchased liability insurance for Directors and Supervisors which provides proper protection from liabilities arising from or in connection with the performance of their duties.

PUBLIC FLOAT

Based on the information that is publicly available to the Company and within the knowledge of the Directors as at the date of this annual report, the Company has maintained the prescribed percentage of public float under the Listing Rules.

FINANCIAL SUMMARY

A summary of the Group's results, assets and liabilities for the last four financial years (prepared in accordance with HKFRS) are set out on page 4 of this annual report. This summary does not form part of the audited consolidated financial statements.

AUDIT COMMITTEE

The Audit Committee consists of two independent non-executive Directors being Ms. Zhu XIN (Chairwoman) and Mr. Shiu Kwan Danny WAI and one non-executive Director being Mr. Zhi XIAO. The primary duties of the Audit Committee are to assist the Board by providing an independent view of the effectiveness of the financial reporting process, internal control and risk management systems of the Company and overseeing the audit process.

The Audit Committee has reviewed together with the management and external auditor the accounting principles and policies adopted by the Company and the audited consolidated financial statements for the year ended December 31, 2019.

AUDITOR

The financial statements for the year ended December 31, 2019 has been audited by PricewaterhouseCoopers. PricewaterhouseCoopers shall retire in the forthcoming annual general meeting and, being eligible, will offer themselves for re-appointment. A resolution to re-appoint PricewaterhouseCoopers as auditor of the Company and to authorise the general manager to determine the specific matters, including but not limited to its remuneration will be proposed at the forthcoming annual general meeting.

By Order of the Board
CanSino Biologics Inc.
Xuefeng YU
Chairman

Hong Kong, March 27, 2020

REPORT OF THE SUPERVISORS FOR 2019

With the joint efforts of all Supervisors of CanSino Biologics Inc. (the "Company"), in accordance with the laws and regulations such as the Company Law of the People's Republic of China (the "Company Law") and the provisions of the Articles of Association and the Rules of Procedures for Meeting of the Board of Supervisors, the Board of Supervisors, in the spirit of being responsible to all shareholders of the Company, conscientiously performed the duties and powers granted by relevant laws and regulations, actively and effectively carried out the work, supervised the compliance of the operation of the Company and the performance of duties by Directors and senior management of the Company, and safeguarded the legitimate rights and interests of the Company as well as its Shareholders.

The work of the Board of Supervisors in 2019 and the work plan for 2020 are hereby reported as follows:

I. WORK OF THE BOARD OF SUPERVISORS IN 2019

In 2019, the Board of Supervisors convened and held 6 meetings of the Board of Supervisors pursuant to the laws. The notice, convening and voting procedures for the meetings were in compliance with the requirements of the Company Law and other laws and regulations as well as the Articles of Association and the Rules of Procedures for the Board of Supervisors. The work of the Board of Supervisors mainly included:

1. Attending general Shareholders' meetings of the Company to understand the operation of the general Shareholders' meetings;

2. Attend the meetings of the Board of Directors of the Company to understand the operation of the Board of Directors;

3. Review the financial reports of the Company and the audit reports submitted by accounting firm.

II. OPINIONS ON THE BOARD OF SUPERVISORS DURING THE REPORTING PERIOD

(i) Compliance of the Operation

The members of the Board of Directors and senior management of the Company operated in strict compliance with the relevant provisions of the Company Law and the Articles of Association, diligently and responsibly performed their duties with a scientific and reasonable decision-making process, earnestly implemented each resolution of the general Shareholders' meetings, and they were not aware of any illegal act or actions against the interests of the Company.

(ii) Financial Position of the Company

The Board of Supervisors reviewed and agreed with the audited consolidated financial statements for the year ended December 31, 2019, and believed that the financial statements of the Company has given an objective and true view of the financial position and the operating results of the Company and is free of false representations, misleading statements and material omissions.

(iii) Internal Control

Based on the relevant regulations of the Company Law and the Articles of Association together with its actual condition, the Company established a comprehensive internal management and internal control system, which ensures the normal operation of the Company. The Company has a complete internal control organization and an internal audit department with sufficient staff to ensure full and effective implementation and supervision of the Company.

(iv) Integrity and Self-discipline

The Directors and senior management of the Company strictly regulated themselves to abide by the laws and regulations with honesty and self-discipline, and no illegal acts due to personal interests were found.

III. WORK PLAN FOR 2020

The Board of Supervisors will further regulate the work of the Board of Supervisors in accordance with the Company Law, the Articles of Association as well as relevant laws and regulations, reinforce its supervision and safeguard the interests of the Company and its Shareholders:

(1) Attend general Shareholders' meetings of the Company and pay close attention to the operation of the general Shareholders' meetings as well as the Company's business decisions to ensure normal operation of the Company.

(2) Attend the meetings of Board of Directors of the Company and continue to actively participate in various work meetings organized and convened by the Company to keep abreast of the operation of the Board of Directors and the development of the Company's operation to ensure the standardized operation of the Company.

(3) Further reinforce the supervision and inspection of the financial position of the Company.

(4) Supervise the compliance and due diligence of the Directors and senior management of the Company.

The Board of Supervisors
CanSino Biologics Inc.
March 27, 2020

To the Shareholders of CanSino Biologics Inc.
(incorporated in the People's Republic of China with limited liability)

OPINION

What we have audited

The consolidated financial statements of CanSino Biologics Inc. (the "Company") and its subsidiaries (the "Group") set out on pages 84 to 141, which comprise:

- the consolidated balance sheet as at 31 December 2019;
- the consolidated statement of comprehensive income for the year then ended;
- the consolidated statement of changes in equity for the year then ended;
- the consolidated statement of cash flows for the year then ended; and
- the notes to the consolidated financial statements, which include a summary of significant accounting policies.

Our opinion

In our opinion, the consolidated financial statements give a true and fair view of the consolidated financial position of the Group as at 31 December 2019, and of its consolidated financial performance and its consolidated cash flows for the year then ended in accordance with Hong Kong Financial Reporting Standards ("HKFRSs") issued by the Hong Kong Institute of Certified Public Accountants ("HKICPA") and have been properly prepared in compliance with the disclosure requirements of the Hong Kong Companies Ordinance.

BASIS FOR OPINION

We conducted our audit in accordance with Hong Kong Standards on Auditing ("HKSAs") issued by the HKICPA. Our responsibilities under those standards are further described in the Auditor's Responsibilities for the Audit of the Consolidated Financial Statements section of our report.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Independence

We are independent of the Group in accordance with the HKICPA's Code of Ethics for Professional Accountants ("the Code"), and we have fulfilled our other ethical responsibilities in accordance with the Code.

KEY AUDIT MATTERS

Key audit matters are those matters that, in our professional judgment, were of most significance in our audit of the consolidated financial statements of the current period. These matters were addressed in the context of our audit of the consolidated financial statements as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on these matters.

Key audit matter identified in our audit is capitalisation of development costs.

Key Audit Matter	How our audit addressed the Key Audit Matter
Capitalisation of development costs	
Refer to Note 2.9(c), Note 4(a)(i) and Note 17 to the consolidated financial statements. The Group is principally engaged in the research and development, manufacturing and commercialisation of vaccine products for human use. During the year ended 31 December 2019, the Group incurred RMB157,571,000 as expenditures on research and development, of which RMB151,747,000 was recognised as research and development expenses for the current year, and RMB5,824,000 was capitalised as intangible assets. As at 31 December 2019, the balance of capitalised development costs recognised as intangible assets was RMB37,409,000. Development costs are capitalised as assets if the criteria set out in Note 2.9 can be demonstrated. We focused on this area given the significance of the expenditures on research and development, a portion of which was capitalised as assets. Management applied significant judgments in assessing whether development costs have met the capitalisation criteria. In view of these reasons, we identified this as a key audit matter.	We performed the following audit procedures on the capitalised development costs: (1) We obtained an understanding of the Group's capitalisation criteria, assessed whether it was in line with relevant accounting standards. We understood, evaluated and validated the key controls in the process of capitalisation of development costs. (2) We examined the research proposal, budgets, approval for clinical trial, clinical trial application materials, clinical trial reports and announcements of the success of clinical trials for each of the projects at development stage, assessed management's intention to complete the project to sell the vaccine product and management's judgment on technical feasibility, checked whether the project has entered into the development stage. (3) For management's judgements on the future economic benefit, with reference to the related market research and product margin levels of the comparable companies in the same industry, we assessed the appropriateness of such key assumptions applied by management as the market size, revenue growth rate and gross profit margin. We then performed sensitivity analysis on the key assumptions used in the forecast to assess the potential impacts on the future economic benefit. (4) Considering the Group's funds availability and technology capabilities, we assessed the reasonableness of management's judgements on the availability of financial and technological resources to complete the development project and kick off the production.

KEY AUDIT MATTERS (CONTINUED)

- Capitalisation of development costs (continued)

Key Audit Matter	How our audit addressed the Key Audit Matter
Capitalisation of development costs (continued)	
	(5) We selected samples of research and development expenditures, examined the supporting documents such as contracts, payment vouchers and invoices. For samples selected relating to capitalised development costs, we further checked that the costs were incurred at development stage and attributable to the development activities. Based on the above procedures performed, the judgments applied by management in determining the capitalisation of development costs were supported by the audit evidence we obtained.

OTHER INFORMATION

The directors of the Company are responsible for the other information. The other information comprises all of the information included in the annual report other than the consolidated financial statements and our auditor's report thereon.

Our opinion on the consolidated financial statements does not cover the other information and we do not express any form of assurance conclusion thereon.

In connection with our audit of the consolidated financial statements, our responsibility is to read the other information and, in doing so, consider whether the other information is materially inconsistent with the consolidated financial statements or our knowledge obtained in the audit or otherwise appears to be materially misstated.

If, based on the work we have performed, we conclude that there is a material misstatement of this other information, we are required to report that fact. We have nothing to report in this regard.

RESPONSIBILITIES OF DIRECTORS AND AUDIT COMMITTEE FOR THE CONSOLIDATED FINANCIAL STATEMENTS

The directors of the Company are responsible for the preparation of the consolidated financial statements that give a true and fair view in accordance with HKFRSs issued by the HKICPA and the disclosure requirements of the Hong Kong Companies Ordinance, and for such internal control as the directors determine is necessary to enable the preparation of consolidated financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the consolidated financial statements, the directors are responsible for assessing the Group's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless the directors either intend to liquidate the Group or to cease operations, or have no realistic alternative but to do so.

The Audit Committee is responsible for overseeing the Group's financial reporting process.

AUDITOR'S RESPONSIBILITIES FOR THE AUDIT OF THE CONSOLIDATED FINANCIAL STATEMENTS

Our objectives are to obtain reasonable assurance about whether the consolidated financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. We report our opinion solely to you, as a body, and for no other purpose. We do not assume responsibility towards or accept liability to any other person for the contents of this report. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with HKSAs will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these consolidated financial statements.

As part of an audit in accordance with HKSAs, we exercise professional judgment and maintain professional scepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the consolidated financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.

- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Group's internal control.

- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by the directors.

- Conclude on the appropriateness of the directors' use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Group's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the consolidated financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Group to cease to continue as a going concern.

- Evaluate the overall presentation, structure and content of the consolidated financial statements, including the disclosures, and whether the consolidated financial statements represent the underlying transactions and events in a manner that achieves fair presentation.

- Obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the Group to express an opinion on the consolidated financial statements. We are responsible for the direction, supervision and performance of the group audit. We remain solely responsible for our audit opinion.

AUDITOR'S RESPONSIBILITIES FOR THE AUDIT OF THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

We communicate with the Audit Committee regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

We also provide the Audit Committee with a statement that we have complied with relevant ethical requirements regarding independence, and to communicate with them all relationships and other matters that may reasonably be thought to bear on our independence, and where applicable, related safeguards.

From the matters communicated with the Audit Committee, we determine those matters that were of most significance in the audit of the consolidated financial statements of the current period and are therefore the key audit matters. We describe these matters in our auditor's report unless law or regulation precludes public disclosure about the matter or when, in extremely rare circumstances, we determine that a matter should not be communicated in our report because the adverse consequences of doing so would reasonably be expected to outweigh the public interest benefits of such communication.

The engagement partner on the audit resulting in this independent auditor's report is Tsun NG.

PricewaterhouseCoopers
Certified Public Accountants

Hong Kong, 27 March 2020

Consolidated Statement of Comprehensive Income

For the year ended 31 December 2019

	Notes	Year ended 31 December 2019 RMB'000	2018 RMB'000
Revenue	6	–	1,132
Other income	7	19,000	19,962
Selling expenses	8	(5,287)	–
Administrative expenses	8	(62,786)	(46,231)
Research and development expenses	8	(151,747)	(113,646)
Impairment loss of non-financial assets	8	(241)	–
Other gains - net	10	816	205
Operating loss		(200,245)	(138,578)
Finance income	11	43,572	297
Finance costs	11	(93)	–
Finance income - net	11	43,479	297
Loss before income tax		(156,766)	(138,281)
Income tax expense	12	–	–
Loss for the year and total comprehensive loss		(156,766)	(138,281)
Loss attributable to owners of the Company		(156,766)	(138,281)
Loss per share			
– Basic and diluted loss per share (in RMB)	13	(0.77)	(0.90)

The notes on pages 88 to 141 form an integral part of the consolidated financial statements.

	Notes	As at 31 December 2019 RMB'000	2018 RMB'000
ASSETS			
Non-current assets			
Property, plant and equipment	15	**575,504**	507,449
Right-of-use assets	16	**32,716**	–
Land use rights		**–**	18,936
Intangible assets	17	**38,689**	32,320
Other receivables and prepayments	19	**36,476**	16,166
Term deposits with initial term of over three months	22	**306,868**	–
Total non-current assets		**990,253**	574,871
Current assets			
Inventories	18	**16,338**	8,494
Other receivables and prepayments	19	**23,114**	15,129
Financial assets at fair value through profit or loss	20	**111,526**	–
Financial assets at amortised cost	21	**–**	140,000
Term deposits with initial term of over three months	22	**440,817**	–
Cash and cash equivalents	23	**202,450**	57,381
Total current assets		**794,245**	221,004
Total assets		**1,784,498**	795,875
EQUITY			
Equity attributable to owners of the Company			
Share capital and share premium	24	**1,792,933**	689,486
Capital reserves	25	**45,637**	24,119
Accumulated losses		**(368,054)**	(211,288)
Total equity		**1,470,516**	502,317
LIABILITIES			
Non-current liabilities			
Borrowings	28	**130,000**	150,000
Lease liabilities		**7,758**	–
Deferred income	29	**51,929**	36,873
Total non-current liabilities		**189,687**	186,873
Current liabilities			
Trade payables	30	**6,171**	6,651
Contract liabilities	6	**578**	–
Other payables and accruals	31	**80,638**	98,509
Borrowings	28	**20,239**	–
Lease liabilities		**8,802**	–
Deferred income	29	**7,867**	1,525
Total current liabilities		**124,295**	106,685
Total liabilities		**313,982**	293,558
Total equity and liabilities		**1,784,498**	795,875

Approved and authorised for issue by the board of directors on 27 March 2020.

Director: Xuefeng YU Director: Shou Bai CHAO

The notes on pages 88 to 141 form an integral part of the consolidated financial statements.

Consolidated Statement of Changes in Equity

For the year ended 31 December 2019

	Notes	Share capital RMB'000 (Note 24)	Share premium RMB'000 (Note 24)	Capital reserves RMB'000 (Note 25)	Accumulated losses RMB'000	Total equity RMB'000
Balance at 1 January 2019		**160,951**	**528,535**	**24,119**	**(211,288)**	**502,317**
Comprehensive loss						
– Loss for the year		**–**	**–**	**–**	**(156,766)**	**(156,766)**
Transaction with owners						
– Issuance of shares	24	**61,699**	**1,041,748**	**–**	**–**	**1,103,447**
– Share-based payments	25	**–**	**–**	**21,518**	**–**	**21,518**
Balance at 31 December 2019		**222,650**	**1,570,283**	**45,637**	**(368,054)**	**1,470,516**
Balance at 1 January 2018		156,444	515,556	8,339	(73,007)	607,332
Comprehensive loss						
– Loss for the year		–	–	–	(138,281)	(138,281)
Transaction with owners						
– Issuance of shares	24	4,507	12,979	–	–	17,486
– Share-based payments	25	–	–	15,780	–	15,780
Balance at 31 December 2018		160,951	528,535	24,119	(211,288)	502,317

The notes on pages 88 to 141 form an integral part of the consolidated financial statements.

Consolidated Statement of Cash Flows

For the year ended 31 December 2019

	Notes	Year ended 31 December 2019 RMB'000	2018 RMB'000
Cash flows from operating activities			
Cash used in operations	32	**(173,718)**	(123,843)
Interests received		**3,529**	205
Net cash used in operating activities		**(170,189)**	(123,638)
Cash flows from investing activities			
Purchase of property, plant and equipment		**(110,045)**	(149,423)
Purchase of wealth management products		**(461,000)**	(1,448,200)
Addition of term deposits with initial term of over three months		**(1,203,652)**	–
Proceeds from term deposits with initial term of over three months		**464,710**	–
Proceeds from disposal of wealth management products		**490,000**	1,710,200
Proceeds from disposal of property, plant and equipment		**10**	230
Purchase of intangible assets		**(6,903)**	(11,251)
Receipt of investment income on wealth management products and term deposits		**13,155**	14,329
Receipt of asset related government grants		**15,955**	–
Proceeds from restricted cash		**–**	4,074
Payments for restricted cash		**–**	(2,334)
Net cash (used in)/generated from investing activities		**(797,770)**	117,625
Cash flows from financing activities			
Interest paid		**(8,783)**	(7,593)
Net proceeds from share issued		**1,127,770**	17,486
Proceeds from borrowings		**–**	41,667
Principal elements of lease payments		**(7,302)**	–
Payment of listing expenses		**(20,859)**	(6,505)
Net cash generated from financing activities		**1,090,826**	45,055
Net increase in cash and cash equivalents		**122,867**	39,042
Cash and cash equivalents at the beginning of the year		**57,381**	18,247
Exchange gains on cash and cash equivalents		**21,725**	92
Cash and cash equivalents at the end of the year	23	**201,973**	57,381

The notes on pages 88 to 141 form an integral part of the consolidated financial statements.

1. GENERAL INFORMATION

CanSino Biologics Inc. (the "Company") was incorporated in Tianjin of the People's Republic of China (the "PRC") on 13 January 2009 as a limited liability company by Xuefeng Yu, Tao Zhu, Dongxu Qiu, Xuan Liu and Helen Huihua Mao. The address of the Company's registered office is 401-420, 4th Floor, Biomedical Park, 185 South Avenue, TEDA West District, Tianjin, the PRC. Upon approval by the shareholders' general meeting held on 10 February 2017, 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 "Tianjin CanSino Biotechnology Inc. (天津康希諾生物技術有限公司)" to "CanSino Biologics Inc. (康希諾生物股份公司)" on 13 February 2017. The Company and its subsidiaries (collectively referred to as the "Group"), are principally engaged in the research and development, manufacturing and commercialisation of vaccine products for human use.

The Company's shares have been listed on the Main Board of The Stock Exchange of Hong Kong Limited since 28 March 2019 (the "Listing").

The consolidated financial statements are presented in Renminbi ("RMB") and rounded to nearest thousand yuan, unless otherwise stated.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

The principal accounting policies applied in the preparation of the consolidated financial statements are set out below. These policies have been consistently applied to all the years presented, unless otherwise stated.

2.1 Basis of preparation

The consolidated financial statements of the Group has been prepared in accordance with Hong Kong Financial Reporting Standards ("HKFRSs") issued by the HKICPA and the disclosure requirements of the Hong Kong Companies Ordinance. The Group has adopted HKFRS 16 "Leases". The Group elected to adopt the new rules retrospectively but recognised the cumulative effect of initially applying the new standard on 1 January 2019. This is disclosed in Note 2.3. The consolidated financial statements have been prepared under the historical cost convention, as modified by the revaluation of financial assets at fair value through profit or loss.

2.2 Use of estimates and judgement

The preparation of the consolidated financial statements in conformity with HKFRSs requires the use of certain critical accounting estimates. It also requires management to exercise its judgement in the process of applying the Group's accounting policies. The areas involving a higher degree of judgement or complexity, or areas where assumptions and estimates are significant to the consolidated financial statements are disclosed in Note 4.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

2.3 Changes in accounting policies

This note explains the impact of the adoption of HKFRS 16 Leases on the Group's financial statements.

The Group has adopted HKFRS 16 retrospectively from 1 January 2019, but has not restated comparatives for the 2018 reporting period, as permitted under the specific transitional provisions in the standard. The reclassifications and the adjustments arising from the new leasing rules are therefore recognised in the opening balance sheet on 1 January 2019.

(a) Adjustments recognised on adoption of HKFRS 16

On adoption of HKFRS 16, the Group recognised lease liabilities in relation to leases which had previously been classified as 'operating leases' under the principles of HKAS 17 Leases. These liabilities were measured at the present value of the remaining lease payments, discounted using the lessee's incremental borrowing rate as of 1 January 2019. The weighted average lessee's incremental borrowing rate applied to the lease liabilities on 1 January 2019 was 5.212%.

	Total RMB'000
Operating lease commitments disclosed as at 31 December 2018	25,853
Discounted using the lessee's incremental borrowing rate of at the date of initial application	22,614
Add: rental payable	1,621
Less: deposits as guarantee	(1,744)
Lease liability recognised as at 1 January 2019	22,491
Of which are:	
Current lease liabilities	8,845
Non-current lease liabilities	13,646
	22,491

The associated right-of-use assets for land use rights were measured on a retrospective basis as if the new rules had always been applied. Other right-of-use assets for property leases were measured at the amount equal to the lease liability, adjusted by the amount of any prepaid or accrued lease payments relating to that lease recognised in the balance sheet as at 31 December 2018. There were no onerous lease contracts that would have required an adjustment to the right-of-use assets at the date of initial application.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

2.3 Changes in accounting policies (Continued)

(a) Adjustments recognised on adoption of HKFRS 16 (Continued)

The recognised right-of-use assets relate to the following types of assets:

	As at 31 December 2019 RMB'000	As at 1 January 2019 RMB'000
Land use rights	**18,526**	18,936
Office rental	**12,764**	17,918
Motor vehicles	**1,004**	683
Office equipments	**422**	198
Total right-of-use assets	**32,716**	37,735

The change in accounting policy affected the following items in the consolidated balance sheet on 1 January 2019:

	As at 31 December 2018 RMB'000	Impact of first-time adoption of HKFRS 16 RMB'000	As at 1 January 2019 RMB'000
Right-of-use assets	–	37,735	37,735
Land use rights	18,936	(18,936)	–
Other receivables and prepayments	31,295	(2,739)	28,556
Lease liabilities	–	22,491	22,491
Other payables and accruals	98,509	(6,431)	92,078

There was no impact on retained earnings on 1 January 2019.

(i) Impact on loss per share

There was no significant impact on loss per share for the year ended 31 December 2019 as a result of the adoption of HKFRS 16.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

2.3 Changes in accounting policies (Continued)

(a) Adjustments recognised on adoption of HKFRS 16 (Continued)

(ii) Practical expedients applied

In applying HKFRS 16 for the first time, the Group has used the following practical expedients permitted by the standard:

- the use of a single discount rate to a portfolio of leases with reasonably similar characteristics
- reliance on previous assessments on whether leases are onerous
- the accounting for operating leases with a remaining lease term of less than 12 months as at 1 January 2019 as short-term leases
- the exclusion of initial direct costs for the measurement of the right-of-use asset at the date of initial application, and
- the use of hindsight in determining the lease term where the contract contains options to extend or terminate the lease.

The Group has also elected not to reassess whether a contract is, or contains a lease at the date of initial application. Instead, for contracts entered into before the transition date the Group relied on its assessment made applying HKAS 17 and HK(IFRIC) 4 *Determining whether an Arrangement contains a Lease*.

(b) The Group's leasing activities and how these are accounted for are disclosed in Note 2.26.

2.4 Subsidiaries

A subsidiary is an entity (including structured entities) over which the Group has control. The Group controls an entity when the Group is exposed to, or has rights to, variable returns from its involvement with the entity and has the ability to affect those returns through its power to direct the activities of the entity. Subsidiaries are fully consolidated from the date on which control is transferred to the Group. They are deconsolidated from the date that control ceases.

Intercompany transactions, balances and unrealised gains on transactions between group companies are eliminated. Unrealised losses are also eliminated unless the transaction provides evidence of an impairment of the transferred asset. Accounting policies of subsidiaries have been changed where necessary to ensure consistency with the policies adopted by the Group.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

2.5 Separate financial statements

Investments in subsidiaries are accounted for at cost less impairment. Cost includes direct attributable costs of investment. The results of subsidiaries are accounted for by the Company on the basis of dividend received and receivable.

Impairment testing of the investments in subsidiaries is required upon receiving a dividend from these investments if the dividend exceeds the total comprehensive income of the subsidiary in the period the dividend is declared or if the carrying amount of the investment in the separate financial statements exceeds the carrying amount in the consolidated financial statements of the investee's net assets including goodwill.

2.6 Segment reporting

Operating segments are reported in a manner consistent with the internal reporting provided to the chief operating decision-maker ("CODM"). The CODM, who is responsible for allocating resources, assessing performance of the operating segments, and has been identified as the executive directors of the Group that make strategic decisions.

2.7 Foreign currency translation

(a) Functional and presentation currency

Items included in the financial statements of each of the Group's entities are measured using the currency of the primary economic environment in which the entity operates ("the functional currency"). The consolidated financial statements are presented in RMB, which is the Company's functional and presentation currency.

(b) Transactions and balances

Foreign currency transactions are translated into the functional currency using the exchange rates at the dates of the transactions. Foreign exchange gains and losses resulting from the settlement of such transactions and from the translation of monetary assets and liabilities denominated in foreign currencies at year end exchange rates are generally recognised in profit or loss.

Foreign exchange gains and losses are presented in the statement of comprehensive income within finance income or finance costs.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

2.8 Property, plant and equipment

Property, plant and equipment are stated at historical cost less depreciation. Historical cost includes expenditure that is directly attributable to the acquisition of the items.

Subsequent costs are included in the asset's carrying amount or recognised as a separate asset, as appropriate, only when it is probable that future economic benefits associated with the item will flow to the Group and the cost of the item can be measured reliably. The carrying amount of any component accounted for as a separate asset is derecognised when replaced. All other repairs and maintenance are charged to profit or loss during the reporting year in which they are incurred.

Depreciation is calculated using the straight-line method to allocate their cost, net of their residual values, over their estimated useful lives or, in the case of leasehold improvements and certain leased plant and equipment, the shorter lease term as follows:

–	Buildings	20 years
–	Leasehold improvements	2-10 years
–	Equipment and instruments	5-10 years
–	Motor vehicles	4 years
–	Office equipment and furniture	3-5 years

The assets' residual values and useful lives are reviewed, and adjusted if appropriate, at the end of each reporting year.

An asset's carrying amount is written down immediately to its recoverable amount if the asset's carrying amount is greater than its estimated recoverable amount.

Gains and losses on disposals are determined by comparing the proceeds with the carrying amount and are recognised within "Other (losses)/gains – net" in the statement of comprehensive income.

2.9 Intangible assets

(a) Computer software

Acquired computer software licenses are capitalised on the basis of the costs incurred to acquire and bring the specific software into usage. These costs are amortised using the straight-line method over their estimated useful lives of 2 years. Costs associated with maintaining computer software programs are recognised as expense as incurred.

(b) Non-proprietary technologies

Non-proprietary technologies are initially recorded at cost and are amortised on a straight-line basis over their useful lives of 5 years.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

2.9 Intangible assets (Continued)

(c) Research and development

The Group incurs significant costs and efforts on research and development activities, which include expenditures on vaccine products. Research expenditures are charged to the profit or loss as an expense in the year the expenditure is incurred. Development costs are recognised as assets if they can be directly attributable to a newly developed vaccine product and all the following can be demonstrated:

(i) The technical feasibility to complete the development project so that it will be available for use or sale;

(ii) The intention to complete the development project to use or sell the vaccine product;

(iii) The ability to use or sell the vaccine product;

(iv) The manner in which the development project will generate probable future economic benefits for the Group;

(v) The availability of adequate technical, financial and other resources to complete the development project and use or sell the vaccine product; and

(vi) The expenditure attributable to the asset during its development can be reliably measured.

The Group recognise development costs as follows:

For class I biological products (biological products that have not been previously approved for sale in China or abroad), development stage begins after obtaining new drug application approval from drug regulatory organization. Development costs at this stage are recognised as assets when the above six criteria are met.

For non-class I biological products, development stage begins after clinical trials are conducted substantially. Development costs at this stage are recognised as assets when the above six criteria are met.

Development expenditures not satisfying the above criteria are recognised in the profit or loss as incurred.

Capitalised development costs are amortised using the straight-line method over the life of the related vaccine product. Amortisation shall begin when the asset is available for use.

2.10 Impairment of non-financial assets

Intangible assets not ready for use are not subject to amortisation and are tested annually for impairment, or more frequently if events or changes in circumstances indicate that they might be impaired. Other assets are tested for impairment whenever events or changes in circumstances indicate that the carrying amount may not be recoverable. An impairment loss is recognised for the amount by which the asset's carrying amount exceeds its recoverable amount. The recoverable amount is the higher of an asset's fair value less costs of disposal and value in use. For the purposes of assessing impairment, assets are grouped at the lowest levels for which there are separately identifiable cash inflows which are largely independent of the cash inflows from other assets or groups of assets (cash-generating units). Non-financial assets other than goodwill that suffered an impairment are reviewed for possible reversal of the impairment at the end of each reporting year.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

2.11 Financial assets and financial liabilities

(a) Initial recognition

Financial assets and financial liabilities are recognised when the entity becomes a party to the contractual provisions of the instrument. Regular way purchases and sales of financial assets are recognised on trade-date, the date on which the Group commits to purchase or sell the asset.

At initial recognition, the Group measures a financial asset or financial liability at its fair value plus or minus, in the case of a financial asset or financial liability not at fair value through profit or loss, transaction costs that are incremental and directly attributable to the acquisition or issue of the financial asset or financial liability, such as fees and commissions. Transaction costs of financial assets and financial liabilities carried at fair value through profit or loss are expensed in profit or loss. Immediately after initial recognition, an expected credit loss allowance (ECL) is recognised for financial assets measured at amortised cost and investments in debt instruments measured at fair value through other comprehensive income, which results in an accounting loss being recognised in profit or loss.

(b) Classification and subsequent measurement

Financial assets

The Group classifies its financial assets in the following measurement categories:

(i) amortised cost;

(ii) fair value through other comprehensive income; or

(iii) fair value through profit or loss.

The classification requirements for debt and equity instruments are described below:

Debt instruments

Classification and subsequent measurement of debt instruments depend on the Group's business model for managing the asset and the cash flow characteristics of the asset.

A debt instrument shall be measured at amortised cost if all of the following conditions are met:

(i) the financial asset is held within a business model whose objective is to hold financial assets in order to collect contractual cash flows;

(ii) the contractual terms of the financial asset give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding; and

(iii) they are not designated at financial assets at fair value through profit or loss.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

2.11 Financial assets and financial liabilities (Continued)

(b) Classification and subsequent measurement (Continued)

Debt instruments (Continued)

The carrying amount of these assets is adjusted by any expected credit loss allowance. Interest income from these financial assets is measured using the effective interest rate method.

A debt instrument shall be measured at fair value through other comprehensive income if all of the following conditions are met:

(i) the financial asset is held within a business model whose objective is achieved by both collecting contractual cash flows and selling financial assets;

(ii) the contractual terms of the financial asset give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding; and

(iii) they are not designated at fair value through profit or loss.

When the financial asset measured at fair value through other comprehensive income is derecognised, the cumulative gain or loss previously recognised in other comprehensive income is reclassified from equity to profit or loss. Interest income from these financial assets is measured using the effective interest rate method and recognised in profit or loss.

A debt instrument shall be measured at fair value through profit or loss unless it is measured at amortised cost or at fair value through other comprehensive income.

Financial assets with embedded derivatives are considered in their entirety when determining whether their cash flows are solely payment of principal and interest.

The Group reclassifies debt investments when and only when its business model for managing those assets changes. The reclassification takes place from the start of the first reporting year following the change.

The Group may also irrevocably designate financial assets at fair value through profit or loss if doing so significantly reduces or eliminates a mismatch created by assets and liabilities being measured on different bases.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

2.11 Financial assets and financial liabilities (Continued)

(b) Classification and subsequent measurement (Continued)

Equity instruments

The Group subsequently measures all equity investments at fair value through profit or loss, except where the Group's management has elected, at initial recognition, to irrevocably designate an equity investment at fair value through other comprehensive income.

At initial recognition, the Group may make an irrevocable election to present in other comprehensive income subsequent changes in the fair value of an investment in an equity instrument that is neither held for trading nor contingent consideration recognised by an acquirer in a business combination.

When this election is used, fair value gains and losses are recognised in other comprehensive income and are not subsequently reclassified to profit or loss, including on disposal. Dividends from these investments are recognised in profit or loss. Impairment losses (and reversal of impairment losses) are not reported separately from other changes in fair value. Dividends, when representing a return on such investments, continue to be recognised in profit or loss as other income when the Group's right to receive payments is established.

Gains and losses on equity investments at fair value through profit or loss are included in the profit or loss.

Financial liabilities

In both the current and prior year, financial liabilities are classified as subsequently measured at amortised cost, except for:

(i) Financial liabilities at fair value through profit or loss. Such liabilities, including derivatives, and financial liabilities designated as fair value through profit or loss. The Group shall present a gain or loss on those financial liabilities designated as at fair value through profit or loss as follows: the amount of change in the fair value of the financial liability that is attributable to changes in the credit risk of that liability shall be presented in other comprehensive income, and the remaining amount of change in the fair value of the liability shall be presented in profit or loss unless the treatment of the effects of changes in the liability's credit risk would create or enlarge an accounting mismatch in profit or loss.

(ii) Financial liabilities arising from the transfer of financial assets which did not qualify for derecognition or when the continuing involvement approach applies. When the transfer of financial asset did not qualify for derecognition, a financial liability is recognised for the consideration received for the transfer. In subsequent periods, the Group recognises any expense incurred on the financial liability.

(iii) Financial guarantee that is not categorised in item (i) and (ii) above, and loan commitment at a below-market interest rate and not categorised in item (i) above.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

2.11 Financial assets and financial liabilities (Continued)

(c) Derecognition

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 balance sheet) when:

(i) the rights to receive cash flows from the asset have expired; or

(ii) 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.

Derecognition of financial liabilities

A financial liability is derecognised when the obligation under the liability is discharged 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.

(d) Impairment

The Group assesses on a forward-looking basis the ECL associated with its debt instrument assets carried at amortised cost, and at fair value through other comprehensive income, receivables, contractual assets and with the exposure arising from loan commitments and financial guarantee contracts. The Group recognises a loss allowance for such losses at each reporting date.

At each reporting date, the Group shall assess whether the credit risk on a financial instrument has increased significantly since initial recognition.

The measurement of ECL reflects: An unbiased and probability-weighted amount that is determined by evaluating a range of possible outcomes; the time value of money; and reasonable and supportable information that is available without undue cost or effort at the reporting date about past events, current conditions and forecasts of future economic conditions.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

2.12 Offsetting financial instruments

Financial assets and liabilities are offset and the net amount reported in the consolidated balance sheets when there is a legally enforceable right to offset the recognised amounts and there is an intention to settle on a net basis or realise the asset and settle the liability simultaneously. The legally enforceable right must not be contingent on future events and must be enforceable in the normal course of business and in the event of default, insolvency or bankruptcy of the Group or the counterparty.

2.13 Inventories

Inventories including finished goods, raw materials and consumable materials purchased for pilot production, research and development activities are stated at the lower of cost and net realisable value. Costs are assigned to individual items of inventory on the basis of weighted average costs. Cost comprises direct materials, direct labour and an appropriate proportion of variable and fixed overhead expenditure, the latter being allocated on the basis of normal operating capacity. Costs of purchased inventory are determined after deducting rebates and discounts. Net realisable value is the estimated selling price in the ordinary course of business less the estimated costs of completion and the estimated costs necessary to make the sale.

2.14 Trade and other receivables

Trade receivables are amounts due from customers for merchandise sold or services performed in the ordinary course of business. If collection of trade and other receivables is expected in one year or less (or in the normal operating cycle of the business if longer), they are classified as current assets. If not, they are presented as non-current assets.

Trade and other receivables are recognised initially at fair value and subsequently measured at amortised cost using the effective interest method, less allowance for impairment.

2.15 Cash and cash equivalents

For the purpose of presentation in the statement of cash flows, cash and cash equivalents includes cash on hand, deposits held at call with financial institutions, other short-term, highly liquid investments with original maturities of three months or less that are readily convertible to known amounts of cash and which are subject to an insignificant risk of changes in value, and bank overdrafts. Bank overdrafts are shown within borrowings in current liabilities in the balance sheet.

2.16 Share capital

Ordinary shares are classified as equity.

Incremental costs directly attributable to the issue of new shares or options are shown in equity as a deduction, net of tax, from the proceeds.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

2.17 Trade and other payables

These amounts represent liabilities for goods and services provided to the Group prior to the end of financial year which are unpaid. Trade and other payables are presented as current liabilities unless payment is not due within 12 months after the reporting year. They are recognised initially at their fair value and subsequently measured at amortised cost using the effective interest method.

2.18 Borrowings

Borrowings are initially recognised at fair value, net of transaction costs incurred. Borrowings are subsequently measured at amortised cost. Any difference between the proceeds (net of transaction costs) and the redemption amount is recognised in profit or loss over the period of the borrowings using the effective interest method. Fees paid on the establishment of loan facilities are recognised as transaction costs of the loan to the extent that it is probable that some or all of the facility will be drawn down. In this case, the fee is deferred until the draw down occurs. To the extent there is no evidence that it is probable that some or all of the facility will be drawn down, the fee is capitalised as a prepayment for liquidity services and amortised over the period of the facility to which it relates.

Borrowings are removed from the balance sheet when the obligation specified in the contract is discharged, cancelled or expired. The difference between the carrying amount of a financial liability that has been extinguished or transferred to another party and the consideration paid, including any non-cash assets transferred or liabilities assumed, is recognised in profit or loss as other income or finance costs.

Borrowings are classified as current liabilities unless the Group has an unconditional right to defer settlement of the liability for at least 12 months after the end of the reporting period.

2.19 Borrowing costs

General and specific borrowing costs that are directly attributable to the acquisition, construction or production of a qualifying asset are capitalised during the period of time that is required to complete and prepare the asset for its intended use or sale. Qualifying assets are assets that necessarily take a substantial period of time to get 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 eligible for capitalisation.

Other borrowing costs are expensed in the period in which they are incurred.

2.20 Current and deferred income tax

The income tax expense or credit for the period is the tax payable on the current period's taxable income based on the applicable income tax rate for each jurisdiction adjusted by changes in deferred tax assets and liabilities attributable to temporary differences and to unused tax losses.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

2.20 Current and deferred income tax (Continued)

(a) Current income tax

The current income tax charge is calculated on the basis of the tax laws enacted or substantively enacted at the end of the reporting period in the countries where the Company and its subsidiaries operate and generate taxable income. Management periodically evaluates positions taken in tax returns with respect to situations in which applicable tax regulation is subject to interpretation. It establishes provisions where appropriate on the basis of amounts expected to be paid to the tax authorities.

(b) Deferred income tax

Deferred income tax is provided in full, using the liability method, on temporary differences arising between the tax bases of assets and liabilities and their carrying amounts in the consolidated financial statements. However, deferred tax liabilities are not recognised if they arise from the initial recognition of goodwill. Deferred income tax is also not accounted for if it arises from initial recognition of an asset or liability in a transaction other than a business combination that at the time of the transaction affects neither accounting nor taxable profit or loss. Deferred income tax is determined using tax rates (and laws) that have been enacted or substantially enacted by the end of the reporting period and are expected to apply when the related deferred income tax asset is realised or the deferred income tax liability is settled.

Deferred tax assets are recognised only if it is probable that future taxable amounts will be available to utilise those temporary differences and losses.

Deferred tax liabilities and assets are not recognised for temporary differences between the carrying amount and tax bases of investments in foreign operations where the Group is able to control the timing of the reversal of the temporary differences and it is probable that the differences will not reverse in the foreseeable future.

Deferred tax assets and liabilities are offset when there is a legally enforceable right to offset current tax assets and liabilities and when the deferred tax balances relate to the same taxation authority. Current tax assets and tax liabilities are offset where the entity has a legally enforceable right to offset and intends either to settle on a net basis, or to realise the asset and settle the liability simultaneously.

Current and deferred tax is recognised in profit or loss, except to the extent that it relates to items recognised in other comprehensive income or directly in equity. In this case, the tax is also recognised in other comprehensive income or directly in equity, respectively.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

2.21 Employee benefits

(a) Short-term obligations

Liabilities for wages and salaries, including non-monetary benefits and accumulating sick leave that are expected to be settled wholly within 12 months after the end of the period in which the employees render the related service are recognised in respect of employees' services up to the end of the reporting period and are measured at the amounts expected to be paid when the liabilities are settled. The liabilities are presented as current employee benefit obligations in the balance sheet.

(b) Post-employment obligations

The Group incorporated in the PRC contributes based on certain percentage of the salaries of the employees to a defined contribution retirement benefit plan organised by relevant government authorities in the PRC on a monthly basis. The government authorities undertake to assume the retirement benefit obligations payable to all existing and further retired employees under these plans and the Group has no further obligation for post-retirement benefits beyond the contributions made. Contributions to these plans are expensed as incurred. Assets of the plans are held and managed by government authorities and are separate from those of the Group.

2.22 Interest income

Interest income from financial assets at fair value through profit or loss is included in profit or loss as part of other income, and the net fair value gains/(losses) on these assets is included in other gains, see Note 10 below.

Interest income on financial assets at amortised cost calculated using the effective interest method is recognised in profit or loss as part of other income.

Interest income is presented as finance income where it is earned from term deposits and financial assets that are held for cash management purposes, see Note 11 below. Any other interest income is included in other income.

Interest income is calculated by applying the effective interest rate to the gross carrying amount of a financial asset except for financial assets that subsequently become credit-impaired. For credit-impaired financial assets the effective interest rate is applied to the net carrying amount of the financial asset (after deduction of the loss allowance).

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

2.23 Share-based payments

Share-based compensation benefits are provided to employees via the Employee Share Plans. Information relating to these schemes is set out in Note 25.

The fair value of awarded shares granted to employees under Employee Share Plans less amount paid by employees is recognised as an employee benefits expense over the relevant service period, being the vesting period of the shares, and the credit is recognised in equity in the share-based compensation reserve. The fair value of the shares is measured at the grant date. The number of shares expected to vest is estimated based on the non-market vesting conditions. The estimates are revised at the end of each reporting period and adjustments are recognised in profit or loss and the share-based compensation reserve. Where shares are forfeited due to a failure by the employee to satisfy the service conditions, any expenses previously recognised in relation to such shares are reversed effective the date of the forfeiture.

2.24 Revenue recognition

Revenues are recognised when, or as, the control of the goods or services is transferred to the customer.

(a) Revenue from vaccine products and other goods are recognised when control of the goods are transferred, being when the goods are delivered to the customers, and the customers have accepted the goods in accordance with the sales contracts, or the Group has objective evidence that all criteria for acceptance have been satisfied.

(b) Research and development services

Control of the research and technology services is transferred over time if the Group's performance:

- provides all of the benefits received and consumed simultaneously by the customer;
- creates and enhances an asset that the customer controls as the Group performs; or
- does not create an asset with an alternative use to the Group and the Group has an enforceable right to payment for performance completed to date.

Otherwise, revenue is recognised at a point in time.

2.25 Government grants

Grants from the government are recognised at their fair value where there is a reasonable assurance that the grant will be received and the Group will comply with all attached conditions.

Where the grants relates to an expense item, it is recognised as income on a systematic basis over the period that the costs, which it is intended to compensate, are expensed. Where the grants relates to an asset, the fair value is credited to a deferred income account and is released to the statement of comprehensive income over the expected useful life of the relevant asset on straight-line basis or deducted from the carrying amount of the asset and released to the statement of comprehensive income by way of a reduced depreciation charge.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

2.26 Leases

As explained in Note 2.3 above, The Group has changed its accounting policy for leases where the Group is the lessee. The new policy is described below and the impact of the change in Note 2.3.

Until 31 December 2018, leases of properties, motor vehicles and office equipments where the Group, as lessee, had substantially all the risks and rewards of ownership were classified as finance leases. Finance leases were capitalised at the lease's inception at the fair value of the leased property or, if lower, the present value of the minimum lease payments. The corresponding rental obligations, net of finance charges, were included in other short-term and long-term payables. Each lease payment was allocated between the liability and finance cost. The finance cost was charged to profit or loss over the lease period so as to produce a constant periodic rate of interest on the remaining balance of the liability for each period. The property, plant and equipment acquired under finance leases was depreciated over the asset's useful life or over the shorter of the asset's useful life and the lease term if there is no reasonable certainty that the Group will obtain ownership at the end of the lease term.

Leases in which a significant portion of the risks and rewards of ownership are not transferred to the Group as lessee are classified as operating leases. Payments made under operating leases (net of any incentives received from the lessor) are charged to profit or loss on a straight-line basis over the period of the lease.

From 1 January 2019, leases are recognised as a right-of-use asset and a corresponding liability at the date at which the leased asset is available for use by the Group.

Contracts may contain both lease and non-lease components. The Group allocates the consideration in the contract to the lease and non-lease components based on their relative stand-alone prices. However, for leases of real estate for which the Group is a lessee, it has elected not to separate lease and non-lease components and instead accounts for these as a single lease component.

Assets and liabilities arising from a lease are initially measured on a present value basis. Lease liabilities include the net present value of the following lease payments:

- fixed payments (including in-substance fixed payments), less any lease incentives receivable
- variable lease payment that are based on an index or a rate, initially measured using the index or rate as at the commencement date
- amounts expected to be payable by the Group under residual value guarantees
- the exercise price of a purchase option if the Group is reasonably certain to exercise that option, and
- payments of penalties for terminating the lease, if the lease term reflects the Group exercising that option.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

2.26 Leases (Continued)

Lease payments to be made under reasonably certain extension options are also included in the measurement of the liability.

The lease payments are discounted using the interest rate implicit in the lease. If that rate cannot be readily determined, which is generally the case for leases in the Group, the lessee's incremental borrowing rate is used, being the rate that the individual lessee would have to pay to borrow the funds necessary to obtain an asset of similar value to the right-of-use asset in a similar economic environment with similar terms, security and conditions.

To determine the incremental borrowing rate, the Group:

- where possible, uses recent third-party financing received by the individual lessee as a starting point,adjusted to reflect changes in financing conditions since third party financing was received.

Lease payments are allocated between principal and finance cost. The finance cost is charged to profit or loss over the lease period so as to produce a constant periodic rate of interest on the remaining balance of the liability for each period.

Right-of-use assets are measured at cost comprising the following:

- the amount of the initial measurement of lease liability;
- any lease payments made at or before the commencement date less any lease incentives received; and
- any initial direct costs.

Right-of-use assets are generally depreciated over the shorter of the asset's useful life and the lease term on a straight-line basis. If the Group is reasonably certain to exercise a purchase option, the right-of-use asset is depreciated over the underlying asset's useful life. While the Group revalues its land and buildings that are presented within property, plant and equipment, it has chosen not to do so for the right-of-use buildings held by the Group.

Payments associated with short-term leases and all leases of low-value assets are recognised on a straight-line basis as an expense in profit or loss. Short-term leases are leases with a lease term of 12 months or less.

2.27 New standards not early adopted by the Group

The following new standards, amendments and interpretations to existing standards which have been issued but not yet effective on 1 January 2019 are applicable to the Group and have not been early adopted by the Group:

		Effective for annual periods beginning on or after
Amendments to HKAS 1 and HKAS 8	Definition of material	1 January 2020
Amendment to HKFRS 3	Definition of a business	1 January 2020
Revised Conceptual Framework for Financial Reporting	Revised Conceptual Framework for Financial Reporting	1 January 2020
HKFRS 17	Insurance contracts	1 January 2021

3. FINANCIAL RISK MANAGEMENT

3.1 Financial risk factors

The Group's risk management is carried out by the finance department under policies approved by the board of directors. The department identifies, evaluates and hedges financial risks in close co-operation with the Group's operating units. The board provides written principles for overall risk management, as well as policies covering specific areas, such as foreign exchange risk, interest rate risk, credit risk, use of derivative financial instruments and non-derivative financial instruments, and investment of excess liquidity.

(a) Market risk

(i) Foreign exchange risk

Foreign currency risk is the risk that the value of a financial instrument fluctuates because of the change in foreign exchange rates.

The Group mainly operates in the PRC with most of the transactions settled in RMB. The Group is not exposed to foreign exchange risk as there are no significant financial assets or liabilities of the Group denominated in the currencies other than the functional currency, except for the cash and term deposits at bank in USD and HKD which were primarily received from the investors as capital contributions as mentioned in Note 22 and 23.

As at 31 December 2019, if RMB strengthened or weaken by 10% against USD with all other variables held constant, loss for the year ended 31 December 2019 would increase or decrease by RMB623,000 (2018: RMB334,000).

As at 31 December 2019, if RMB strengthened or weaken by 10% against HKD with all other variables held constant, loss for the year ended 31 December 2019 would increase or decrease by RMB45,102,000 (2018: nil).

(ii) Cash flow and fair value interest rate risk

The Group is exposed to interest rate risk primarily in relation to cash and cash equivalents, term deposits, wealth management products and borrowings. The Group generally assumes borrowings to fund capital expenditures and working capital requirements. The risk is mainly managed by the Group by maintaining an appropriate mix between fixed and floating rate borrowings.

The Group's exposures to interest rates on financial assets and financial liabilities are detailed in the liquidity risk management section of this note. An analysis of borrowings by maturities is provided in Note 28.

During the years ended 31 December 2019 and 2018, all the interests have been capitalised. Assuming that there was no interest capitalisation effect, the Group performs a sensitivity analysis below which has been determined based on the exposure to interest rates for financial assets and financial liabilities at the end of the reporting period. For floating rate liabilities, the analysis is prepared assuming the amount of the liability outstanding at the end of the reporting period was outstanding for the whole year.

A 50 basis point increase or decrease represents management's assessment of the reasonably possible change in interest rates. If interest rates had been 50 basis points higher and all other variables were held constant, the Group's loss would approximately increase by RMB750,000 for the year ended 31 December 2019 (2018: RMB750,000).

3. FINANCIAL RISK MANAGEMENT (CONTINUED)

3.1 Financial risk factors (Continued)

(b) Credit risk

Credit risk mainly arises from term deposits, bank balance, financial assets at amortised cost, financial assets at fair value through profit or loss, trade and other receivables. The maximum exposure to credit risk is represented by the carrying amount of each financial asset in the consolidated balance sheet.

The credit risk of financial assets at amortised cost, financial assets at fair value through profit or loss, term deposits and bank balance is limited because the counterparties are state-owned or reputable commercial banks which are high-credit-quality financial institutions located in the PRC.

For trade and other receivables, management makes periodic assessments as well as individual assessment on the recoverability based on historical settlement records and past experience and adjusts for forward looking information. The Group applies the simplified approach for the Group's trade receivables using a lifetime expected loss provision. As at 31 December 2019, the Group had no balance in respect of trade receivables (31 December 2018: nil). Thus no loss allowance provision for trade receivables was recognised during the year ended 31 December 2019 (2018: nil).

Management has assessed that during the year ended 31 December 2019, other receivables have not had a significant increase in credit risk since initial recognition. Thus, a 12-month expected credit loss approach that results from possible default event within 12 months of each reporting date is adopted by management. The directors of the Company do not expect any losses from non-performance by the counterparties of other receivables and no loss allowance provision for other receivables was recognised.

(c) Liquidity risk

The Group aims to maintain sufficient cash to meet operating capital requirements.

The table below analyses the Group's financial liabilities into relevant maturity groupings based on the remaining period at the balance sheet date to the contractual maturity date. The amounts disclosed in the table are the contractual undiscounted cash flows.

	Less than 1 year RMB'000	Between 1 and 2 years RMB'000	Between 2 and 5 years RMB'000	Over 5 years RMB'000	Total RMB'000
As at 31 December 2019					
Trade payables	**6,171**	**–**	**–**	**–**	**6,171**
Other payables	**60,056**	**–**	**–**	**–**	**60,056**
Borrowings	**27,496**	**45,674**	**92,237**	**–**	**165,407**
Lease liabilities	**9,403**	**4,793**	**3,332**	**–**	**17,528**
Total	**103,126**	**50,467**	**95,569**	**–**	**249,162**
As at 31 December 2018					
Trade payables	6,651	–	–	–	6,651
Other payables	84,748	–	–	–	84,748
Borrowings	7,838	27,271	138,005	–	173,114
Total	99,237	27,271	138,005	–	264,513

3. FINANCIAL RISK MANAGEMENT (CONTINUED)

3.2 Capital management

The Group's objectives when managing capital are to safeguard the Group's ability to continue as a going concern in order to provide returns for shareholders and benefits for other stakeholders and to maintain an optimal capital structure to reduce the cost of capital.

The Group monitors capital on the basis of the gearing ratio. This ratio is calculated as net debt divided by total capital. Net debt is calculated as total borrowings less "cash and cash equivalents". Total capital is calculated as "equity" as shown in the consolidated balance sheet plus net debt.

The gearing ratio as at 31 December 2019 and 2018 are as follows:

	As at 31 December	
	2019	2018
Gearing ratio	**NA**	16%

As at 31 December 2019, the Group was in a net cash position and thus, gearing ratio is not applicable.

3.3 Fair value estimation

The carrying amounts of the Group's financial assets and liabilities, including cash and cash equivalents, financial assets at amortised cost, financial assets at fair value through profit or loss, term deposits with initial term of over three months, other receivables, trade and other payables approximate their fair values. The fair value of financial liabilities for disclosure purpose is estimated by discounting the future contractual cash flows at the market interest rate available to the Group for similar financial instruments.

The table below analyses the Group's financial instruments carried at fair value as at 31 December 2019 and 2018 by level of the inputs to valuation techniques used to measure fair value. Such inputs are categorised into three levels within a fair value hierarchy as follows:

(i) Quoted prices (unadjusted) in active markets for identical assets or liabilities (level 1).

(ii) Inputs other than quoted prices included within level 1 that are observable for the asset or liability, either directly (that is, as prices) or indirectly (that is, derived from prices) (level 2).

(iii) Inputs for the asset or liability that are not based on observable market data (that is, unobservable inputs) (level 3).

3. FINANCIAL RISK MANAGEMENT (CONTINUED)

3.3 Fair value estimation (Continued)

The following table presents the Group's assets that are measured at fair value at 31 December 2019 and 2018.

	Level 1 RMB'000	Level 2 RMB'000	Level 3 RMB'000	Total RMB'000
As at 31 December 2019				
Financial assets at fair value through profit or loss				
– Wealth management products with floating rates	**–**	**–**	**111,526**	**111,526**

	Level 1 RMB'000	Level 2 RMB'000	Level 3 RMB'000	Total RMB'000
As at 31 December 2018				
Financial assets at fair value through profit of loss				
– Wealth management products with floating rates	–	–	–	–

There were no transfers between levels 1, 2 and 3 during the years.

(a) Financial instruments in Level 3

The following table presents the changes in level 3 instruments for the year ended 31 December 2019 and 2018, respectively.

	Wealth management products with floating rates	
	Year ended 31 December	
	2019 RMB'000	2018 RMB'000
Opening balance	**–**	132,636
Additions	**326,000**	309,200
Settlements	**(216,266)**	(444,487)
Gain and losses recognised in profit or loss	**1,792**	2,651
Closing balance	**111,526**	–
Total gains or losses for the year included in "other income"	**1,266**	2,651
Changes in unrealised gains or losses for the year included in "other gains" at the end of the year	**526**	–

3. FINANCIAL RISK MANAGEMENT (CONTINUED)

3.3 Fair value estimation (Continued)

(b) Valuation process, inputs and relationship to fair value

The finance department of the Group performs the valuation of level 3 financial instruments for financial reporting purposes. It manages the valuation exercise of the investments on a case by case basis. At least once a year, the finance department would use valuation techniques to determine the fair value of the Group's level 3 instruments.

The valuation of the level 3 instruments mainly include financial assets at fair value through profit or loss. The following table summarises the quantitative information about the significant unobservable inputs used in the recurring level 3 fair value measurements.

Description	Fair value as at 31 December		Unobservable Inputs	Range as at 31 December		Relationship of unobservable input to fair value
	2019 RMB'000	2018 RMB'000		2019	2018	
Financial assets at fair value through profit or loss	111,526	–	Expected rate of return	3.75%-3.85%	–	The higher the expected rate of return, the higher the fair value

If the unobservable inputs, the expected return, is 50 basis points higher/lower, the loss before income tax for the year ended 31 December 2019 would approximately decrease/increase by RMB241,000 (2018: nil).

4. CRITICAL ACCOUNTING ESTIMATES AND JUDGEMENTS

The preparation of financial statements requires the use of accounting estimates which, by definition, will seldom equal the actual results. Management also needs to exercise judgement in applying the Group's accounting policies.

Estimates and judgements are continually evaluated. They are based on historical experience and other factors, including expectations of future events that may have a financial impact on the entity and that are believed to be reasonable under the circumstances.

(a) Intangible assets not available for use

(i) Capitalisation

Clinical trial expenses incurred on development projects are recognised as intangible assets when it is probable that the projects will be successful considering the criteria set out in Note 2.9. The Group's development activities are tracked by its finance department which combines the evidence from research and development and clinical department and documents to support the basis of determining if and when the criteria are met.

4. CRITICAL ACCOUNTING ESTIMATES AND JUDGEMENTS (CONTINUED)

(a) Intangible assets not available for use (Continued)

(ii) Impairment

The Group is required to test intangible development assets 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 its recoverable amount. The recoverable amount is determined based on the higher of fair value less cost to sell and value in use.

Determination of the value in use is an area involving management judgement in order to assess whether the carrying value of the intangible development 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 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.

(b) Recognition of share-based compensation expenses

As mentioned in Note 25, equity-settled share-based compensation plans were granted to the employees. The directors have used the discounted cash flow method to determine the total fair value of the awarded shares granted to employees, which is to be expensed over the vesting period. Significant estimate on assumptions, such as the discount rate, risk-free interests rate and liquidity discount, is required to be made by the directors in applying the discounted cash flow method.

(c) Current and deferred income taxes

There are many transactions and events for which the ultimate tax determination is uncertain during the ordinary course of business. Significant judgment is required from the Group in determining the provision for income taxes. Where the final tax outcome of these matters is different from the amounts that were initially recorded, such differences will impact the income tax and deferred tax provisions in the period in which such determination is made.

The Group recognises deferred tax assets based on estimates that it is probable to generate sufficient taxable profits in the foreseeable future against which the deductible temporary differences will be utilised. The recognition of deferred tax assets mainly involved management's judgments and estimations about the timing and the amount of taxable profits of the companies who had tax losses. During the year, deferred tax assets have not been recognised in respect of these accumulated tax losses and other deductible temporary differences based on the fact that there were several vaccine candidates of the Company and most of them were in earlier research and development stage, the future taxable profits would be uncertain.

5. SEGMENT

Management has determined the operating segments based on the reports reviewed by CODM. The CODM, who is responsible for allocating resources and assessing performance of the operating segment, has been identified as the executive directors of the Group.

The Group is principally engaged in the research and development of vaccine products for human use. Management reviews the operating results of the business as one operating segment to make decisions about resources to be allocated. Therefore, the CODM of the Company regards that there is only one segment which is used to make strategic decisions.

The major operating entity of the Group is domiciled in the PRC. Accordingly, the Group's results were primarily derived in the PRC.

As at 31 December 2019 and 2018, the Group's assets were mainly located in the PRC.

6. REVENUE

	Year ended 31 December	
	2019	2018
	RMB'000	RMB'000
Revenue from research and development service		
– at a point in time	**–**	1,132

The Group recognised the following liabilities related to contracts with customers:

	Year ended 31 December	
	2019	2018
	RMB'000	RMB'000
Contract liabilities – technical services	**578**	–

As at 31 December 2019, aggregate amount of the transaction price allocated to contracts that are partially or fully unsatisfied was RMB1,591,000 (31 December 2018: nil), which management expects will be recognised as revenue during the next reporting period.

7. OTHER INCOME

	Year ended 31 December	
	2019	2018
	RMB'000	RMB'000
Investment income on wealth management products	**3,388**	12,438
Government grants	**13,460**	5,842
Net income from vaccine components	**2,136**	1,438
Others	**16**	244
	19,000	19,962

8. EXPENSES BY NATURE

	Year ended 31 December	
	2019	2018
	RMB'000	RMB'000
Changes in inventories of finished goods	**(229)**	–
Employee benefits expenses (Note 9)	**116,684**	76,433
Listing expenses	**14,886**	16,391
Depreciation and amortisation	**22,473**	12,019
Raw materials and consumables used	**26,681**	22,940
Utilities and office expenses	**9,530**	7,643
Consulting fee	**5,327**	2,338
Travelling and transportation expenses	**5,613**	3,776
Business tax and other transaction taxes	**2,955**	2,171
Testing fee	**10,628**	6,171
Auditors' remuneration		
– Audit services	**775**	150
– Other services	**376**	31
Operating lease rental expenses	**–**	5,960
Impairment losses on inventories	**241**	–
Others	**4,121**	3,854
	220,061	159,877

Note:

For the year ended 31 December 2019, expense relating to short-term leases of RMB451,000, primarily the rentals for employee apartments, was included in employee benefits expenses.

The vice president in charge of sales department joined the Group in March 2019, and the Group initiated preliminary market research and promotion for the commercialisation of vaccine products.

9. EMPLOYEE BENEFITS EXPENSES

	Year ended 31 December	
	2019	2018
	RMB'000	RMB'000
Wages, salaries and bonuses	**73,334**	47,484
Share-based compensation expenses	**21,518**	15,780
Social security costs and housing benefits	**14,021**	8,754
Other employee benefits	**7,811**	4,415
	116,684	76,433

The employees of the Group in the PRC are members of a state-managed pension scheme operated by the PRC Government. The Group is required to contribute a specified percentage of payroll costs as determined by local government authority to the pension obligations to fund the benefits. The only obligation of the Group with respect to the retirement benefits scheme is to make the specified contribution under the scheme.

(a) Employee benefit expenses by nature

Employee benefit expenses were charged in the following categories:

	Year ended 31 December	
	2019	2018
	RMB'000	RMB'000
Research and development expenses	**87,457**	60,411
Administrative expenses	**25,074**	16,022
Selling expenses	**3,969**	–
Manufacturing costs	**184**	–
	116,684	76,433

9. EMPLOYEE BENEFITS EXPENSES (CONTINUED)

(b) Five highest paid individuals

For the years ended 31 December 2019, the five individuals whose emoluments were the highest in the Group include 1 director (2018: 2), whose emoluments are reflected in the analysis presented in Note 36. The emoluments payable to the remaining individuals were as follows:

	Year ended 31 December	
	2019	2018
	RMB'000	RMB'000
Salaries	**3,007**	1,356
Discretionary bonuses	**1,487**	585
Share-based compensation expenses (Note 25)	**9,269**	2,904
Social security costs, housing benefits and other employee benefits	**189**	121
	13,952	4,966

The remaining highest paid individuals fell within the following bands:

	Year ended 31 December	
	2019	2018
Emolument bands		
HK$1,500,001 – HK$ 2,000,000	**–**	1
HK$2,000,001 – HK$ 2,500,000	**–**	2
HK$2,500,001 – HK$ 3,000,000	**1**	–
HK$3,000,001 – HK$ 3,500,000	**1**	–
HK$3,500,001 – HK$ 4,000,000	**1**	–
HK$6,000,001 – HK$ 6,500,000	**1**	–
	4	3

During the year ended 31 December 2019, no emoluments have been paid to the five highest individuals of the Group as an inducement to join or upon joining the Group or as compensation for loss of office (2018: nil).

10. OTHER GAINS – NET

	Year ended 31 December	
	2019	2018
	RMB'000	RMB'000
(Losses)/gains on disposal of property, plant and equipment	**(16)**	105
Net fair value gains on financial assets at fair value through profit or loss	**526**	–
Others	**306**	100
	816	205

11. FINANCE INCOME – NET

	Year ended 31 December	
	2019	2018
	RMB'000	RMB'000
Finance income		
Interest income on bank deposits	**21,847**	205
Exchange gains on foreign currency deposits	**21,725**	92
	43,572	297
Finance costs		
Interest expenses on bank borrowings	**(7,947)**	(7,662)
Interest paid/payable for lease liabilities	**(942)**	–
Less: borrowing costs capitalised in qualifying assets (Note 15)	**8,889**	7,662
	–	–
Bank charges	**(93)**	–
	(93)	–
Finance income – net	**43,479**	297

12. INCOME TAX EXPENSE

	Year ended 31 December	
	2019	2018
	RMB'000	RMB'000
Current income tax expense	**–**	–
Deferred income tax expense	**–**	–
	–	–

The tax on the Group's loss before tax differs from the theoretical amount that would arise using the statutory tax rate as follows:

	Year ended 31 December	
	2019	2018
	RMB'000	RMB'000
Loss before income tax	**(156,766)**	(138,281)
Tax expense calculated at statutory tax rate of 25%	**(39,192)**	(34,570)
Impact of applying preferential tax rate	**15,677**	13,828
Expenses not deductible for taxation purposes	**85**	70
Previously unrecognised tax loss recognised as deferred tax assets	**(79)**	–
Temporary differences not recognised as deferred tax assets	**1,999**	1,951
Tax loss not recognised as deferred tax assets	**34,314**	28,740
Extra deduction of research and development expenses	**(12,804)**	(10,019)
Income tax expense	**–**	–

On 24 November 2016, the "Certificate of New Hi-tech Enterprise" was granted to the Company and renewed on 28 November 2019, and the Company becomes eligible for a corporate income tax rate of 15% for the year ended 31 December 2019 (2018: 15%).

13. LOSS PER SHARE

(a) Basic loss per share

Basic loss per share is calculated by dividing the loss attributable to owners of the Company by the weighted average number of ordinary shares outstanding.

	Year ended 31 December	
	2019	2018
	RMB'000	RMB'000
Loss for the year	**(156,766)**	(138,281)
Weighted average number of ordinary shares in issue (in thousand)	**203,252**	152,996
Basic loss per share (in RMB)	**(0.77)**	(0.90)

Under the 2015 Employee Share Plan and 2018 Employee Share Plan (Note 25), 3,474,600, 3,299,475 and 1,207,150 shares are granted to 33, 42 and 3 eligible employees, respectively. Except for 52,590 shares which was granted and vested by Tao Zhu immediately under the 2018 Employee Share Plan, the effect of such shares held for share award scheme has not been taken into account in the calculation of basic loss per share, until the vesting requirements of remaining shares have been satisfied, or the special purpose vehicle is deconsolidated.

(b) Diluted loss per share

Diluted loss per share for the year ended 31 December 2019 is same with basic loss per share, since there are no share options or other equity securities of the Company in issue which if exercised would have a dilutive effect on the issued ordinary share capital as at 31 December 2019. As at 31 December 2018, the Group had potential dilutive shares related to the shares held for share award scheme. Due to the Group's negative financial results during the years ended 31 December 2018, shares held for share award scheme had anti-dilutive effect on the Group's loss per share. Thus, diluted loss per share was equivalent to the basic loss per share for the year ended 31 December 2018.

14. DIVIDENDS

No dividend has been declared by the Company for the year ended 31 December 2019 (2018: nil).

15. PROPERTY, PLANT AND EQUIPMENT

	Buildings RMB'000	Leasehold improvements RMB'000	Equipment and instruments RMB'000	Motor vehicles RMB'000	Office equipment and furniture RMB'000	Construction in progress RMB'000	Total RMB'000
As at 31 December 2017							
Cost	–	17,522	36,273	803	2,725	365,313	422,636
Accumulated depreciation	–	(7,330)	(16,377)	(680)	(1,355)	–	(25,742)
Net book value	–	10,192	19,896	123	1,370	365,313	396,894
Year ended 31 December 2018							
Opening net book value	–	10,192	19,896	123	1,370	365,313	396,894
Additions	–	–	14,119	367	2,477	105,193	122,156
Disposals	–	–	(111)	(12)	(2)	–	(125)
Transfer upon completion	27,278	–	5,575	–	–	(32,853)	–
Depreciation	(635)	(3,104)	(6,796)	(110)	(831)	–	(11,476)
Closing net book value	26,643	7,088	32,683	368	3,014	437,653	507,449
As at 31 December 2018							
Cost	27,278	17,522	55,062	639	5,084	437,653	543,238
Accumulated depreciation	(635)	(10,434)	(22,379)	(271)	(2,070)	–	(35,789)
Net book value	26,643	7,088	32,683	368	3,014	437,653	507,449
Year ended 31 December 2019							
Opening net book value	**26,643**	**7,088**	**32,683**	**368**	**3,014**	**437,653**	**507,449**
Additions	**–**	**–**	**17,283**	**–**	**1,904**	**64,995**	**84,182**
Disposals	**–**	**–**	**(15)**	**–**	**(1)**	**–**	**(16)**
Transfer upon completion	**9,915**	**11,652**	**2,043**	**–**	**–**	**(23,610)**	**–**
Depreciation	**(1,746)**	**(3,934)**	**(9,067)**	**(123)**	**(1,241)**	**–**	**(16,111)**
Closing net book value	**34,812**	**14,806**	**42,927**	**245**	**3,676**	**479,038**	**575,504**
As at 31 December 2019							
Cost	**37,193**	**29,174**	**74,093**	**639**	**6,749**	**479,038**	**626,886**
Accumulated depreciation	**(2,381)**	**(14,368)**	**(31,166)**	**(394)**	**(3,073)**	**–**	**(51,382)**
Net book value	**34,812**	**14,806**	**42,927**	**245**	**3,676**	**479,038**	**575,504**

During the years ended 31 December 2019, the Group has capitalised borrowing costs amounting to RMB8,889,000 on qualifying assets (2018: RMB7,662,000) (Note 11). Borrowing costs were capitalised at the weighted average of its borrowings rate of 5.224% during the year (2018: 5.212%).

Certain of the Group's property, plant and equipment have been pledged as collateral under the Group's borrowing arrangements. The carrying amount of property, plant and equipment pledged as collateral were RMB261,292,000 as at 31 December 2019 (31 December 2018: RMB241,290,000).

15. PROPERTY, PLANT AND EQUIPMENT (CONTINUED)

Depreciation were charged in the following categories:

	Year ended 31 December	
	2019	2018
	RMB'000	RMB'000
Research and development expenses	**14,287**	10,619
Administrative expenses	**1,801**	857
Manufacturing costs	**23**	–
Total	**16,111**	11,476

16. RIGHT-OF-USE ASSETS

	Land use rights	Office rental	Motor vehicles	Office equipment	Total
	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000
As at 1 January 2019 (Restated)					
Cost	20,508	17,918	683	198	39,307
Accumulated depreciation	(1,572)	–	–	–	(1,572)
Net book value	18,936	17,918	683	198	37,735
Year ended 31 December 2019					
Opening net book value	**18,936**	**17,918**	**683**	**198**	**37,735**
Addition	**–**	**–**	**600**	**305**	**905**
Depreciation	**(410)**	**(5,154)**	**(279)**	**(81)**	**(5,924)**
Closing net book value	**18,526**	**12,764**	**1,004**	**422**	**32,716**
As at 31 December 2019					
Cost	**20,508**	**17,918**	**1,283**	**503**	**40,212**
Accumulated depreciation	**(1,982)**	**(5,154)**	**(279)**	**(81)**	**(7,496)**
Net book value	**18,526**	**12,764**	**1,004**	**422**	**32,716**

Amounts recognised in the consolidated statement of comprehensive income:

	Year ended 31 December	
	2019	2018
	RMB'000	RMB'000
Depreciation of right-of-use assets	**5,924**	–
Interest expense (included in finance cost then captialised) (Note 11)	**942**	–
Expense relating to short-term leases (included in administrative expenses) (Note 8)	**451**	–

There was no leases of low-value assets as at 31 December 2019. The total cash outflow for leases for the year ended 31 December 2019 was RMB8,590,000.

Certain of the Group's land use rights have been pledged as collateral under the Group's borrowing arrangements. The carrying amount of land use rights pledged as collateral were RMB10,592,000 as at 31 December 2019 (31 December 2018: RMB10,826,000).

17. INTANGIBLE ASSETS

	Capitalised product development costs RMB'000	Computer software RMB'000	Non-proprietary technologies RMB'000	Total RMB'000
As at 31 December 2017				
Cost	21,310	121	6,700	28,131
Accumulated amortisation	–	(13)	(6,700)	(6,713)
Net book value	21,310	108	–	21,418
Year ended 31 December 2018				
Opening net book value	21,310	108	–	21,418
Additions	10,275	17	743	11,035
Amortisation	–	(59)	(74)	(133)
Closing net book value	31,585	66	669	32,320
As at 31 December 2018				
Cost	31,585	138	7,443	39,166
Accumulated amortisation	–	(72)	(6,774)	(6,846)
Net book value	31,585	66	669	32,320
Year ended 31 December 2019				
Opening net book value	**31,585**	**66**	**669**	**32,320**
Additions	**5,824**	**480**	**503**	**6,807**
Amortisation	**–**	**(164)**	**(274)**	**(438)**
Closing net book value	**37,409**	**382**	**898**	**38,689**
As at 31 December 2019				
Cost	**37,409**	**618**	**7,946**	**45,973**
Accumulated amortisation	**–**	**(236)**	**(7,048)**	**(7,284)**
Net book value	**37,409**	**382**	**898**	**38,689**

Amortisation charges were expensed in the following categories:

	Year ended 31 December 2019 RMB'000	2018 RMB'000
Research and development expenses	**274**	74
Administrative expenses	**164**	59
Total	**438**	133

17. INTANGIBLE ASSETS (CONTINUED)

(a) Impairment test

Capitalised product development costs not yet available for use are tested annually based on the recoverable amount of the cash generating unit to which the intangible asset is related. As these development costs support each of the vaccine product, their appropriate cash-generating unit ("CGU") is at the product level. As at 31 December 2019 and 2018, the intangible asset is related to the capitalisation of the clinical trial expenses of two developing products: Meningococcal Conjugate Vaccine 2 (MCV 2) and Meningococcal Conjugate Vaccine 4 (MCV 4).

Relevant evaluation including forecasts and recoverable amount during the year was performed by an independent appraiser.

The recoverable amount of each CGU was determined based upon value in use. The value in use was estimated using the discounted cash flow approach.

The revenue forecasts of MCV2 and MCV4 are based on management's expectations of timing of commercialisation, productivity and market size of related products. Based on the requirement of the approval process, management estimates that MCV2 and MCV4 will start generating revenue from 2020. Management also estimates both MCV2 and MCV4 will have at least ten-year useful lives from 2020.

The percentage of costs and operating expenses to revenue is the average percentages over the revenue forecast period. It is based on the current margin levels of comparable companies, with adjustments made to reflect the expected future price rises in labour, rental and relevant equipment, which management does not expect to be able to pass on to customers through price increases.

The discount rates used are pre-tax and reflect specific risks relating to the relevant vaccine products.

17. INTANGIBLE ASSETS (CONTINUED)

(a) Impairment test (Continued)

The key assumptions used in the value-in-use calculations of each CGU as at 31 December 2019 and 2018, are as follows.

	As at 31 December	
	2019	2018
MCV 2		
For the first five years from commercialisation		
Average market share	**5%**	8%
Revenue (% compound growth rate)	**30%**	78%
Costs and operating expenses (% of revenue)	**68%**	51%
For the second five years from commercialisation		
Revenue (% compound growth rate)	**-6%**	-59%
Costs and operating expenses (% of revenue)	**65%**	51%
Pre-tax discount rate	**24.45%**	25.18%
Recoverable amount of CGU (in RMB'000)	**133,514**	224,881
MCV 4		
For the first five years from commercialisation		
Average market share	**5%**	5%
Revenue (% compound growth rate)	**65%**	82%
Costs and operating expenses (% of revenue)	**65%**	51%
For the second five years from commercialisation		
Revenue (% compound growth rate)	**7%**	-59%
Costs and operating expenses (% of revenue)	**59%**	51%
Pre-tax discount rate	**23.20%**	25.22%
Recoverable amount of CGU (in RMB'000)	**1,432,638**	1,017,602

17. INTANGIBLE ASSETS (CONTINUED)

(b) Impact of possible changes in key assumptions

The recoverable amount of the CGU of MCV2 was estimated to exceed the carrying amount of the CGU at 31 December 2019 by RMB116,741,000 (31 December 2018: RMB210,133,000). The recoverable amount of the CGU of MCV4 was estimated to exceed the carrying amount of the CGU at 31 December 2019 by RMB1,412,002,000 (31 December 2018: RMB1,000,765,000).

Considering there was still sufficient headroom based on the assessment, the directors and management believes that any reasonably possible change in any of these assumptions would not cause the aggregate carrying amount of the CGU to exceed its recoverable amount.

The recoverable amount of each CGU would equal its carrying amount if the key assumptions were to change as follows:

	As at 31 December	
	2019	2018
MCV 2		
Average market share (first five years average after commercialisation)	**0.90%**	1.15%
Revenue (% ten years compound growth rate from commercialisation)	**-62%**	-20%
Costs and operating expenses (% of revenue)	**91%**	87%
Pre-tax discount rate	**147%**	95.82%
MCV 4		
Average market share (first five years average after commercialisation)	**0.30%**	0.21%
Revenue (% ten years compound growth rate from commercialisation)	**-83%**	-30%
Costs and operating expenses (% of revenue)	**94%**	91%
Pre-tax discount rate	**406%**	199.54%

18. INVENTORIES

	As at 31 December	
	2019	2018
	RMB'000	RMB'000
Raw materials	**6,713**	4,195
Consumable materials	**9,637**	4,299
Finished goods	**229**	–
	16,579	8,494
Less: impairment	**(241)**	–
	16,338	8,494

19. OTHER RECEIVABLES AND PREPAYMENTS

	As at 31 December	
	2019	2018
	RMB'000	RMB'000
Value added tax recoverable	**25,682**	12,228
Prepayments to suppliers of intangible assets and property, plant and equipment	**10,734**	2,296
Prepayments to other suppliers	**17,884**	3,132
Receivables of vaccine components sale	**–**	286
Staff advances	**–**	300
Deposits as guarantee	**75**	2,377
Receivable of investment income on wealth management products	**–**	466
Prepayments of listing expenses	**5,215**	10,210
	59,590	31,295
Less: non-current portion (a)	**(36,476)**	(16,166)
Current portion	**23,114**	15,129

Note:

(a) The non-current portion of other receivables and prepayments mainly includes value added tax recoverable that could not be utilised in the coming 12 months and prepayments to suppliers of property, plant and equipment.

20. FINANCIAL ASSETS AT FAIR VALUE THROUGH PROFIT OR LOSS

	As at 31 December	
	2019	2018
	RMB'000	RMB'000
Structured deposits	**111,526**	–

21. FINANCIAL ASSETS AT AMORTISED COST

	As at 31 December	
	2019	2018
	RMB'000	RMB'000
Wealth management products with fixed rates	**–**	140,000

As at 31 December 2018, wealth management products with fixed rates held by the Group bear interests at 3.85%-4.25% per annum with a duration of 35 to 91 days.

22. TERM DEPOSITS

	As at 31 December	
	2019	2018
	RMB'000	RMB'000
Term deposits (a)		
– RMB deposits	**300,000**	–
– HKD deposits	**438,942**	–
	738,942	–
Accrued interest (b)	**8,743**	–
	747,685	–

Note:

(a) Term deposits held by the Group as at 31 December 2019 bear interests at 2.51% – 3.85% per annum with a duration of 3 to 36 months.

(b) The interest on financial instruments accrued based on the effective interest rate method has been included in the net balance of the corresponding financial instruments.

23. CASH AND CASH EQUIVALENTS

	As at 31 December	
	2019	2018
	RMB'000	RMB'000
Cash on hand	**5**	7
Cash at banks (a)		
– RMB deposits	**185,537**	54,031
– USD deposits	**6,227**	3,343
– HKD deposits	**10,204**	–
	201,973	57,381
Accrued interest (b)	**477**	–
	202,450	57,381

Note:

(a) Cash at banks earns interest at floating rates based on daily bank deposit rates. The Group's balances of cash at banks which are mainly denominated in RMB are deposited with banks in the PRC. The conversion of these RMB-denominated balances into foreign currencies and the remittance of funds out of the Mainland China are subject to the rules and regulations of foreign exchange control promulgated by the Government of the PRC.

(b) The interest on financial instruments accrued based on the effective interest rate method has been included in the net balance of the corresponding financial instruments. The Group elected not to restate comparative figures.

24. SHARE CAPITAL AND SHARE PREMIUM

	Numbers of shares	Nominal value of shares RMB'000
Authorised and issued		
As at 1 January 2019	160,950,899	160,951
Issuance of shares upon global offering (a)	61,699,000	61,699
As at 31 December 2019	**222,649,899**	**222,650**
As at 1 January 2018	156,444,274	156,444
Issuance of shares (b)	4,506,625	4,507
As at 31 December 2018	160,950,899	160,951

	Numbers of ordinary shares	Share capital RMB'000	Share premium RMB'000	Total RMB'000
As at 1 January 2019	160,950,899	160,951	528,535	689,486
Issuance of shares upon global offering (a)	61,699,000	61,699	1,041,748	1,103,447
As at 31 December 2019	**222,649,899**	**222,650**	**1,570,283**	**1,792,933**
As at 1 January 2018	156,444,274	156,444	515,556	672,000
Issuance of shares (b)	4,506,625	4,507	12,979	17,486
As at 31 December 2018	160,950,899	160,951	528,535	689,486

Note:

(a) On 28 March 2019, the Company's shares have been listed on the Main Board of The Stock Exchange of Hong Kong by issuing 57,248,600 ordinary shares at a price of HKD22.00 per share for cash, before related issuance expenses, of approximately HKD1,259,469,000 (equivalent to approximately RMB1,079,239,000).

On 9 April 2019, the Company issued additional 4,450,400 new shares for the exercise of over-allotment of the global offering at a price of HKD22.00 per share for cash, before related issuance expenses, of approximately HKD97,909,000 (equivalent to approximately RMB83,895,000).

Accordingly, 61,699,000 ordinary shares with par value of RMB1.00 each are issued and RMB61,699,000 are credited to share capital, and remaining amounts, after netting of listing expenses, are credited to share premium.

(b) Pursuant to a share subscription agreement entered into between the Company, Tianjin Qianrui Enterprise Management Partnership (Limited Partnership) (天津千睿企業管理合夥企業(有限合夥)) ("Tianjin Qianrui") and Tianjin Qianzhi Enterprise Management Partnership (Limited Partnership) (天津千智企業管理合夥企業(有限合夥)) ("Tianjin Qianzhi") on 28 May 2018, which was subsequently approved by the annual general meeting of the Company held on 28 May 2018, the Company issued 3,299,475 shares to Tianjin Qianrui at a consideration of approximately RMB12,802,000, and issued 1,207,150 shares to Tianjin Qianzhi at a consideration of approximately RMB4,684,000. Upon completion of the share subscription by Tianjin Qianrui and Tianjin Qianzhi, the registered share capital of the Company was increased to RMB160,951,000 approximately. Tianjin Qianrui and Tianjin Qianzhi were special purpose vehicles to hold the ordinary shares for the Company's employees under the 2018 Employee Share Plan (Note 25).

25. CAPITAL RESERVES

	Other reserves RMB'000	Shares held for share award schemes RMB'000 (note)	Share-based compensation reserves RMB'000 (note)	Total RMB'000
Balance at 1 January 2018	(5,495)	(3,475)	17,309	8,339
– Consolidation of special purpose vehicles	4,454	(4,454)	–	–
– Share-based payments	–	–	15,780	15,780
Balance at 31 December 2018	(1,041)	(7,929)	33,089	24,119
Balance at 1 January 2019	(1,041)	(7,929)	33,089	24,119
– Share-based payments	–	–	21,518	21,518
– Transfer upon exercise of employee share plan	23,407	3,475	(26,882)	–
– Deconsolidation of special purpose vehicles	(4,454)	4,454	–	–
Balance at 31 December 2019	**17,912**	**–**	**27,725**	**45,637**

Note:

Share-based payment

Tianjin Qianyi Enterprise Management Partnership (Limited Partnership) (天津千益企業管理合夥企業(有限合夥)) ("Tianjin Qianyi") was incorporated in Tianjin of the PRC under the Law of the People's Republic of China on Partnerships on 31 July 2015 as a vehicle to hold the ordinary shares for the Company's employees under the equity-settled share-based compensation plan of 2015 (the "2015 Employee Share Plan").

Tianjin Qianrui and Tianjin Qianzhi were incorporated in Tianjin of the PRC under the Law of the People's Republic of China on Partnerships on 28 May 2018 as vehicles to hold the ordinary shares for the Company's employees under the equity-settled share-based compensation plan of 2018 (the "2018 Employee Share Plan"). Detailed information of the 2015 Employee Share Plan and 2018 Employee Share Plan (together referred to as the "Employee Share Plans") are disclosed as follows.

(a) Share award schemes

2015 Employee Share Plan

On 21 December 2015, shares of the Company were granted to 33 eligible employees (the "Grantees") under the 2015 Employee Share Plan. Under this plan, 3,474,600 shares of RMB1.00 each (equivalent to RMB3,474,600 paid-in capital before the conversion into a joint stock company) will be vested when the Company's shares get listed on the stock exchange or the Company is acquired by other parties. The Grantees paid approximately RMB440,000 in total at an exercise price of RMB0.1265 each to Tianjin Qianyi on the grant date. If an employee ceases to be employed by the Company within this period, the awarded shares will be forfeited.

The 2015 Employee Share Plan is administered by Tianjin Qianyi. 3,474,600 shares of RMB1.00 each were acquired by Tianjin Qianyi from Xuefeng Yu, Tao Zhu (the General Partner, "GP"), Dongxu Qiu and Helen Huihua Mao in total at a price of RMB0.1265 per share on 27 August 2015, and are held under the 2015 Employee Share Plan until such time as they are vested. Forfeited shares are purchased back by GP at the price that the employees initially purchased.

2,931,941 awarded shares under the 2015 Employee Share Plan were unlocked and vested on 28 March 2019 when the Company's shares were listed on the Main Board of The Stock Exchange of Hong Kong Limited. Thus, 2015 Employee Share Plan has been fulfilled completely.

25. CAPITAL RESERVES (CONTINUED)

(a) Share award schemes (Continued)

2018 Employee Share Plan

On 28 May 2018, the Company issued 3,299,475 and 1,207,150 shares of RMB1.00 each to Tianjin Qianrui and Tianjin Qianzhi, respectively, at a price of RMB3.88 per share under the 2018 Employee Share Plan. Under the plan, 42 eligible employees were granted 3,299,475 shares issued to Tianjin Qianrui, of which 52,590 shares were granted to GP and could be vested immediately and the rest 3,246,885 shares were granted to the other 41 eligible employees and could be vested when such eligible employees complete a five-year service period. 3 eligible employees were granted 1,207,150 shares issued to Tianjin Qianzhi, of which 19 shares were granted to GP and could be vested immediately and the remaining 1,207,131 shares were granted to the rest 2 employees. 60% of these 1,207,131 shares could be vested when such eligible employees complete a three-year service period, and the remaining 40% could be vested when such eligible employees complete a five-year service period. Approximately RMB17,486,000 were paid by those employees to Tianjin Qianrui and Tianjin Qianzhi in total on the grant date. If an eligible employee ceases the employment by the Company within this period, the awarded shares will be forfeited.

Forfeited shares are purchased back by GP, or a person designated by GP, at the price that the employees initially purchased, and if applicable, plus 7% per annum interest.

Two eligible employee left the Company in July and December 2019 respectively, 50,000 and 12,000 shares awarded to these 2 employees were granted to GP and vested immediately based on the 2018 Employee Share Plan. The fair value of these shares were measured by the closing price of the Company on The Stock Exchange of Hong Kong on the completion of business registration of change date with 80% discount.

The Company has power to govern the relevant activities of Tianjin Qianyi, Tianjin Qianrui and Tianjin Qianzhi and can derive benefits from the contributions of the eligible employees who are awarded with the shares under the Employee Share Plans. Therefore Tianjin Qianyi was consolidated until 2015 Employee Share Plan was fulfilled completely in the first half of 2019. Tianjin Qianui and Tianjin Qianzhi were consolidated until GP obtained the control of these two special purpose vehicles and partner agreements were further revised accordingly in the second half of 2019.

Set out below are the movement in the number of awarded shares under the Employee Share Plans:

	Year ended 31 December	
	2019	2018
At the beginning of the year	**7,385,957**	2,931,941
Vested	**(2,993,941)**	(52,609)
Granted	**62,000**	4,506,625
Forfeited	**(62,000)**	–
At the end of the year	**4,392,016**	7,385,957

25. CAPITAL RESERVES (CONTINUED)

(a) Share award schemes (Continued)

The Group has applied discounted cash flow method to determine the fair value of the underlying shares of RMB8.49 per share under the 2015 Employee Share Plan, and RMB21.84 per share under the 2018 Employee Share Plan on the respective grant dates. Best estimates of key assumptions, such as discount rate and projections of future performance, are required to be determined by management. Key assumptions used in determining the fair value of shares under the Employee Share Plans are as follows:

	2015 Employee Share Plan	2018 Employee Share Plan
Key assumptions		
Discount rate	21.50%	17.00%
Risk-free interest rate	2.00%	2.84%
Liquidity discount	25.00%	10.00%

(b) Expenses arising from share-based payment transactions

	Year ended 31 December	
	2019	2018
	RMB'000	RMB'000
Share award schemes issued under the Employee Share Plans	**21,518**	15,780

As at 31 December 2019, the accumulated expenses arising from share-based payment transactions amounting to RMB27,725,000 are recognised in the share-based compensation reserve (2018: RMB33,089,000).

26. DEFERRED INCOME TAX

The analysis of deferred income tax assets and liabilities in the consolidated balance sheet are as follows:

	As at 31 December	
	2019	2018
	RMB'000	RMB'000
Deferred income tax assets:		
– To be recovered within 12 months	**79**	–
Deferred income tax liabilities:		
– To be settled within 12 months	**(79)**	–
Deferred income tax assets/(liabilities) – net	**–**	–

26. DEFERRED INCOME TAX (CONTINUED)

The movement in deferred income tax assets and liabilities is as follows:

Deferred tax assets	**Tax losses** RMB'000
Balance at 1 January 2018	95
Charged to the statement of comprehensive income	(95)
Balance at 31 December 2018	–
Balance at 1 January 2019	–
Credited to the statement of comprehensive income	79
Balance at 31 December 2019	**79**

Deferred tax liabilities	**Fair value gain on financial assets at fair value through profit or loss** RMB'000
Balance at 1 January 2018	(95)
Credited to the statement of comprehensive income	95
Balance at 31 December 2018	–
Balance at 1 January 2019	–
Charged to the statement of comprehensive income	(79)
Balance at 31 December 2019	**(79)**

(a) Deferred tax assets not recognised

The Group has not recognised any deferred tax assets in respect of the following items:

	Year ended 31 December	
	2019 **RMB'000**	2018 RMB'000
Deductible losses	**612,008**	383,777
Deductible temporary differences	**88,060**	74,736
Total	**700,068**	458,513

As at 31 December 2019, the Group has tax loss carry forwards approximately RMB612,008,000 (31 December 2018: RMB383,777,000), available for offset against future profits. No deferred tax asset has been recognised in respect of the tax losses due to the unpredictability of future profit streams (31 December 2018: nil).

26. DEFERRED INCOME TAX (CONTINUED)

(b) Deductible losses that are not recognised as deferred tax assets will be expired as follows:

	As at 31 December	
	2019	2018
	RMB'000	RMB'000
2023	**13,038**	13,564
2024	**17,292**	17,292
2025	**33,743**	33,743
2026	**55,729**	55,729
2027	**71,854**	71,854
2028	**191,595**	191,595
2029	**228,757**	–
	612,008	383,777

Pursuant to the Notice on extending the expired years of unused tax losses of High-tech Enterprises and Small and Medium-sized Technological Enterprises (《關於延長高新技術企業和科技型中小企業虧損結轉年限的通知》(Caishui [2018] No. 76)) issued in July 2018, which retrospectively effect from 1 January 2018, the Group adjusted the expiration year of the unused tax losses.

27. FINANCIAL INSTRUMENTS BY CATEGORY

	As at 31 December	
	2019	2018
	RMB'000	RMB'000
Financial assets at amortised cost		
Cash and cash equivalents (Note 23)	**202,450**	57,381
Wealth management products with fixed rates (Note 21)	**–**	140,000
Other receivables excluding non-financial assets (Note 19)	**75**	3,429
Term deposits (Note 22)	**747,685**	–
	950,210	200,810
Financial assets at fair value through profit or loss		
Wealth management products with floating rates (Note 20)	**111,526**	–
	111,526	–
Financial liabilities at amortised cost		
Trade payables (Note 30)	**6,171**	6,651
Other payables excluding non-financial liabilities (Note 31)	**60,056**	84,748
Borrowings (Note 28)	**150,239**	150,000
Lease liabilities	**16,560**	–
	233,026	241,399

28. BORROWINGS

	As at 31 December	
	2019	2018
	RMB'000	RMB'000
Borrowings from banks – secured	**150,000**	150,000
Accrued interest (note)	**239**	–
	150,239	150,000
Less: current portion	**(20,239)**	–
Non-current portion	**130,000**	150,000

Note:

The interest on financial instruments accrued based on the effective interest rate method has been included in the net balance of the corresponding financial instruments. The Group elected not to restate comparative figures.

	As at 31 December	
	2019	2018
	RMB'000	RMB'000
Maturity of borrowings		
Less than 1 year	**20,239**	–
Between 1 and 2 years	**40,000**	20,000
Between 2 and 5 years	**90,000**	130,000
	150,239	150,000

As at 31 December 2019 and 2018, bank borrowings were denominated in RMB, bearing interest at rates equivalent to 105%-120% of rates announced by the People's Bank of China, and were secured against certain of the Group's property, plant and equipment (Note 15) and right-of-use assets (Note 16).

The fair value of borrowings approximated their carrying amounts as at 31 December 2019 and 2018 as the borrowings carried interests which were benchmarked against rates announced by the People's Bank of China from time to time.

29. DEFERRED INCOME

	As at 31 December	
	2019	2018
	RMB'000	RMB'000
Government grants		
Asset-related grants (a)	**52,828**	37,772
Reimbursement of future expenses (b)	**6,968**	626
	59,796	38,398
Less: current portion	**(7,867)**	(1,525)
Non-current portion	**51,929**	36,873

(a) The asset-related grants are the subsidies received from the government for the purpose of compensation for purchase of the Group's property, plant and equipment and land use rights.

(b) Government grants as reimbursement of future expenses are subsidies received for compensating the Group's future research and development activities with regards to certain projects.

The amount of government grants that credited to the statement of comprehensive income is disclosed in Note 7.

30. TRADE PAYABLES

The aging analysis of trade payables is as follows:

	As at 31 December	
	2019	2018
	RMB'000	RMB'000
Within 1 year	**6,028**	6,539
Between 1 year and 2 years	**31**	–
Between 2 year and 3 years	**–**	112
More than 3 years	**112**	–
	6,171	6,651

The carrying amounts of trade payables are denominated in RMB, and approximate their fair values due to short-term maturities.

31. OTHER PAYABLES AND ACCRUALS

	As at 31 December	
	2019	2018
	RMB'000	RMB'000
Other payables to suppliers of property, plant and equipment	**49,187**	65,546
Payroll and welfare payable	**19,006**	12,816
Testing expenses	**1,011**	57
Accrued listing expenses	**2,173**	8,940
Deposits from suppliers	**1,800**	6
Disability benefit payable	**1,086**	712
Utilities	**895**	190
Consulting fees	**730**	1,045
Accrued taxes other than income tax	**490**	233
Interest payable	**–**	239
Rental payable	**–**	6,431
Others	**4,260**	2,294
	80,638	98,509

32. CASH USED IN OPERATION

	Year ended 31 December	
	2019	2018
	RMB'000	RMB'000
Loss before income tax	**(156,766)**	(138,281)
Adjustments for:		
– Depreciation	**22,035**	11,476
– Amortisation	**438**	543
– Impairment loss on inventories	**241**	–
– Investment income on wealth management products	**(3,388)**	(12,438)
– Losses/(gains) on disposal of property, plant and equipment	**16**	(105)
– Net fair value gains on financial assets at fair value through profit or loss	**(526)**	–
– Gains from asset related government grants	**(899)**	(899)
– Finance income	**(43,572)**	(297)
– Share-based compensation expenses	**21,518**	15,780
Changes in working capital		
– Inventories	**(8,085)**	(6,870)
– Other receivables and prepayments	**(8,593)**	(7,956)
– Trade payables	**(480)**	4,772
– Contract liabilities	**578**	–
– Other payables and accruals	**(2,577)**	10,659
– Deferred income	**6,342**	(227)
Cash used in operations	**(173,718)**	(123,843)

32. CASH USED IN OPERATION (CONTINUED)

Net debt reconciliation is shown below:

	Borrowings RMB'000	Lease liabilities RMB'000	Interest expenses RMB'000	Total debts RMB'000
At 1 January 2018	108,333	–	170	108,503
Cash flows	41,667	–	(7,593)	34,074
Non-cash movements	–	–	7,662	7,662
At 31 December 2018	150,000	–	239	150,239
At 1 January 2019 (Restated)	150,000	22,491	239	172,730
Cash flows	–	(7,302)	(8,783)	(16,085)
Non-cash movements	–	1,265	8,889	10,154
At 31 December 2019	**150,000**	**16,454**	**345**	**166,799**

33. BALANCE SHEET AND STATEMENT OF CHANGES IN EQUITY OF THE COMPANY

	As at 31 December	
	2019 RMB'000	2018 RMB'000
ASSETS		
Non-current assets		
Property, plant and equipment	**575,504**	507,449
Right-of-use assets	**32,716**	–
Land use rights	**–**	18,936
Intangible assets	**38,689**	32,320
Other receivables and prepayments	**36,476**	16,166
Term deposits with initial term of over three months	**306,868**	–
Total non-current assets	**990,253**	574,871
Current assets		
Inventories	**16,338**	8,494
Other receivables and prepayments	**23,114**	15,129
Financial assets at fair value through profit or loss	**111,526**	–
Financial assets at amortised cost	**–**	140,000
Term deposits with initial term of over three months	**440,817**	–
Cash and cash equivalents	**202,450**	57,374
Total current assets	**794,245**	220,997
Total assets	**1,784,498**	795,868

33. BALANCE SHEET AND STATEMENT OF CHANGES IN EQUITY OF THE COMPANY (CONTINUED)

	As at 31 December	
	2019	2018
	RMB'000	RMB'000
EQUITY		
Equity attributable to owners of the Company		
Share capital and share premium	**1,792,933**	689,486
Capital reserves	**45,637**	24,119
Accumulated losses	**(368,054)**	(211,272)
Total equity	**1,470,516**	502,333
LIABILITIES		
Non-current liabilities		
Borrowings	**130,000**	150,000
Lease liabilities	**7,758**	–
Deferred income	**51,929**	36,873
Total non-current liabilities	**189,687**	186,873
Current liabilities		
Trade payables	**6,171**	6,651
Contract liabilities	**578**	–
Other payables and accruals	**80,638**	98,486
Borrowings	**20,239**	–
Lease liabilities	**8,802**	–
Deferred income	**7,867**	1,525
Total current liabilities	**124,295**	106,662
Total liabilities	**313,982**	293,535
Total equity and liabilities	**1,784,498**	795,868

The balance sheet of the Company was approved and authorised for issue by the board of directors on 27 March 2020.

Director: Xuefeng YU Director: Shou Bai CHAO

33. BALANCE SHEET AND STATEMENT OF CHANGES IN EQUITY OF THE COMPANY (CONTINUED)

(a) Statement of changes in equity of the Company

	Notes	Share capital RMB'000	Share premium RMB'000	Capital reserves RMB'000	Accumulated losses RMB'000	Total equity RMB'000
Balance at 1 January 2019		**160,951**	**528,535**	**24,119**	**(211,272)**	**502,333**
Comprehensive loss						
– Loss for the year		**–**	**–**	**–**	**(156,782)**	**(156,782)**
Transaction with owners						
– Issuance of shares	24	**61,699**	**1,041,748**	**–**	**–**	**1,103,447**
– Share-based payments	25	**–**	**–**	**21,518**	**–**	**21,518**
Balance at 31 December 2019		**222,650**	**1,570,283**	**45,637**	**(368,054)**	**1,470,516**
Balance at 1 January 2018		156,444	515,556	8,339	(73,002)	607,337
Comprehensive loss						
– Loss for the year		–	–	–	(138,270)	(138,270)
Transaction with owners						
– Issuance of shares	24	4,507	12,979	–	–	17,486
– Share-based payments	25	–	–	15,780	–	15,780
Balance at 31 December 2018		160,951	528,535	24,119	(211,272)	502,333

34. COMMITMENTS

(a) Capital commitments

The following is the details of capital expenditure contracted for but not provided in the consolidated financial statements.

	As at 31 December	
	2019 RMB'000	2018 RMB'000
Contracted but not provided for		
– Property, plant and equipment	**26,328**	14,239

34. COMMITMENTS (CONTINUED)

(b) Operating lease commitments

The Group leases various offices and warehouses under non-cancellable operating lease agreements.

From 1 January 2019, the Group has recognised right-of-use assets for these leases, except for short-term and low-value leases. The future minimum lease payables under non-cancellable operating leases contracted but not provided for at each year-end date are as follows:

	As at 31 December	
	2019	2018
	RMB'000	RMB'000
No later than 1 year	**91**	7,756
Later than 1 year but no later than 5 years	**–**	18,097
	91	25,853

35. RELATED PARTY TRANSACTIONS

Parties are considered to be related if one party has the ability, directly or indirectly, control the other party or exercise significant influence over the other party in making financial and operation decisions. Parties are also considered to be related if they are subject to common control. Members of key management and their close family member of the Group are also considered as related parties.

(a) The following companies and persons are related parties of the Group during the year ended 31 December 2019 and 2018:

Names of the related parties	**Nature of relationship**
Tianjin Kun Jian Biopharmaceutical Co., Ltd. 天津坤健生物製藥有限公司 ("Tianjin Kun Jian")	Under common control of Xuefeng Yu, Helen Huihua Mao, Dongxu Qiu and Tao Zhu

On 25 November 2019, Tianjin Kun Jian completed the cancellation of registration.

During the year ended 31 December 2019, the Group did not have any significant transactions with related parties (2018: nil).

(b) Key management compensation

Key management includes directors, supervisors and senior management. The compensation paid or payable to key management for employee services is shown below:

	Year ended 31 December	
	2019	2018
	RMB'000	RMB'000
Salaries	**6,843**	4,529
Discretionary bonuses	**2,944**	2,196
Share-based compensation expenses (Note 25)	**2,554**	1,701
Others	**331**	275
	12,672	8,701

36. BENEFITS AND INTERESTS OF DIRECTORS

(a) Directors' and chief executive's emoluments

The remuneration of each director and the chief executive for the year ended 31 December 2019 and 2018 is set out below:

	Emoluments paid or receivable in respect of a person's services as a director					
Name	Fees RMB'000	Salaries RMB'000	Discretionary bonuses RMB'000	Share-based compensation expenses RMB'000	Social security costs, housing benefits and other employee benefits RMB'000	Total RMB'000
For the year ended 31 December 2019						
Name of executive directors						
Xuefeng Yu*	–	1,111	546	–	13	1,670
Tao Zhu	–	1,111	546	835	93	2,585
Dongxu Qiu	–	667	328	–	13	1,008
Shoubai Chao	–	1,111	545	–	13	1,669
Name of non-executive directors						
Qiang Xu	–	–	–	–	–	–
Liang Lin	–	–	–	–	–	–
Nisa Leung	–	–	–	–	–	–
Zheng Yin (i)	–	–	–	–	–	–
Zhi Xiao (i)	–	–	–	–	–	–
Name of independent non-executive directors						
Shiu Kwan Danny Wai	–	229	–	–	–	229
Zhu Xin	–	229	–	–	–	229
Luis Barreto (i)	–	204	–	–	–	204
Pierre Armand Morgon (i)	–	204	–	–	–	204
Shuifa Gui (i)	–	26	–	–	–	26
Jianzhong Liu (i)	–	26	–	–	–	26
	–	4,918	1,965	835	132	7,850

36. BENEFITS AND INTERESTS OF DIRECTORS (CONTINUED)

(a) Directors' and chief executive's emoluments (Continued)

	Emoluments paid or receivable in respect of a person's services as a director					
Name	Fees RMB'000	Salaries RMB'000	Discretionary bonuses RMB'000	Share-based compensation expenses RMB'000	Social security costs, housing benefits and other employee benefits RMB'000	Total RMB'000
For the year ended 31 December 2018						
Name of executive directors						
Xuefeng Yu*	–	878	450	–	71	1,399
Tao Zhu	–	863	450	945	154	2,412
Dongxu Qiu	–	488	270	–	61	819
Helen Huihua Mao (ii)	–	338	–	–	69	407
Shoubai Chao (ii)	–	525	301	–	7	833
Name of non-executive directors						
Qiang Xu	–	–	–	–	–	–
Liang Lin	–	–	–	–	–	–
Nisa Leung	–	–	–	–	–	–
Zheng Yin	–	–	–	–	–	–
Name of independent non-executive directors (ii)						
Shiu Kwan Danny Wai	–	–	–	–	–	–
Zhu Xin	–	–	–	–	–	–
Luis Barreto	–	–	–	–	–	–
Pierre Armand Morgon	–	–	–	–	–	–
	–	3,092	1,471	945	362	5,870

* Chief executive of the Company

Note:

(i) On 28 June 2019, Mr.Zhi Xiao was appointed as a non-executive director, and Dr.Zheng Yin ceased to be a non-executive director.

On 29 November 2019, Mr.Shuifa Gui and Mr.Jianzhong Liu were appointed as independent non-executive directors, and Dr.Pierre Armand Morgon and Dr.Luis Barreto ceased to be independent non-executive directors.

(ii) On 22 June 2018, Shoubai Chao was appointed as the Company's executive director. On the same day, Helen Huihua Mao resigned from the position as executive director.

On 22 June 2018, Shiu Kwan Danny Wai, Zhu Xin, Luis Barreto and Pierre Armand Morgon were appointed as independent non-executive directors of the Company with the appointment to take effect upon the Listing.

36. BENEFITS AND INTERESTS OF DIRECTORS (CONTINUED)

(b) No directors waived or agreed to waive any emoluments. No emoluments were paid to directors as an inducement to join or upon joining the Group or as compensation for loss of office.

(c) Directors' material interests in transactions, arrangements or contracts

No significant transactions, arrangements and contracts in relation to the Group's business to which the Group was a party and in which a director of the Company had a material interest, whether directly or indirectly, subsisted at the end of the year or at any time during the year ended 31 December 2019 and 2018.

37. PRINCIPAL SUBSIDIARY

Name of company	Place of incorporation and operation and kind of legal entity	Principal activity	Shares issued	Proportion of ownership interest		
				Attributable to the Group	Held by the Company	Held by subsidiaries
Tianjin Wan Bo Biomedical Technology Co., Ltd. 天津萬博生物醫藥技術有限公司	Mainland China, wholly foreign owned enterprises	Research, manufacturing, technical transformation and imports and exports of vaccine products	N/A	100%	100%	0%

38. SUBSEQUENT EVENTS

The Novel Coronavirus outbreak around the world may have an impact on our business operations, such as causing delays in clinical trials, regulatory inspections and launch of vaccine products. It is difficult to estimate the full impact in the coming months given the dynamic nature of these circumstances. The Company will keep continuous attention on the situation and react actively to the impacts.

Definitions

"Audit Committee"	the audit committee of the Board
"Board" or "Board of Directors"	the board of directors of the Company
"CanSinoBIO", "Company", "our Company" or "the Company"	CanSino Biologics Inc. (康希諾生物股份公司), a joint stock company incorporated in the PRC with limited liability on February 13, 2017, or, where the context requires (as the case may be), its predecessor, Tianjin CanSino Biotechnology Inc. (天津康希諾生物技術有限公司), a company incorporated in the PRC with limited liability on January 13, 2009
"CDE"	Center for Drug Evaluation of the National Medical Products Administration (國家藥品監督管理局藥品審評中心)
"CG Code"	the Corporate Governance Code as set out in Appendix 14 to the Listing Rules
"China" or "the PRC"	the People's Republic of China excluding, for the purpose of this annual report, Hong Kong, Macau Special Administrative Region and Taiwan
"Concert Party Agreement"	the agreement entered into between Dr. Yu, Dr. Zhu, Dr. Qiu and Dr. Mao on February 13, 2017 pursuant to which Dr. Yu, Dr. Zhu, Dr. Qiu and Dr. Mao have undertaken to, among other things, vote unanimously for any resolutions proposed at any Shareholders' meeting of our Company
"Controlling Shareholder(s)"	has the meaning ascribed thereto under the Listing Rules and unless the context requires otherwise, refers to Dr. Yu, Dr. Zhu, Dr. Qiu and Dr. Mao
"Core Product(s)"	has the meaning ascribed to it in Chapter 18A of the Listing Rules; for purposes of this report, our Core Products include our MCV2 candidate and MCV4 candidate
"CTA"	clinical trial application, the PRC equivalent of investigational new vaccine application
"Director(s)"	the director(s) of the Company
"Domestic Shares"	ordinary shares in the 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
"Dr. Chao"	Dr. Shou Bai CHAO, executive Director, chief operating officer and deputy general manager of the Company and spouse of Dr. Mao
"Dr. Mao"	Dr. Helen Huihua MAO, senior vice president and deputy general manager of the Company, our co-founder and Controlling Shareholder and spouse of Dr. Chao

"Dr. Qiu"	Dr. Dongxu QIU, executive Director, senior vice president and deputy general manager of the Company, our co-founder and Controlling Shareholder
"Dr. Yu"	Dr. Xuefeng YU, chairman of the Board, executive Director, chief executive officer and general manager of the Company, our co-founder and controlling shareholder
"Dr. Zhu"	Dr. Tao ZHU, executive Director, chief scientific officer and deputy general manager of the Company, our co-founder and Controlling Shareholder
"Global Offering"	the offer of H Shares for subscription as described in the Prospectus
"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
"Group", "our Group", "the Group", "we", "us", "our" or "CanSino"	the Company and its subsidiary
"H Shares"	overseas listed shares in the share capital of our Company with a nominal value of RMB1.00 each, which are subscribed for and traded in HK dollars
"HK$"	Hong Kong dollars, the lawful currency of Hong Kong
"HKFRS"	the Hong Kong Financial Reporting Standards
"Hong Kong"	the Hong Kong Special Administrative Region of the PRC
"IFRS"	International Financial Reporting Standards
"Listing" or "IPO"	the listing of the H Shares on the Main Board of the Stock Exchange on the Listing Date
"Listing Date"	March 28, 2019, being the date on which the H Shares were listed on the Main Board
"Listing Rules"	the Rules Governing the Listing of Securities on the Stock Exchange, as amended or supplemented from time to time
"Main Board"	the Main Board of the Stock Exchange

"Model Code"	the Model Code for Securities Transactions by Directors of Listed Issuers as set out in Appendix 10 to the Listing Rules
"NMPA"	the National Medical Products Administration of China (國家藥品監督管理局) or, where the context so requires, its predecessor, the China Food and Drug Administration (國家食品藥品監督管理總局), or CFDA
"NDA"	new drug application
"Nomination Committee"	the nomination committee of the Board
"Proposed Issue of A Shares"	the proposed initial public issue of not more than 24,800,000 A Shares, which will be listed on the Sci-Tech Innovation Board of the Shanghai Stock Exchange, details of which were set in the circular of the Company dated October 14, 2019
"Prospectus"	the prospectus issued by the Company dated March 18, 2019
"Reporting Period"	the year from January 1, 2019 to December 31, 2019
"Remuneration and Assessment Committee"	the remuneration and assessment committee of the Board
"Renminbi" or "RMB"	Renminbi Yuan, the lawful currency of China
"SFO"	the Securities and Futures Ordinance (Chapter 571 of the Laws of Hong Kong), as amended or supplemented from time to time
"Shareholder(s)"	holder(s) of the Shares
"Share(s)"	shares in the share capital of our Company, with a nominal value of RMB1.00 each, comprising our Domestic Shares, Unlisted Foreign Shares and H Shares
"Stock Exchange"	The Stock Exchange of Hong Kong Limited
"Supervisor(s)"	the supervisor(s) of the Company
"Unlisted Foreign Shares"	ordinary shares issued by our company with a nominal value of RMB1.00 each and are held foreign investors and are not listed on any stock exchange

康希诺生物股份公司
CanSino Biologics Inc.