Jiangsu Recbio Technology Co., Ltd.
江蘇瑞科生物技術股份有限公司

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

(Stock Code: 2179)

ANNUAL RESULTS ANNOUNCEMENT FOR THE YEAR ENDED DECEMBER 31, 2023 AND NO FURTHER EXTENSION OF VALIDITY PERIOD OF RESOLUTIONS ON ISSUANCE OF DOMESTIC SHARES FOR 2023

The Board is pleased to announce the audited condensed consolidated results of the Group for the year ended December 31, 2023, together with the audited comparative figures for the year ended December 31, 2022.

BUSINESS HIGHLIGHTS

We achieved the following milestones and progress in pipeline development and business operations:

REC603 – Recombinant HPV 9-valent Vaccine

HPV 9-valent vaccines can provide protection against approximately 90% of cervical cancer and 90% of the anal and genital warts, being widely considered as the most effective vaccines against HPV-related diseases. Currently, no domestic HPV 9-valent vaccine has been approved for marketing in China.

- We are in the process of conducting phase III clinical trial of REC603 in China and follow-up is being conducted in accordance with the clinical protocol. We have completed the 24th month follow-up visit and are conducting the 30th month follow-up visit observation. We plan to take the pathological endpoint for interim analysis and submit BLA application after meeting the conditions.

- The "Technical Guidelines for the Clinical Trials of Human Papillomavirus Vaccines (for Trial Implementation)" issued by the Center for Drug Evaluation of NMPA clearly states that "randomized, double-blind, placebo-controlled design is currently the best strategy to confirm the protective efficacy of first-generation vaccines". Our phase III clinical protocol for the 9-valent HPV vaccine strictly follows the guidelines of the regulatory authorities; and we have the largest HPV 9-valent phase III clinical trial subjects in China and are conducting clinical trials in Henan, Shanxi and Yunnan provinces with high HPV infection rates. Currently, the Company is conducting follow-up visits according to the established protocol, maintaining ranking among the leading group in China in term of the clinical development progress.

- We are actively promoting the commercialization of recombinant HPV 9-valent vaccine REC603 in overseas markets. In January 2024, we have signed the framework agreement with SPIMACO, a pharmaceutical company in Saudi Arabia, for the recombinant HPV 9-valent vaccine REC603 and entered into an authorization and strategic cooperation. According to the agreement, we exclusively license SPIMACO to develop, register and commercialize recombinant HPV 9-valent vaccine REC603, in 15 Middle East and North Africa countries, including Saudi Arabia. In addition, we have successively achieved intention of cooperation with partners in the United Arab Emirates, the Philippines and India on the recombinant HPV 9-valent vaccine to jointly promote clinical registration and market expansion.

REC610 – Novel Adjuvanted Recombinant Shingles Vaccine

Shingles is an acute infectious skin disease caused by reactivation of latent varicella zoster virus (VZV) in the body. There is no specific medicine for shingles, and vaccine is an effective means of preventing shingles. According to research data on shingles vaccines that have been marketed around the world, the novel adjuvanted vaccine can provide stronger cellular immunity and protective efficacy as compared to live attenuated vaccines.

- We have completed enrollment of all subjects in the phase I clinical trial in China. The study proposes to adopt a randomized, double-blind, parallel controlled design for enrolled 180 healthy adult subjects aged 40 and above in Pu'er, Yunnan Province to evaluate the safety, tolerability and immunogenicity of REC610. REC610 has obtained the Notice on Drug Clinical Trial Approval (notice number: 2023LP02151) issued by the NMPA in October 2023, which is authorized to carry out phase I and phase III clinical trials in China as a Category 3.3 biological product for preventive use.

- Positive results from the first-in-human ("FIH") clinical trial interim analysis in the Philippines. Previously, the Company's REC610 commenced the FIH clinical trial with GSK Shingrix® active controlled in the Philippines. The Interim Analysis (IA) results showed that REC610 demonstrated overall favorable safety and tolerability profile in healthy participants aged 40 and above after two doses of the vaccination. REC610 induced strong gE-specific humoral and cellular immune responses, which were evident after the first vaccination and reached the peak at 30 days after the second vaccination. The humoral and cellular immune responses were comparable between REC610 and Shingrix® group, and the immune response level in REC610 group was numerically higher than that in Shingrix® group.

REC625 – Novel Adjuvanted Recombinant Respiratory Syncytial Virus Vaccine

- The REC625 is equipped with the novel adjuvant BFA01 independently developed by us and intended to prevent the diseases caused by respiratory syncytial virus infection in the elderly population. Preclinical studies have shown that REC625 has favorable immunogenicity and can induce high levels of specific neutralizing antibodies, and its immunogenicity is comparable to that of international mainstream varieties.

- The project adopted our independently designed vaccine antigen structure and relevant invention patents application has been submitted.

- We plan to complete the preclinical study for this project in 2024.

Others

- The two independently developed novel adjuvants, BFA01 and BFA03, have been successfully included in the adjuvant supply pool managed by the Coalition for Epidemic Preparedness Innovations ("**CEPI**") due to their significant advantages in efficacy and safety, as well as their commercial-scale industrialization capabilities, to meet the demand for innovative adjuvants from vaccine developers around the world.

- We actively promote the cooperation of adjuvant empowerment and work with partners to achieve the upgrade and iteration of vaccines, and will share the incremental value of innovative varieties in the future. We have successively signed joint development agreements with two industry chain partners to provide innovative adjuvants and related technical services to jointly develop novel adjuvant respiratory syncytial virus vaccine and novel adjuvant rabies vaccine.

We cannot guarantee that we will ultimately develop or market our Core Product or other pipeline products successfully. Shareholders and potential investors of our Company are advised to exercise due care when dealing in the Shares of our Company.

FINANCIAL HIGHLIGHTS

Consolidated Statement of Profit or Loss and Other Comprehensive Income

	For the year ended December 31,				
	2023	2022	2021	2020	2019
	RMB'000	*RMB'000*	*RMB'000*	*RMB'000*	*RMB'000*
Other income and gains	**100,555**	147,993	27,810	9,551	12,932
Loss before tax	**(572,443)**	(735,996)	(657,566)	(179,400)	(138,270)
Loss for the year	**(572,443)**	(735,996)	(657,566)	(179,400)	(138,270)
Loss attributable to owners of the parent	**(571,957)**	(722,703)	(657,561)	(179,400)	(138,270)
Loss per share – Basic and diluted (RMB)	**(1.19)**	(1.52)	(1.56)	(0.58)	(0.48)

Consolidated Statement of Financial Position

	As at December 31,				
	2023	2022	2021	2020	2019
	RMB'000	*RMB'000*	*RMB'000*	*RMB'000*	*RMB'000*
Total non-current assets	**1,056,904**	889,687	624,649	337,638	115,895
Total current assets	**1,129,373**	1,419,920	1,294,571	709,376	310,650
Total current liabilities	**444,235**	328,983	139,293	57,481	17,798
Net current assets	**685,138**	1,090,937	1,155,278	651,895	292,852
Total assets less current liabilities	**1,742,042**	1,980,624	1,779,927	989,533	408,747
Total non-current liabilities	**671,098**	327,546	106,631	1,998,317	728,294
Total (deficit)/equity	**1,070,944**	1,653,078	1,673,296	(1,008,784)	(319,547)

CONSOLIDATED STATEMENT OF PROFIT OR LOSS AND OTHER COMPREHENSIVE INCOME

Year ended December 31, 2023

	Notes	**2023** ***RMB'000***	2022 *RMB'000*
Other income and gains	*5*	**100,555**	147,993
Selling and distribution expenses		**(8,471)**	(8,654)
Administrative expenses		**(143,767)**	(155,302)
Research and development expenses		**(487,847)**	(716,444)
Other expenses	*5*	**(19,347)**	(55)
Finance costs	*7*	**(13,566)**	(3,534)
LOSS BEFORE TAX	*6*	**(572,443)**	(735,996)
Income tax expense	*8*	**–**	–
LOSS FOR THE YEAR		**(572,443)**	(735,996)
Attributable to:			
Owners of the parent		**(571,957)**	(722,703)
Non-controlling interests		**(486)**	(13,293)
		(572,443)	(735,996)
OTHER COMPREHENSIVE INCOME			
Other comprehensive income that will not be reclassified to profit or loss in subsequent periods:			
Exchange differences on translation of foreign operations		**2,421**	–
TOTAL COMPREHENSIVE LOSS FOR THE YEAR		**(570,022)**	(735,996)
Attributable to:			
Owners of the parent		**(569,536)**	(722,703)
Non-controlling interests		**(486)**	(13,293)
		(570,022)	(735,996)
LOSS PER SHARE ATTRIBUTABLE TO ORDINARY EQUITY HOLDERS OF THE PARENT			
Basic and diluted (RMB)	*9*	**(1.19)**	(1.52)

CONSOLIDATED STATEMENT OF FINANCIAL POSITION

December 31, 2023

	Notes	As at December 31, 2023 *RMB'000*	As at December 31, 2022 *RMB'000*
NON-CURRENT ASSETS			
Property, plant and equipment	*11*	**840,843**	558,710
Right-of-use assets		**43,390**	72,542
Goodwill		**9,305**	9,305
Other intangible assets		**41,126**	33,505
Other non-current assets	*13*	**122,240**	215,625
Total non-current assets		**1,056,904**	889,687
CURRENT ASSETS			
Inventories		**93,750**	56,160
Prepayments, other receivables and other assets		**123,197**	38,610
Pledged deposits	*12*	**77,443**	–
Cash and cash equivalents	*12*	**834,983**	1,325,150
Total current assets		**1,129,373**	1,419,920
CURRENT LIABILITIES			
Trade and bills payables	*10*	**115,081**	62,517
Other payables and accruals		**268,116**	244,711
Interest-bearing bank and other borrowings – current		**46,307**	1,394
Lease liabilities		**14,731**	20,361
Total current liabilities		**444,235**	328,983
NET CURRENT ASSETS		**685,138**	1,090,937
TOTAL ASSETS LESS CURRENT LIABILITIES		**1,742,042**	1,980,624
NON-CURRENT LIABILITIES			
Interest-bearing bank and other borrowings		**585,333**	231,621
Lease liabilities		**4,424**	29,251
Deferred income		**75,811**	61,144
Deferred tax liabilities		**5,530**	5,530
Total non-current liabilities		**671,098**	327,546
Net assets		**1,070,944**	1,653,078
EQUITY			
Equity attributable to owners of the parent			
Share capital		**482,963**	482,963
Treasury shares		**(54,005)**	–
Reserves		**642,478**	1,178,913
Non-controlling interests		**(492)**	(8,798)
Total equity		**1,070,944**	1,653,078

1. CORPORATE AND GROUP INFORMATION

Jiangsu Recbio Technology Co., Ltd. is a joint stock company with limited liability incorporated in the People's Republic of China ("PRC"). The registered office of the Company is located at No. 888 Yaocheng Avenue, Medical High-tech District, Taizhou City, Jiangsu Province, PRC.

During the year, the Company and its subsidiaries (collectively referred to as the "Group") are principally engaged in the research and development of vaccines in Mainland China.

The Company was listed on the Main Board of The Stock Exchange of Hong Kong Limited (the "Stock Exchange") on March 31, 2022.

2. BASIS OF PREPARATION

These financial statements have been prepared in accordance with International Financial Reporting Standards ("IFRSs"), which include all standards and interpretations approved by the International Accounting Standards Board ("IASB"), and the disclosure requirements of the Hong Kong Companies Ordinance. They have been prepared under the historical cost convention. These financial statements are presented in RMB and all values are rounded to the nearest thousand (RMB'000) except when otherwise indicated.

Basis of consolidation

The consolidated financial statements include the financial statements of the Company and its subsidiaries (collectively referred to as the "Group") for the year ended December 31, 2023. A subsidiary is an entity (including a structured entity), directly or indirectly, controlled by the Company. Control is achieved when the Group is exposed, or has rights, to variable returns from its involvement with the investee and has the ability to affect those returns through its power over the investee (i.e., existing rights that give the Group the current ability to direct the relevant activities of the investee).

Generally, there is a presumption that a majority of voting rights results in control. When the Company has less than a majority of the voting or similar rights of an investee, the Group considers all relevant facts and circumstances in assessing whether it has power over an investee, including:

(a) the contractual arrangement with the other vote holders of the investee;

(b) rights arising from other contractual arrangements; and

(c) the Group's voting rights and potential voting rights.

The financial statements of the subsidiaries are prepared for the same reporting period as the Company, using consistent accounting policies. The results of subsidiaries are consolidated from the date on which the Group obtains control, and continue to be consolidated until the date that such control ceases.

Profit or loss and each component of other comprehensive income are attributed to the owners of the parent of the Group and to the non-controlling interests, even if this results in the non-controlling interests having a deficit balance. All intra-group assets and liabilities, equity, income, expenses and cash flows relating to transactions between members of the Group are eliminated in full on consolidation.

The Group reassesses whether or not it controls an investee if facts and circumstances indicate that there are changes to one or more of the three elements of control described above. A change in the ownership interest of a subsidiary, without a loss of control, is accounted for as an equity transaction.

If the Group loses control over a subsidiary, it derecognises the related assets (including goodwill), liabilities, any non-controlling interest and the exchange fluctuation reserve; and recognises the fair value of any investment retained and any resulting surplus or deficit in profit or loss. The Group's share of components previously recognised in other comprehensive income is reclassified to profit or loss or retained profits, as appropriate, on the same basis as would be required if the Group had directly disposed of the related assets or liabilities.

3. CHANGES IN ACCOUNTING POLICIES AND DISCLOSURES

The Group has adopted the following new and revised IFRSs for the first time for the current year's financial statements.

IFRS 17	*Insurance Contracts*
Amendments to IAS 1 and IFRS Practice Statement 2	*Disclosure of Accounting Policies*
Amendments to IAS 8	*Definition of Accounting Estimates*
Amendments to IAS 12	*Deferred Tax related to Assets and Liabilities arising from a Single Transaction*
Amendments to IAS 12	*International Tax Reform – Pillar Two Model Rules*

The nature and the impact of the new and revised IFRSs that are applicable to the Group are described below:

(a) Amendments to IAS 1 require entities to disclose their material accounting policy information rather than their significant accounting policies. Accounting policy information is material if, when considered together with other information included in an entity's financial statements, it can reasonably be expected to influence decisions that the primary users of general purpose financial statements make on the basis of those financial statements. Amendments to IFRS Practice Statement 2 *Making Materiality Judgements* provide non-mandatory guidance on how to apply the concept of materiality to accounting policy disclosures.

(b) Amendments to IAS 8 clarify the distinction between changes in accounting estimates and changes in accounting policies. Accounting estimates are defined as monetary amounts in financial statements that are subject to measurement uncertainty. The amendments also clarify how entities use measurement techniques and inputs to develop accounting estimates. Since the Group's approach and policy align with the amendments, the amendments had no impact on the Group's financial statements.

(c) Amendments to IAS 12 *Deferred Tax related to Assets and Liabilities arising from a Single Transaction* narrow the scope of the initial recognition exception in IAS 12 so that it no longer applies to transactions that give rise to equal taxable and deductible temporary differences, such as leases and decommissioning obligations. Therefore, entities are required to recognise a deferred tax asset (provided that sufficient taxable profit is available) and a deferred tax liability for temporary differences arising from these transactions.

Prior to the initial application of these amendments, the Group applied the initial recognition exception and did not recognise a deferred tax asset and a deferred tax liability for temporary differences for transactions related to leases. The Group has applied the amendments on temporary differences related to leases as at January 1, 2022. Upon initial application of these amendments, the Group recognised (i) a deferred tax asset for all deductible temporary differences associated with lease liabilities (provided that sufficient taxable profit is available), and (ii) a deferred tax liability for all taxable temporary differences associated with right-of-use assets at January 1, 2022.

Upon the application of the amendments, the Group has determined the temporary differences arising from right-of-use assets and lease liabilities separately. However, they did not have any material impact on the overall deferred tax balances presented in the consolidated statement of financial position as the related deferred tax balances qualified for offsetting under IAS 12.

(d) Amendments to IAS 12 *International Tax Reform – Pillar Two Model Rules* introduce a mandatory temporary exception from the recognition and disclosure of deferred taxes arising from the implementation of the Pillar Two model rules published by the Organisation for Economic Co-operation and Development. The amendments also introduce disclosure requirements for the affected entities to help users of the financial statements better understand the entities' exposure to Pillar Two income taxes, including the disclosure of current tax related to Pillar Two income taxes separately in the periods when Pillar Two legislation is effective and the disclosure of known or reasonably estimable information of their exposure to Pillar Two income taxes in periods in which the legislation is enacted or substantively enacted but not yet in effect. The Group has applied the amendments retrospectively. Since the Group did not fall within the scope of the Pillar Two model rules, the amendments did not have any impact to the Group.

4. OPERATING SEGMENT INFORMATION

For the purpose of resource allocation and performance assessment, the Group's chief executive officer, being the chief operating decision maker, reviews the consolidated results when making decisions about allocating resources and assessing performance of the Group as a whole and hence, the Group has only one reportable segment and no further analysis of this single segment is presented.

The Group did not record any revenue during the year and the Group's non-current assets are substantially located in the PRC, accordingly, no analysis of geographical segment is presented.

5. OTHER INCOME AND GAINS, AND OTHER EXPENSES

(a) An analysis of other income and gains is as follows:

	Year ended December 31,	
	2023	2022
	RMB'000	*RMB'000*
Other income		
Government grants (i)	**30,377**	5,325
Bank interest income	**45,580**	23,975
Gain on disposal of items of right-of-use assets and lease liabilities	**6,605**	–
Others	**4**	74
Gains		
Gain on fair value changes of financial assets at fair value through profit or loss	**492**	3,558
Foreign exchange gains, net	**17,497**	115,061
Other income and gains	**100,555**	147,993

(i) The government grants and subsidies related to income and assets have been received to compensate for the Group's research and development expenditures and business operations.

(b) An analysis of other expenses is as follows:

	Year ended December 31,	
	2023	2022
	RMB'000	*RMB'000*
Impairment of other non-current assets	**8,689**	–
Provision of impairment for inventories	**8,038**	–
Others	**2,620**	55
	19,347	55

6. LOSS BEFORE TAX

The Group's loss before tax is arrived at after charging/(crediting):

		Year ended December 31,	
		2023	2022
	Notes	***RMB'000***	*RMB'000*
Depreciation of property, plant and equipment*	*11*	**47,416**	27,075
Depreciation of right-of-use assets*		**12,035**	13,476
Amortisation of intangible assets*		**4,447**	384
Amortisation of other non-current assets*		**461**	333
Amortisation of other current assets*		**2,019**	3,067
Interest on lease liabilities		**1,363**	1,914
Expense relating to short-term leases*		**2,140**	1,688
Provision of impairment for inventories		**8,038**	–
Research and development costs		**487,847**	716,444
(Gain)/Loss on disposals of items of right-of-use assets and leases	*5*	**(6,605)**	37
Loss on disposal of items of property, plant and equipment		**35**	55
Gain on fair value changes of financial assets	*5*	**(492)**	(3,558)
Government grants related to income	*5*	**(30,377)**	(5,325)
Foreign exchange gains, net	*5*	**(17,497)**	(115,061)
Bank interest income	*5*	**(45,580)**	(23,975)
Auditor's remuneration*		**2,360**	2,719
Listing expense		**–**	9,932
Employee benefit expense* (excluding directors', chief executive's and supervisors' remuneration):			
Wages and salaries		**113,772**	109,199
Share-based payments expense		**19,658**	30,325
Pension scheme contributions, social welfare and other welfare		**12,470**	10,557

* The depreciation of property, plant and equipment, depreciation of right-of-use assets, amortisation of intangible assets, amortisation of other non-current assets, amortisation of other current assets, expense relating to short-term leases, auditor's remuneration, listing expense and employee benefit expense for the year are set out in "Selling and distribution expenses", "Administrative expenses" and "Research and development costs" in the consolidated statement of profit or loss and other comprehensive income.

7. FINANCE COSTS

An analysis of finance costs is as follows:

	Year ended December 31,	
	2023	2022
	RMB'000	*RMB'000*
Interest on bank borrowings	**19,989**	5,567
Less: Interest capitalised	**7,786**	3,947
Interest on lease liabilities	**1,363**	1,914
	13,566	3,534

8. INCOME TAX EXPENSE

The Group's principal applicable taxes and tax rates are as follows:

(a) No provision for Mainland China income tax has been provided for at a rate of 25% pursuant to the Corporate Income Tax Law of the PRC and the respective regulations (the "CIT Law"), as the Group's PRC entities have no estimated assessable profits during the year.

(b) Pursuant to the Corporate Income Tax Law of the PRC and the respective regulations (the "CIT Law"), the Company is subject to CIT at a rate of 25% on the taxable income. Beijing ABZYMO obtained its certificate of high-technology enterprise on December 30, 2022 and is entitled to enjoy a preferential tax rate of 15% for three years from 2022 to 2024.

(c) A reconciliation of the tax expense applicable to loss before tax at the statutory rate to the tax expense at the effective tax rate is as follows:

	Year ended December 31, 2023 ***RMB'000***	Year ended December 31, 2022 *RMB'000*
Loss before tax	**(572,443)**	(735,996)
Tax at the statutory tax rate (25%)	**(143,111)**	(183,999)
Lower tax rates for specific provinces or enacted by local authority	**11,533**	11,968
Expenses not deductible for tax	**11,514**	12,754
Additional deductible allowance for qualified research and development costs	**(105,173)**	(127,394)
Tax losses and deductible temporary differences not recognised	**225,237**	286,671
Tax charge at the Group's effective rate	**–**	–

Deferred tax assets have not been recognised in respect of the following items:

	As at December 31, 2023 ***RMB'000***	As at December 31, 2022 *RMB'000*
Tax losses	**698,686**	491,413
Deductible temporary differences	**72,263**	55,714
	770,949	547,127

The Group has tax losses of RMB3,063,726,000 and RMB2,163,611,000 as at December 31, 2023 and 2022.

Deferred tax assets have not been recognised in respect of these losses as it is not considered probable that taxable profits will be available against which the tax losses can be utilised.

9. LOSS PER SHARE ATTRIBUTABLE TO ORDINARY EQUITY HOLDERS OF THE PARENT

The calculation of the basic loss per share amounts for the years ended December 31, 2023 and 2022 is based on the loss for the years attributable to ordinary equity holders of the parent and the weighted average number of ordinary shares assumed to be in issue after taking into account the retrospective adjustments on the assumption that the company conversion into a joint stock company (Company's Capitalization Issue) and the share capital transfer from capital premium had been in effect on January 1, 2022.

The Company had no potentially dilutive ordinary shares in issue during each of the years presented.

The calculation of basic loss per share is based on:

	Year ended December 31, 2023	Year ended December 31, 2022
Loss		
Loss attributable to ordinary equity holders of the parent, used in the basic and diluted loss per share calculation (RMB'000)	**(571,957)**	(722,703)
Shares		
Weighted average number of ordinary shares assumed to be in issue during the year used in the basic and diluted loss per share calculation	**480,943,660**	474,213,311
Loss per share (basic and diluted) (RMB per share)	**(1.19)**	(1.52)

10. TRADE AND BILLS PAYABLES

An ageing analysis of the trade and bills payables as at the end of the reporting period, based on the invoice date, is as follows:

	As at December 31, 2023 ***RMB'000***	As at December 31, 2022 *RMB'000*
Within 1 year	**113,918**	62,507
Over 1 year	**1,163**	10
	115,081	62,517

Trade and bills payables are non-interest-bearing and are normally settled within the normal operating cycle.

11. PROPERTY, PLANT AND EQUIPMENT

	Leasehold improvements *RMB'000*	Plant and machinery *RMB'000*	Furniture and fixtures *RMB'000*	Computer and office equipment *RMB'000*	Motor vehicles *RMB'000*	Construction in progress *RMB'000*	Total *RMB'000*
For the year ended 2023							
At January 1, 2023:							
Cost	**30,059**	**190,064**	**200**	**5,050**	**2,683**	**381,731**	**609,787**
Accumulated depreciation and impairment	**(13,342)**	**(34,162)**	**(94)**	**(2,299)**	**(1,180)**	**–**	**(51,077)**
Net carrying amount	**16,717**	**155,902**	**106**	**2,751**	**1,503**	**381,731**	**558,710**
At January 1, 2023, net of accumulated depreciation and impairment	**16,717**	**155,902**	**106**	**2,751**	**1,503**	**381,731**	**558,710**
Additions	**461**	**2,006**	**56**	**983**	**–**	**340,069**	**343,575**
Disposals	**–**	**(72)**	**(8)**	**–**	**–**	**(1,878)**	**(1,958)**
Depreciation provided during the year	**(18,415)**	**(26,336)**	**(33)**	**(1,903)**	**(729)**	**–**	**(47,416)**
Transfers	**122,531**	**88,909**	**1**	**2,286**	**413**	**(226,208)**	**(12,068)**
At December 31, 2023, net of accumulated depreciation and impairment	**121,294**	**220,409**	**122**	**4,117**	**1,187**	**493,714**	**840,843**
At December 31, 2023							
Cost	**150,381**	**279,514**	**226**	**8,305**	**3,096**	**493,714**	**935,236**
Accumulated depreciation and impairment	**(29,087)**	**(59,105)**	**(104)**	**(4,188)**	**(1,909)**	**–**	**(94,393)**
Net carrying amount	**121,294**	**220,409**	**122**	**4,117**	**1,187**	**493,714**	**840,843**

	Leasehold improvements *RMB'000*	Plant and machinery *RMB'000*	Furniture and fixtures *RMB'000*	Computer and office equipment *RMB'000*	Motor vehicles *RMB'000*	Construction in progress *RMB'000*	Total *RMB'000*
For the year ended 2022							
At January 1, 2022:							
Cost	29,207	138,859	176	3,361	2,179	266,735	440,517
Accumulated depreciation and impairment	(6,626)	(15,762)	(62)	(1,162)	(571)	–	(24,183)
Net carrying amount	22,581	123,097	114	2,199	1,608	266,735	416,334
At January 1, 2022, net of accumulated depreciation and impairment	22,581	123,097	114	2,199	1,608	266,735	416,334
Additions	–	30,104	24	813	134	150,200	181,275
Disposals	–	(55)	–	–	–	–	(55)
Depreciation provided during the year	(6,716)	(18,581)	(32)	(1,137)	(609)	–	(27,075)
Transfers	852	21,337	–	876	370	(35,204)	(11,769)
At December 31, 2022, net of accumulated depreciation and impairment	16,717	155,902	106	2,751	1,503	381,731	558,710
At December 31, 2022							
Cost	30,059	190,064	200	5,050	2,683	381,731	609,787
Accumulated depreciation and impairment	(13,342)	(34,162)	(94)	(2,299)	(1,180)	–	(51,077)
Net carrying amount	16,717	155,902	106	2,751	1,503	381,731	558,710

12. CASH AND CASH EQUIVALENTS AND PLEDGED DEPOSITS

	As at December 31, 2023 ***RMB'000***	As at December 31, 2022 *RMB'000*
Cash at banks	**912,426**	1,169,092
Time deposits	**–**	156,058
Subtotal	**912,426**	1,325,150
Less: Pledged deposits	**(77,443)**	–
Cash and cash equivalents	**834,983**	1,325,150
Denominated in:		
RMB	**247,104**	205,393
USD	**509,223**	701,487
HKD	**78,656**	418,270
Total	**834,983**	1,325,150

13. OTHER NON-CURRENT ASSETS

	As at December 31, 2023 ***RMB'000***	As at December 31, 2022 *RMB'000*
Time deposits	**–**	31,404
Prepayment for purchase of property, plant and equipment	**118,410**	182,585
Deposits – non current*	**2,400**	–
Prepayment for long-term insurance**	**1,430**	1,636
	122,240	215,625

As at December 31, 2023, the Group had no time deposits with a maturity date of one year later.

* The Company signed a finance lease contract with Zhongguancun Science-Tech Leasing Co., Ltd. ("Zhongguancun") with regard to the sale and leaseback for certain equipment, of which the related deposit being paid to Zhongguancun was amounting to RMB2,400,000.

** This is the prepayment for long-term insurance, which will expire in September 2027.

14. DIVIDEND

No dividends have been paid or declared by the Company during the year (2022: Nil).

MANAGEMENT DISCUSSION AND ANALYSIS

BUSINESS REVIEW

Overview

Founded in 2012, we are a vaccine company dedicated to the research, development and commercialization of innovative vaccines, with a high-value innovative vaccine portfolio driven by in-house developed technologies. We primarily focus on the R&D of innovative vaccines such as HPV vaccine candidates. Our vaccine portfolio currently consists of more than 10 vaccines, including our three strategic products, namely REC603, a recombinant HPV 9-valent vaccine under phase III clinical trial; REC610, a novel adjuvanted recombinant shingles vaccine, which has completed enrollment of all subjects for phase I in China; and a novel adjuvanted recombinant vaccine against respiratory syncytial virus, which is about to enter clinical research stage.

Through years of dedication and focus on this area, we have developed a comprehensive vaccine innovation engine consisting of a novel adjuvant platform, protein engineering platform and immunological evaluation platform. These platforms empower us to continue to discover and develop innovative vaccines that apply advanced technologies in our vaccine candidates. We are one of the few companies that are capable of developing novel adjuvants, benchmarking all of the FDA-approved novel adjuvants to date. Our technology platforms form a "solid trifecta", creating synergies among the design and optimization of antigens, the development and production of adjuvants and the identification of the optimal combinations of antigens and adjuvants. We have also established an IPD system, enabling us to advance the R&D of multiple vaccine candidates simultaneously. Guided by our "OPTI" vaccine development philosophy, we have established a vaccine portfolio consisting of more than 10 candidates.

We have started to build our manufacturing capabilities at an early stage, aiming at ensuring our vaccine candidates to be smoothly transferred into successful commercial vaccine products. We are constructing HPV vaccine manufacturing facility in Taizhou, Jiangsu province, which meets the WHO Prequalification (WHO PQ) Standards, the first phase of which has a designed capacity of 20 million doses of HPV 9-valent vaccines per year. Currently, the facility is under the stage of equipment installation and testing. In addition, we have completed the construction of our innovative vaccines manufacturing facility based on the CHO cell expression systems in November 2021, and successfully acquired the production license issued by Jiangsu MPA. In April 2022, this manufacturing facility received the European Union (EU) Qualified Person Declaration issued by a Qualified Person (QP), which indicated that the Company's manufacturing facility in Taizhou and its quality management system met the EU GMP standard. This manufacturing facility has a total GFA of approximately 17,000 sq.m., and can be used for the manufacturing of a variety of innovative vaccines (CHO cell), including the novel adjuvanted recombinant shingles vaccines.

Our Vaccine Pipeline

Our vaccine portfolio strategically covered seven disease areas with significant burden globally, including HPV, varicella zoster virus, respiratory syncytial virus, cytomegalovirus and herpes simplex virus infection, etc. As of the date of this announcement, our vaccine portfolio consisted of more than 10 vaccine candidates including, in particular, REC603, a recombinant HPV 9-valent vaccine candidate under phase III clinical trial in China; a novel adjuvanted recombinant shingles vaccine under phase I clinical research stage in China; and a novel adjuvanted recombinant vaccine against respiratory syncytial virus, which is about to enter clinical research stage.

The following table summarizes our vaccine pipeline as of the date of this announcement.

Diseases	Candidates	Type of Vaccine	Adjuvant Systems	Product Rights	Commercial Rights	R&D Status: Pre-clinical / IND Filing / Phase I / Phase II / Phase III	Commercialization
Cervical Cancers & Genital Warts	★ **REC603**	Recombinant HPV 9-valent vaccine	Alum	Self-developed	Global	Phase III[2]	
	REC604b	Novel adjuvanted recombinant HPV 9-valent vaccine	Undisclosed novel adjuvant[1]	Self-developed	Global	Pre-clinical	
	REC601	Recombinant HPV bivalent (Types 16/18) vaccine	Alum	Self-developed	Global	Phase I	
	REC602	Recombinant HPV bivalent (Types 6/11) vaccine	Alum	Self-developed	Global	Phase I	
	REC604a	Novel adjuvanted recombinant HPV quadrivalent vaccine[3]	BFA04	Self-developed	Global	IND Filing	
Shingles	REC610	Novel adjuvanted recombinant shingles vaccine[4]	BFA01	Self-developed	Global	Phase I	
Respiratory Diseases Caused by Respiratory Syncytial Virus (RSV)/ Metapneumovirus Infection	REC625	Novel adjuvanted recombinant respiratory syncytial virus vaccine	BFA01	Self-developed	Global	Pre-clinical	
	REC627	Recombinant metapneumovirus vaccine	Undisclosed novel adjuvant[1]	Self-developed	Global	Pre-clinical	
Human Cytomegalovirus Disease	REC609	Recombinant human cytomegalovirus vaccine	BFA01	Self-developed	Global	Pre-clinical	
COVID-19 Infection	ReCOV	Recombinant Bicomponent COVID-19 Vaccine	BFA03	Co-developed[5]	Global	Phase III	
Diseases Caused by Hepatitis B Virus Infection	REC629	Recombinant Hepatitis B virus vaccine	Undisclosed novel adjuvant[1]	Self-developed	Global	Pre-clinical	
	REC630	Therapeutic Recombinant Hepatitis B virus vaccine	Undisclosed novel adjuvant[1]	Self-developed	Global	Pre-clinical	
Herpes Caused by Herpes Simplex Infection	REC608	Recombinant herpes simplex virus vaccine	BFA01	Self-developed	Global	Pre-clinical	

★ Core Product

Notes:

1. "Undisclosed novel adjuvant" represents a self-developed novel adjuvant to be used in vaccine candidates.

2. Our Core Product REC603, an HPV 9-valent vaccine, obtained the umbrella IND approval from the NMPA in July 2018. The umbrella IND approval covers all three phases (phase I, II and III) of clinical trials of REC603. Based on communications with the CDE of the NMPA, the NMPA has no objection for us to proceed with phase III clinical trial in China directly. Accordingly, the Company did not conduct any phase II clinical trial for REC603.

3. REC604a has obtained the implied license for conducting clinical trials from Chinese medical products administrations.

4. REC610 received a drug clinical trial approval notice (notice number: 2023LP02151) issued by the NMPA in October 2023, which is approved for use as a preventive 3.3 biological product in its phase I and phase III clinical trials being carried out in China.

5. ReCOV was designed and developed by the Group jointly with Professor Wang Xiangxi's group at the Institute of Biophysics, Chinese Academy of Science. ReCOV has obtained formal marketing registration authorization from Mongolia. We will adopt a more reasonable follow-up development strategy by taking into account market demand and relevant regulatory guidance.

HPV Vaccine Pipeline

HPV is the most common viral pathogen of the reproductive tract. Although HPV infections may clear up within a few months without any intervention, certain types of HPV infections can persist and develop into cervical cancer. These high-risk HPV infections are mainly caused by HPV types 16, 18, 31, 33, 45, 52 and 58, which account for approximately 90% of cervical cancer cases globally. It is widely accepted that HPV vaccine can play an important role in eliminating cervical cancer as it can prevent HPV infection on certain high-risk types. In addition, some cancers of the anus, vulva, vagina, and oropharynx and most genital warts can be prevented by HPV vaccines.

REC603 – Phase III Stage HPV 9-Valent Vaccine – Our Core Product

REC603, our Core Product, is designed to provide protection against HPV types 6, 11, 16, 18, 31, 33, 45, 52 and 58. It is expected that REC603 will be one of the first of domestic vaccines of its kind to be approved and commercialized in China.

Summary of Clinical Trial: We jointly applied, and obtained the umbrella IND approval for REC603 in July 2018. The umbrella IND approval covers all three phases (phase I, II and III) of clinical trials. In March 2019, we commenced the phase I clinical trial of REC603 in China. We completed phase I clinical trial of REC603 in China in July 2020. Based on communications with the CDE of the NMPA, the NMPA has no objection for us to proceed with phase III clinical trial in China directly. Accordingly, we did not conduct any phase II clinical trial for REC603.

The CDE of the NMPA issued the "Technical Guidelines for the Clinical Trials of Human Papillomavirus Vaccines (for Trial Implementation)" (the "**Guidelines**") in July 2023, which clearly points out that the randomized, double-blind and placebo-controlled design is still the best strategy to confirm the immunogenicity profile of the first-generation of vaccine for the time being. We are in the process of conducting phase III clinical trial in China. The phase III clinical trial in China consists of three parts, i.e., the primary efficacy trial, the immuno-bridging trial in younger-age groups, and the immunogenicity comparative trial with Gardasil®9, with a multi-center, randomized, blinded and parallel controlled design and with a total size of 16,050 subjects. At the same time, follow-up on the subjects of REC603's primary efficacy trial is being conducted in accordance with the clinical protocol. We have completed the visit of the 24th month and are in the process of conducting the visit and observation of the 30th month. We will carry out an interim analysis by taking pathological endpoints and plan to submit a BLA application to the NMPA in 2025 when conditions are satisfied. Since obtaining the IND approval in China, no material unexpected accidents or adverse changes in relation to REC603 have occurred.

Advantages of REC603: We believe our REC603 has various advantages, including:

Positive immunogenicity profile. REC603 demonstrates a positive immunogenicity profile in its phase I clinical trial. In general, we observed a significant increase in terms of NAb GMT level against all of the target HPV types.

High-yield and stable production of HPV VLPs. REC603 adopts H. polymorpha expression system. In general, the VLPs from different expression systems are all highly similar to natural HPV capsid in structure and epitope in order to trigger immune response after vaccination, including those being produced by H. polymorpha expression system. H. polymorpha, a methylotrophic yeast species, is able to grow to very high cell density rapidly on simple media and has relatively high optimum growth temperature. Owing to its strong and tunable promoters derived from the methanol utilization pathway, high secretion capacity, and lower glycosylation activity compared to S. cerevisiae, H. polymorpha is suitable for production of recombinant proteins for medical use. With high copies of expression cassettes integrated stably in the genome of H. polymorpha, high-yield and stable expression of HPV VLPs is achieved, making our vaccine candidate more suitable for commercial production.

Favorable safety profile. REC603 was safe and well-tolerated as shown in the phase I clinical trial for REC603. There were no statistical differences in terms of incidences of AEs between the vaccine group and the placebo group. Although there is currently no available paper reporting a head-to-head clinical trial comparing domestic HPV vaccines and foreign HPV vaccines, in the clinical trial conducted by Merck Sharp & Dohme for Gardasil®9 in 2009, the rate of adverse event was 86.6% among subjects enrolled in the vaccine cohort, as compared to 53.75% as observed in the phase I clinical trial of REC603.[1] The main adverse reactions were expected fever and inject site pain, mostly were transient and mild.

[1] The above information was derived from multiple clinical trials conducted for different vaccines without the support of controlled, head-to-head clinical studies, and a number of factors (including the different subject enrollment standards adopted in different trials, different population characteristics of subjects, physicians' inoculation skills and experiences, and lifestyle of the subjects) could affect the relevant clinical results and could render cross-trial comparison results less meaningful.

Scalable manufacturing potential. Our patented technology in HPV VLPs in combination with optimized fermentation strategy and purification process enables us to achieve high and stable yield in bulk production. With well-defined critical process parameters, manufacturing of REC603 can be easily scaled-up to meet the market demand domestically and globally.

Opportunities and potentials: We believe there are significant opportunities for our HPV vaccine candidates, considering the following factors:

Superiority of HPV 9-valent vaccines. In general, HPV 9-valent vaccines can provide protection against 90% of cervical cancer and 90% of the anal and genital warts and therefore are the most recommended vaccines for HPV protection. However, to the best knowledge and information of the Company with reference to independent market research, currently there is only one HPV 9-valent vaccine approved in China, and it is expected HPV 9-valent vaccines will account for a larger market share in China after more HPV 9-valent vaccines are approved in China.

Domestic substitute. To the best knowledge and information of the Company with reference to independent market research, the first domestic HPV bivalent vaccine accounted for 66.7% of China's HPV bivalent vaccine market in terms of production value in the first year of its launch by virtue of its cost effectiveness, even if it was only approved in 2019 whereas the first imported HPV bivalent vaccine was approved in China in 2016. We believe that considering domestic vaccine products tend to adopt more favorable prices as compared to their global peers, HPV 9-valent vaccines will follow a similar trend in China after being approved. In recent years, the Chinese government has also promulgated policies in favor of domestic HPV vaccine developers. For example, in 2019, the National Health Commission of the People's Republic of China released the Healthy China Action – Cancer Prevention and Control Implementation Plan (2019-2022), stating to accelerate the review and approval process of domestic HPV vaccines and improve the accessibility of HPV vaccines. As one of the few domestic vaccine companies to have phase III stage HPV 9-valent vaccine candidate, we believe we will benefit from such favorable government policies in the future.

Same age coverage as imported vaccines. On August 30, 2022, HPV 9-valent vaccine available in the market in China has been expanded for females aged 9 to 45. Our Core Product, REC603, has also initiated phase III clinical trial for females aged 9 to 45 in 2021, indicating a same coverage in terms of age as compared to the current approved vaccines.

Next-generation HPV vaccines under development. We are also developing next-generation HPV quadrivalent and 9-valent vaccine candidates with novel adjuvants, which are designed to adopt a two-shot regimen without compromising the efficacy/safety profile of vaccine candidates, and are potentially superior as compared to the commercialized products as they are all adopting three-shot regimen.

The Guidelines clearly states that "randomized, double-blind, placebo-controlled design is currently the best strategy to confirm the protective efficacy of first-generation vaccines". Our phase III clinical protocol for the 9-valent HPV vaccine strictly follows the guidelines of the regulatory authorities; and we have the largest HPV 9-valent phase III clinical trial subjects in China and are conducting clinical trials in Henan, Shanxi and Yunnan provinces with high HPV infection rates. Currently, the Company is conducting follow-up visits according to the established protocol, maintaining ranking among the leading group in China in term of the clinical development progress.

Cautionary Statement required under Rule 18A.08(3) of the Listing Rules: We cannot guarantee that we will ultimately develop or market our Core Product successfully. Shareholders and potential investors of our Company are advised to exercise due care when dealing in the Shares of our Company.

REC601 – Phase I Stage HPV Bivalent (Type 16/18) Vaccine

The bivalent vaccine candidates are designed as HPV protection solutions for people with different affordability and have the potential to be included in the national vaccination regime in China and other jurisdictions. Due to the cost advantage of the HPV bivalent vaccine, it may become the mainstream vaccine for developing countries.

We are developing a bivalent HPV vaccine candidate, namely REC601, targeting HPV types 16 and 18, which are the main cause for a majority of cervical cancer cases. Currently, we have completed data evaluation and analysis on the phase I trial in China. The phase I trial data showed that REC601 has a favorable safety profile and an immunogenicity profile in healthy females aged 9 to 45. There was no vaccination-related grade 4 or higher AEs or SAEs. 30 days after the whole immunization: the positive rates of HPV types 16 and 18 antibodies reached 100.00%, and the negative population before immunization also reached positive conversion after the whole immunization (positive conversion rate was 100.00%).

The HPV types 16 and 18 antibody levels also increased significantly: GMT of HPV type 16 antibody increased by 632.99 times and GMT of HPV type 18 antibody increased by 1,194.02 times compared with that before immunization. REC601 adopts a similar technical process line with the recombinant HPV 9-valent vaccine.

We will adopt a more reasonable follow-up development strategy by taking into account market demand and relevant regulatory guidance.

REC602 – Phase I Stage HPV Bivalent (Type 6/11) Vaccine

We are also developing REC602, a bivalent HPV vaccine candidate targeting HPV type 6/11. We have completed the phase I trial in late 2022. REC602 adopts a similar technical process line with the recombinant HPV 9-valent vaccine. We will adopt a more reasonable follow-up development strategy by taking into account market demand and relevant regulatory guidance.

REC604a and REC604b – Early-Stage HPV Vaccines Formulated with Novel Adjuvant

Supported by our strong technology platforms, we are exploring opportunities to develop HPV vaccines formulated with novel adjuvant, namely REC604a and REC604b. Unlike the traditional aluminum adjuvant we are currently using, we are conducting early-stage development of next-generation HPV 9-valent and quadrivalent vaccines formulated with a novel self-developed adjuvant. Based on existing studies, compared to Merck's Gardasil, GSK's AS04-adjuvanted Cervarix has demonstrated strong cross-protection effectiveness with higher titers of neutralizing antibodies in clinical trials, suggesting that novel adjuvants can enhance the immunogenicity of HPV vaccines. As the introduction of novel adjuvant enhances immunogenicity profile of REC604a and REC604b, they are designed to adopt a two-shot regimen. We have obtained the implied license for conducting clinical trials for REC604a in China, and will adopt a more reasonable follow-up development strategy by taking into account market demand and relevant regulatory guidance. We plan to use a novel self-developed adjuvant to improve the immunogenicity of REC604b.

Shingles Vaccine

REC610 – Novel Adjuvanted Recombinant Shingles Vaccine Candidate under Phase I Clinical Stage

REC610 received a drug clinical trial approval notice (notice number: 2023LP02151) issued by the NMPA in October 2023, which is approved for use as a preventive 3.3 biological product in its phase I and phase III clinical trials being carried out in China and completed enrollment of all subjects for phase I clinical study in China in March 2024. This study adopted a randomized, double-blind, parallel controlled design in 180 healthy adult subjects aged 40 and above in Pu'er, Yunnan Province to evaluate the safety, tolerability and immunogenicity of REC610.

REC610 achieved positive results in the interim analysis of phase I clinical trial in the Philippines. The Interim Analysis (IA) results showed that REC610 demonstrated overall favorable safety and tolerability profile in healthy participants aged 40 and above after two doses of the vaccination. REC610 induced strong gE-specific humoral and cellular immune responses, which were evident after the first vaccination and reached the peak at 30 days after the second vaccination. The humoral and cellular immune responses were comparable between REC610 and Shingrix® group, and the immune response level in REC610 group was numerically higher than that in Shingrix® group.

1) Safety: REC610 had good safety profile with the two-dose vaccination regimen. No SAE, AESI or TEAE leading to early discontinuation was reported. The incidences of vaccination related TEAEs, solicited local and systemic TEAEs, unsolicited TEAEs were comparable between REC610 group and Shingrix® group. Majority of vaccination related TEAE were grade 1 or grade 2, and all recovered in 1-3 days post vaccination. The common (≥5%) solicited TEAEs in REC610 group included injection site pain, injection site swelling, pyrexia, headache, and myalgia.

2) Immunogenicity: REC610 induced strong gE-specific humoral and cellular immune responses, which were evident after the first vaccination and reached the peak at 30 days after the second vaccination. The humoral and cellular immune responses were comparable between REC610 and Shingrix® group, and the immune response level in REC610 group was numerically higher than that in Shingrix® group. REC610 induced favorable humoral and cellular immune responses in both elderly and adult groups. Both REC610 and Shingrix® groups induced high levels of gE-specific antibodies at 60 days after the first dose vaccination, and 30 days after the second dose vaccination. The GMT, GMI and SCR of gE-specific antibodies were comparable in REC610 group and Shingrix® group, especially, the GMT and GMI of gE-specific antibodies were numerically higher in REC610 group than those in Shingrix® group. Both REC610 and Shingrix® groups induced strong cellular immune response at 60 days after the first dose vaccination, and 30 days after the second vaccination. Tested by the internationally recognized ICS method, the frequencies and CMI response rates of CD4 + T cells secreting at least one or two of gE-specific cytokines were comparable in REC610 group and Shingrix® group, and the cellular immune response level was numerically higher in REC610 group than that in Shingrix® group.

Shingles is a common viral infectious disease. According to statistics, about 6 million new cases of shingles occur each year in China, and the incidence of shingles has gradually become younger in recent years. According to global research data on shingles vaccines that have been marketed, as compared to attenuated live vaccines, novel adjuvanted recombinant shingles vaccines can provide stronger cellular immune and protective efficacy. REC610 is equipped with a novel adjuvant BFA01 independently developed by the Company, which can promote the production of high levels of VZV glycoprotein E (gE)-specific CD4 + T cells and antibody. REC610 is intended to prevent shingles in adults aged 40 and above. According to statistics, China's population aged 40 and above is approximately 700 million. Only GSK Shingrix®, the novel adjuvant recombinant vaccine, is on the market in China, and there is a strong demand for import substitution.

Respiratory Syncytial Virus Vaccine Pipeline

REC625 – Novel Adjuvanted Recombinant Respiratory Syncytial Virus Vaccine

The REC625 is equipped with the novel adjuvant BFA01 independently developed by us and intended to prevent the diseases caused by respiratory syncytial virus infection in the elderly population. Preclinical studies have shown that REC625 has favorable immunogenicity and can induce high levels of specific neutralizing antibodies, and its immunogenicity is comparable to that of international mainstream varieties. The project adopted our independently designed vaccine antigen structure and relevant invention patents application has been submitted, and we plan to complete the preclinical study for this product in 2024.

COVID-19 Vaccine

ReCOV – Recombinant Bicomponent COVID-19 Vaccine

ReCOV is a recombinant COVID-19 vaccine developed by the Company comprehensively using its core technology platforms, including its novel adjuvant, protein engineering and immunological evaluation platforms, and the adjuvant used therein is its self-developed novel adjuvant BFA03. ReCOV vaccine has a variety of comprehensive advantages, including favorable broad-spectrum of neutralizing antibodies and good immune persistence, overall positive safety profile, potential growth in production scale, low production cost, good preparation stability, and ability to be stored and transported at room temperature. In a comparative clinical study with a positive control of the Pfizer's mRNA vaccine, a sequential booster of ReCOV among subjects who have completed vaccination of inactivated vaccines induced durable and widespread cross-neutralizing antibodies against various Omicron variants, with all subgroups achieving superior levels of neutralizing antibodies as compared to the Pfizer's mRNA vaccine (with statistically significant differences). The vaccine has obtained formal marketing authorization from Mongolia. We will adopt a more reasonable follow-up development strategy by taking into account market demand and relevant regulatory guidance.

Other Disease Areas

REC627 – Early-stage Recombinant Metapneumovirus Vaccine

Metapneumovirus is a key cause of respiratory diseases after influenza virus and syncytial virus. There is currently no effective vaccine against metapneumovirus available on the market worldwide. We are developing REC627, an early-stage recombinant metapneumovirus vaccine and are developing novel adjuvants to enhance tolerability, immunogenicity, length of protection and cross-protection capability.

REC609 – Early-stage Recombinant Human Cytomegalovirus Vaccine

We are developing a recombinant human cytomegalovirus vaccine (i.e., REC609) with our technology platform, with a higher cellular immune response and enhanced protection.

REC629 – Early-stage Recombinant HBV Vaccine

We plan to develop a recombinant HBV vaccine (i.e., REC629) based on the same yeast expression system as the HPV vaccine, combined with the enhanced immune effects of the novel adjuvant, with a higher humoral immune response and enhanced protection.

REC630 – Early-stage Therapeutic Recombinant HBV Vaccine

We plan to develop a therapeutic recombinant HBV vaccine (i.e., REC630) based on the same yeast expression system as the HPV vaccine, combined with the enhanced immune effects of the novel adjuvant, with a higher immune response and enhanced protection.

REC608 – Early-stage Recombinant HSV Vaccine

HSV is a key cause of genital herpes. We are developing a recombinant HSV vaccine (i.e., REC608) with our technology platform, taking into account a multi-antigen combination scheme in the antigen design to fully utilize the enhanced immunity effect of the adjuvant, as well as the influence of mucosal immunity, resulting in a higher cellular immune response and stronger protection.

Our Technology Platforms

We have developed three advanced technology platforms for novel adjuvant development, protein engineering and immunological evaluation. These platforms empower us to continue to discover and develop subunit vaccines that apply advanced technologies in our vaccine candidates.

Novel adjuvant platform

Adjuvants are substances that are used in conjunction with antigens to assist in antigen presentation and enhance immune responses. Conventionally, only the alum adjuvant was widely used in vaccines for human use. Since the early 21st century, novel adjuvants have been widely applied in the vaccine industry gradually, and created vaccine products that can stimulate higher and broader immune response. At present, five novel adjuvants are applied in FDA-approved vaccines for human use, namely AS01, AS03, AS04, CpG1018, and MF59, the components of which have been in the public domain for over 20 years. Through this platform, we are one of the few companies that have been able to develop adjuvant, benchmarking all of the above-mentioned FDA-approved adjuvants. This capability has enabled us to not rely on any particular adjuvant supplier. In addition, our platform also empowers us to discover and apply new adjuvants in the next-generation vaccine candidates. The two independently developed novel adjuvants, BFA01 and BFA03, have been successfully included in the adjuvant supply pool managed by CEPI due to their significant advantages in efficacy and safety, as well as their commercial-scale industrialization capabilities, to meet the demand for innovative adjuvants from vaccine developers around the world.

Protein engineering platform

Our protein engineering platform utilizes a structure-based immunogen design approach to provide antigen optimization solutions for the development of subunit vaccines based on multidisciplinary studies. This platform enables us to rapidly target and prepare pathogen-derived antigens, to define the structural basis of antigenicity, to understand mechanisms of immune protection and to guide rational immunogen design, which are critical steps in our vaccine development. In addition, our protein engineering platform can elicit immune response in different expression systems, including E.coli, H. polymorpha, baculovirus and CHO cell expression systems, among others. With this diversified expression system toolbox, we are able to select and apply the most suitable expression systems in vaccine development. Through this platform, we are capable of rapidly advancing the development of our COVID-19 and HPV vaccine candidates.

Immunological evaluation platform

To elucidate the mechanism of immune protection for emerging and re-emerging infectious diseases, immunological evaluation is a critical step in subunit vaccine discovery and development. With this platform, we are able to select the optimal antigen and adjuvant combination and in turn improve the immunogenicity profile of our candidates. The immunological evaluation process involves multiple disciplines, including immunology, biology, molecular biology and clinical chemistry. Our core scientific team began to build our immunological evaluation platform as early as 2004 and we became one of the first teams in China to have such a platform. With this platform, we are one of the first companies that can conduct pseudoviral neutralization, ELISPOT, and ICS tests in China, which have been used in the development of our vaccine candidates.

Research and Development

R&D is crucial to our sustainable success. We are led by a core scientific team with over 20 years of experience in the research, development and commercialization of vaccine products, including working experience at the CDC in China. As of the date of this announcement, our in-house R&D team consisted of over 100 talented personnel, most of them held masters or doctorate degrees in immunology, pathogen biology, clinical medicine or other related areas. Benefiting from our IPD system, our R&D team comprises four different product development teams, namely the vaccine innovation core, process research core, comprehensive R&D core and R&D quality core. Our R&D team is primarily located in our Beijing R&D center and our Taizhou R&D base, and is responsible for the full-cycle vaccine R&D.

Our IPD system lays a solid foundation for our R&D activities. The IPD system governs the entire life cycle of vaccine candidates. We conduct market demand analysis for our vaccine candidates at the early stage of vaccine development. Such analysis will serve as the basis of our vaccine development program to ensure our vaccine products can meet the market demand. In addition, under the IPD system, our R&D resources are allocated for the goals of each R&D project. As vaccine development involves a complex and multi-disciplinary process, for each vaccine development project, we will assign a designated project manager and establish a product development team, consisting of employees from technology platforms and related departments including clinical and regulatory affairs, manufacturing, quality control and quality assurance. In addition, our management team is responsible for crucial decision-making and technical review at key points during the R&D process to ensure the R&D can satisfy our R&D protocol and the applicable legal and quality requirements. Empowered by the IPD system, we have been able to advance multiple vaccine development programs simultaneously.

We have developed three advanced technology platforms for novel adjuvant development, protein engineering and immunological evaluation. These platforms empower us to continue to discover and develop subunit vaccines that apply advancing technologies in our vaccine candidates. Our technology platforms form a "solid trifecta", creating synergies among the design and optimization of antigens, the development and production of adjuvants and the identification of the optimal combinations of antigens and adjuvants. Supported by these platforms, we have developed several vaccine candidates. We are constantly upgrading our technology platforms to further enrich our R&D toolbox and we believe that our technology platforms will continue to drive our vaccine candidate development going forward.

For the year ended December 31, 2023, our total research and development costs amounted to RMB487.8 million and we had not capitalized any research and development costs for the same period.

Manufacturing and Commercialization

Our R&D activities have primarily been conducted at our Beijing R&D center and Taizhou headquarters. Our Beijing R&D center is equipped with a pilot plant mainly for the pre-IND process development and has laboratories for vaccine R&D with a total GFA of approximately 4,000 sq.m. Our Taizhou headquarters R&D facility has a total GFA of approximately 3,800 sq.m. and four pilot plants, mainly for the manufacturing of our clinical trial samples and process development. Our R&D facilities can also support the manufacturing and development of novel adjuvants. Most of our vaccine candidates used in our clinical trials have been manufactured by our in-house manufacturing team, including our HPV vaccine pipeline, shingles vaccines pipeline, etc.

In anticipation of the huge market demand of our clinical-stage vaccine candidates, we have started to prepare for the commercial manufacturing of our vaccine candidates. We are constructing our HPV vaccine manufacturing facility in Taizhou, Jiangsu province, the first phase of which has a designed peak annual capacity of 20 million doses of HPV 9-valent vaccines. Currently, the facility is under the stage of equipment installation and testing. In addition, we completed the construction of our manufacturing facility for innovative vaccines (CHO cell) in Taizhou, Jiangsu province in November 2021 and obtained a vaccine manufacturing license issued by Jiangsu MPA. The manufacturing facility has a total GFA of approximately 17,000 sq.m., and can also be used for the manufacturing of a variety of innovative vaccines (CHO cell), including recombinant shingles vaccines. On April 9, 2022, the Company received the European Union (EU) Qualified Person Declaration issued by a Qualified Person (QP) for our innovative vaccines (CHO cell) manufacturing facility in Taizhou.

We have engaged third-party CMOs and manufacturers to produce vaccine samples for our clinical trials, aiming for an efficient and more cost-effective process. We have also adopted stringent procedures to ensure the facilities and production qualifications of our CMOs are in compliance with the relevant regulatory requirements and all of our CMOs are GMP certified. We selected a limited number of industry-leading third party CMOs based on their qualification, relevant expertise, manufacturing capacity, track record and the contract terms.

We have formulated clear commercialization strategy for our clinical-stage vaccine candidates, namely HPV vaccines and recombinant shingles vaccines. In building sales channels and terminals for the commercialization of our vaccine candidates in international markets, we are currently building our international business development team. Our international business development team plans to enter into collaborations with foreign governments, MNCs, CSOs and international organizations to commercialize the Company's products overseas. In January 2024, we have signed the framework agreement with SPIMACO, a pharmaceutical company in Saudi Arabia, for the recombinant HPV 9-valent vaccine REC603 and entered into a strategic cooperation. According to the agreement, we exclusively license SPIMACO to develop, register and commercialize recombinant HPV 9-valent vaccine REC603, in 15 Middle East and North Africa countries, including Saudi Arabia.

Intellectual Property

As a company focusing on the research, development and commercialization of recombinant vaccine products, we believe intellectual property is crucial to our business. We actively seek patent protection for our vaccine candidates in China and major jurisdictions and file the relevant patent applications of each project, when appropriate, to cover certain antigens, strains, proteins, formulations and production processes. We have developed a significant portfolio of intellectual property rights to protect our technologies and products. We hold 17 authorized patents in China and 57 patent applications (including 72 invention patents and patent applications, and 2 design patents), among which, the authorized patents are mainly concentrated in the Core Products related to HPV project, adjuvant platform and syncytial virus vaccine projects, etc. In particular, we constantly strengthen the deployment of proprietary intellectual property rights for innovative vaccines. Among them, for the protein engineering platform, we have applied for a total of 27 invention patents in relation to antigens for recombinant human herpes simplex virus vaccine (HSV), SARS-COV-2 and its variants vaccine, and respiratory syncytial virus vaccine (RSV) projects. For the new adjuvant platform, we have applied for 21 invention patents in relation to key raw materials for adjuvants, of which 4 new adjuvant patents have been granted. For the year ended December 31, 2023, we were not involved in any proceedings in respect of, and we had not received notice of any claims of infringement of, any intellectual property rights that might be threatened or pending as claimant or respondent.

Employees and Remuneration

As of December 31, 2023, the Group had 472 employees, all of whom were based in China. The total staff costs incurred by the Group (which are recorded as part of our administrative expenses, research and development costs and selling and distribution expenses) for the year ended December 31, 2023 was RMB227.6 million, as compared to RMB213.2 million for the year ended December 31, 2022. The remuneration package of our employees includes wages and other incentives, which are generally determined by their qualifications, industry experience, positions and performance. We conduct new employee training, as well as professional and safety training programs for all employees in accordance with our internal procedures. We make contributions to social insurance and housing provident funds in compliance with applicable PRC laws and regulations in all material respects. We also enter into standard confidentiality, intellectual property assignment and non-competition agreements with our key management and research and development staff, which typically include a standard non-compete agreement that prohibits the employee from competing with us, directly or indirectly, during his or her employment and for two years after the termination of his or her employment. Employees also sign acknowledgments regarding service inventions and discoveries made during the course of his or her employment.

Business Outlook

Going forward, leveraging our strengths, we plan to implement the following strategies, which we believe will further strengthen our core competitive strengths and enable us to capture rising business opportunities:

- accelerate the R&D, clinical trial and commercialization of our vaccine candidates;
- continue to strengthen our R&D capabilities;
- refine our organization structure and human resource management to enhance our competitiveness; and
- advance our international strategy through "going-out" and "bringing-in" strategies.

FINANCIAL REVIEW

The following discussion is based on, and should be read in conjunction with, the financial information and the notes included elsewhere in this announcement.

Analysis of Our Key Items of Our Results of Operations

Other Income and Gains

Our other income and gains decreased by 32.0% from RMB148.0 million for the year ended December 31, 2022 to RMB100.6 million for the year ended December 31, 2023, such decrease resulted from (i)RMB97.6 million decrease of our exchange gains arising from foreign currency transactions; (ii) RMB21.6 million increase of interest income; and (iii) RMB25.1 million increase of government grant.

Selling and Distribution Expenses

Our selling and distribution expenses decreased by 2.3% from RMB8.7 million for the year ended December 31, 2022 to RMB8.5 million for the year ended December 31, 2023, which was substantially the same as compared with the corresponding period.

Research and Development Costs

Our research and development costs decreased by 31.9% from RMB716.4 million for the year ended December 31, 2022 to RMB487.8 million for the year ended December 31, 2023. Such decrease in research and development costs resulted from the following:

- RMB172 million decrease in clinical trial expenses from RMB369 million for the year ended December 31, 2022 to RMB197 million for the year ended December 31, 2023, mainly due to the decrease in clinical expenditure compared with the previous period as our Core Product, REC603/REC611, had been in the case collection stage of phase III clinical trials.

- RMB88 million decrease in pre-IND expenses from RMB108 million for the year ended December 31, 2022 to RMB20 million for the year ended December 31, 2023, mainly because the Company's three major pipeline products had substantially completed their preliminary research and development and are currently in the clinical stage.

Administrative Expenses

Our administrative expenses decreased by 7.4% from RMB155.3 million for the year ended December 31, 2022 to RMB143.8 million for the year ended December 31, 2023, mainly because listing expenses have been settled as the Group has completed Initial Public Offering in prior year which is not accrued in the current year.

Other Expenses

Our other expenses increased from RMB0.06 million for the year ended December 31, 2022 to RMB19.3 million for the year ended December 31, 2023, mainly due to the increase of RMB8.7 million in impairment of other non-current assets and the increase of RMB8.0 million in provision of impairment for inventories.

Finance Costs

Our finance costs increased by 288.6% from RMB3.5 million for the year ended December 31, 2022 to RMB13.6 million for the year ended December 31, 2023, mainly because we obtained additional debt financing.

Analysis of Key Items of Financial Position

Property, Plant and Equipment

Our property, plant and equipment primarily consisted of (i) leasehold improvements; (ii) plant and machinery; (iii) furniture and fixtures; (iv) computers and office equipment; (v) motor vehicles; and (vi) construction in progress. Our property, plant and equipment increased by 50.5% from RMB558.7 million as of December 31, 2022 to RMB840.8 million as of December 31, 2023, mainly because the construction of the purification and decoration project for the vaccine building and quality inspection building of our HPV Industrialization Base gradually picked up.

Right-of-use Assets

Our right-of-use assets represent (i) leasehold land, representing the land use right of our manufacturing facility for our HPV vaccines with an original use right of 50 years; and (ii) leased properties, representing our leased manufacturing facility for ReCOV and our leased office building and laboratories. Our right-of-use assets decreased by 40.1% from RMB72.5 million as of December 31, 2022 to RMB43.4 million as of December 31, 2023, mainly because we terminated the lease contracts of Beijing ABZYMO, Wuhan Recbio and Wuhan Recogen in advance to cut down the operating expenses.

Other Non-current Assets

Our other non-current assets mainly represent our time deposits and prepayment for purchase of property, plant and equipment. Our other non-current assets decreased by 43.3% from RMB215.6 million as of December 31, 2022 to RMB122.2 million as of December 31, 2023, mainly due to the redemption of time deposits and the settlement of prepayment for property, plant and equipment.

Prepayments, Other Receivables and Other Assets

Our prepayments, other receivables and other assets increased by 219.2% from RMB38.6 million as of December 31, 2022 to RMB123.2 million as of December 31, 2023, mainly resulting from: (i) an increase of RMB46.6 million in prepayment for shares purchased under 2022 H share incentive scheme; (ii) an increase of RMB26.0 million in value-added tax recoverable; and (iii) an increase of RMB14.3 million in prepayment for raw materials.

Cash and Bank Balances

Our cash and bank balances decreased by 31.2% from RMB1,325.2 million as of December 31, 2022 to RMB912.4 million as of December 31, 2023, mainly due to the purchase of research and development services, raw materials and equipment, the industrialization construction, and administrative expenses.

Trade and Bills Payables

Our trade payables increased by 84.2% from RMB62.5 million as of December 31, 2022 to RMB115.1 million as of December 31, 2023, mainly due to the increase in the purchase of raw materials used in the research and development projects.

Other Payables and Accruals

Our other payables and accruals increased by 9.6% from RMB244.7 million as of December 31, 2022 to RMB268.1 million as of December 31, 2023, mainly resulting from the following: (i) an increase of RMB54.4 million for the purchase of industrialization-based equipment of HPV 9-valent, which is mainly in line with the progress of our commercialization layout; (ii) a decrease of RMB9.4 million in staff payroll, welfare and bonus payables, which is mainly due to the streamlining of our team; and (iii) a decrease of RMB20.6 million in the clinical trial expenses, which is in line with the progress of the research and development of our vaccine candidates.

Lease Liabilities

Our lease liabilities decreased by 61.3% from RMB49.6 million as of December 31, 2022 to RMB19.2 million as of December 31, 2023, mainly because we terminated the lease contracts of Beijing ABZYMO, Wuhan Recbio and Wuhan Recogen in advance to cut down the operating expenses.

Liquidity and Capital Resources

Our primary uses of cash relate to the research and development of our vaccine candidates and the purchase of fixed assets. We monitor and maintain a level of cash and cash equivalents deemed adequate to finance our operations and mitigate the effects of fluctuations in cash flows. As our business develops and expands, we expect to generate more cash from our operating activities through commercialization of new vaccines. Going forward, we believe our liquidity requirements will be satisfied by using funds from a combination of cash from operations, bank balances and cash. As of December 31, 2023, our cash and bank balances amounted to RMB912.4 million. Out of the RMB912.4 million cash and bank balances as of December 31, 2023, RMB323.8 million (approximately 35.5%) was denominated in RMB, RMB510 million (approximately 55.9%) was denominated in U.S. dollars and RMB78.6 million (approximately 8.6%) was denominated in Hong Kong dollars.

Net Current Assets

Our net current assets decreased by 37.2% from RMB1,090.9 million as of December 31, 2022 to RMB685.1 million as of December 31, 2023, primarily due to the decrease in cash and bank balances resulting from our purchase of research and development services, raw materials and equipment, the industrialization construction, and administrative expenses.

Charge on Asset

As of December 31, 2023, the Group had pledged the real estate located on the west side of Xiangtai Road and the north side of Yaocheng Avenue in Medical High-tech District, Taizhou, Jiangsu Province for a loan with a principal of RMB200 million (FY2022: RMB100 million).

Indebtedness and Financial Ratios

The total interest-bearing bank loans and other borrowings of the Group as of December 31, 2023 were RMB631.6 million. RMB46.3 million of the bank loans and other borrowings were current borrowings with maturity dates in 2024 and effective interest rates ranging from 3.3% to 6.7%. RMB585.3 million of the bank borrowings and other borrowings were non-current bank borrowings with maturity days from 2025 to 2028 and effective interest rates ranging from 3.3% to 6.7%.

Our current ratio (calculated as current assets divided by current liabilities as of the same date) decreased from 4.3 as of December 31, 2022 to 2.5 as of December 31, 2023, mainly due to the decrease in cash and cash equivalents resulting from the purchase of fixed assets.

Our gearing ratio (calculated as total liabilities divided by total assets as of the same date) was 51.0% as of December 31, 2023 (as of December 31, 2022: 28.4%), as the large amount of loans borrowed for production and operations.

Contingent Liabilities

As of December 31, 2023, we did not have any contingent liabilities.

Capital Expenditure and Contractual Commitments

Our capital expenditure is mainly for the purchase of our long-term assets including (i) construction in progress; (ii) plant and machinery; (iii) leasehold improvements; (iv) motor vehicles; (v) computers and office equipment; and (vi) furniture and fixtures. Our capital expenditure decreased from RMB296.7 million for the year ended December 31, 2022 to RMB212.0 million for the year ended December 31, 2023, mainly related to the increase in the procurement of production equipment during the period.

Our capital expenditure commitments increased from RMB68.9 million as of December 31, 2022 to RMB76.2 million as of December 31, 2023, primarily attributable to further progress in research and development projects, resulting in the continued increase in investment in construction and procurement of equipment, as well as significant increase in construction in progress during the period.

As disclosed in the Prospectus, we plan to apply approximately HK$88 million from the proceeds from the Global Offering (before exercise of over-allotment option) for constructing the HPV manufacturing facility in Taizhou. Save as disclosed above, the Group had no other material capital expenditure or investment plan as at the date of this announcement.

Significant Investments and Material Acquisitions and Disposals

Save as disclosed in this announcement, our Company had no other significant investments, material acquisitions and/or disposals of subsidiaries, associates and joint ventures for the year ended December 31, 2023.

Events after the Reporting Period

Save as disclosed in this announcement, we are not aware of any material subsequent events from the end of the Reporting Period to the date of this announcement.

Financial Risks

We are exposed to a variety of financial risks, including interest risk, foreign currency risk, credit risk and liquidity risk as set out below. Our overall risk management program focuses on the unpredictability of financial markets and seeks to minimize potential adverse effects on our financial performance.

Interest Risk

The Group has no significant interest-bearing assets other than time deposits and cash and cash equivalents. The Group's interest rate risk arises from its borrowings, which are at variable rates and expose the Group to the risk of changes in market interest rates. The Group has not used any interest rate swaps to hedge its exposure to interest rate risk. The Group's exposure to the risk of changes in market interest rates relates primarily to the Group's debt obligations with a floating interest rate.

As at December 31, 2023, if interest rates on loans had been 50 basis points higher/lower with all other variables held constant, the loss before tax for the year ended December 31, 2023 would have been RMB2,063,000 (2022: RMB670,000) higher/lower, mainly as a result of the increase in bank loans by the Company this year.

Foreign Currency Risk

We mainly operate in China and a majority of our transactions are settled in RMB, the functional currency of our Company's principal subsidiaries. The Group however has certain transactional currency exposure as a portion of our transactions are settled in U.S. dollars. The Group trades only with recognized and creditworthy third parties. In addition, receivable balances are monitored on an ongoing basis and the Group's exposure to bad debts is not significant. We currently do not have a foreign currency hedging policy. However, our management monitors foreign exchange exposure and will consider hedging significant foreign exchange exposure should the need arise. The Group did not have significant foreign currency exposure from its operations as of December 31, 2023.

Credit Risk

We generally trade only with recognized and creditworthy third parties. In addition, receivable balances are monitored on an ongoing basis and our exposure to bad debts is not significant. The credit quality of the financial assets included in prepayments, other receivables and other assets is considered to be "normal" when they are not past due and there is no information indicating that the financial assets had a significant increase in credit risk since initial recognition. Otherwise, the credit quality of the financial assets is considered to be "doubtful".

As of December 31, 2023, cash and cash equivalents were deposited in banks of high quality without significant credit risk. The Directors are of the view that our exposure to credit risk arising from other receivables is not significant since counterparties to these financial assets have no history of default.

Liquidity Risk

In the management of the liquidity risk, we monitor and maintain a level of cash and cash equivalents deemed adequate by the management of our Group to allocate the working capital and mitigate the effects of fluctuations in cash flows. Our objective is to maintain a balance between continuity of funding and flexibility through the use of bank loans and other borrowings and lease liabilities. We aim to maintain sufficient cash and cash equivalents to meet our liquidity requirements.

Future Plans for Material Investments and Capital Assets

Save as disclosed in this announcement, we did not have other plans for material investments and capital assets as of the date of this announcement.

OTHER INFORMATION

PURCHASE, SALE OR REDEMPTION OF OUR COMPANY'S SHARES

During the Reporting Period, neither our Company nor any of its subsidiaries purchased, sold or redeemed any listed securities of the Company.

H SHARE FULL CIRCULATION

On August 15, 2022, the Company held an extraordinary general meeting and class meetings of Shareholders to review and approve the proposal to apply for the "Full Circulation" of the Company's unlisted shares.

On August 25, 2022, the Company received a formal acceptance letter from the CSRC regarding the Company's submission to the CSRC of its application for the implementation of this H Share full circulation (the "**Application**"). According to the Application, the Company applied to convert 222,498,569 Domestic Shares into H Shares and list them on the Stock Exchange.

On November 10, 2022, the Company received approval from the CSRC for the Application. According to the approval, accordingly, the CSRC approved 46 Shareholders of the Company to convert a total of 222,498,569 Domestic Shares into H Shares and list them on the Stock Exchange. The approval is valid for 12 months from the date of approval (November 3, 2022).

On December 1, 2022, the Stock Exchange granted approval for the listing and trading of 222,498,569 H Shares (i.e., the maximum number of Domestic Shares to be converted according to the conversion and listing).

On February 20, 2023, the Company completed the conversion of 222,498,569 Domestic Shares into H Shares. The converted H Shares were listed on the Stock Exchange at 9:00 a.m. on February 21, 2023.

For details of the Company's H Share full circulation plan, please refer to the Company's announcements dated June 30, 2022, August 15, 2022, August 25, 2022, November 10, 2022, December 5, 2022 and February 20, 2023 and the circular dated July 29, 2022.

MODEL CODE FOR SECURITIES TRANSACTIONS

Our Company has adopted the Model Code since the Listing Date.

Specific enquiry has been made of all the Directors and Supervisors, and all Directors and Supervisors confirmed that they have complied with the Model Code for transactions in our Company's securities during the Reporting Period.

CORPORATE GOVERNANCE PRACTICES

We strive to maintain high standards of corporate governance to safeguard the interests of the Shareholders and to enhance corporate value and accountability. Our Company has adopted the Code Provisions of the CG Code as the basis of our Company's corporate governance practices since the Listing Date.

Save as disclosed below, our Company has complied with all applicable Code Provisions as set out in the CG Code during the Reporting Period.

Under Code Provision C.2.1 of the CG Code, the roles of chairman and chief executive officer should be separate and should not be performed by the same individual. In view of Dr. Liu's experience, personal profile and his roles in our Company and that Dr. Liu has assumed the role of general manager of our Company since our commencement of business, the Board considers it beneficial to the business prospect and operational efficiency of our Company that Dr. Liu acts as the chairman of the Board and continues to act as the general manager of our Company.

While this will constitute a deviation from the code provision, the Board believes that this structure will not impair the balance of power and authority between the Board and the management of our Company, given that: (i) any decision to be made by our Board requires approval by at least a majority of our Directors; (ii) Dr. Liu and the other Directors are aware of and undertake to fulfil their fiduciary duties as Directors, which require, among other things, that they act for the benefits 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 our Company. Moreover, the overall strategic and other key business, financial, and operational policies of our Company are made collectively after thorough discussions by both the Board and senior management. 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.

USE OF PREVIOUS PROCEEDS

Our Company's H Shares were listed on the Stock Exchange on March 31, 2022. After exercise of over-allotment option on April 23, 2022, the net proceeds from the Global Offering amounted to approximately RMB669,714 thousand. Reference is made to the announcement of the Company dated March 20, 2023 (the "**Announcement**"). In order to improve the efficiency of the use of proceeds, reduce financial expenses and align with the Company's strategic objectives, the Board considered and approved the changes in the use of proceeds on March 20, 2023. As of December 31, 2023, the Company had utilized proceeds of approximately RMB504,216 thousand and unutilized proceeds amounted to approximately RMB165,498 thousand.

The above proceeds have been and will be used in accordance with the purposes set out in the Prospectus and disclosed in the Announcement. As of December 31, 2023, the Company had used the net proceeds from the Global Offering for the following purposes:

	Net proceeds used for related purposes *(RMB'000)*	Percentage of total net proceeds *(%)*	Actual utilised amount proceeds as of December 31, 2023 *(RMB'000)*	Unutilised amount of proceeds as of December 31, 2023 *(RMB'000)*
1. Continuous optimization, development and commercialization of our HPV vaccine pipeline, including our Core Product, the recombinant HPV 9-valent vaccine REC603, as follows:	316,633	47%	174,315	142,318
(i) The ongoing phase III clinical trial, registration, manufacturing and commercialization of our Core Product, REC603	302,393	45%	160,873	141,520
(ii) Preclinical and clinical studies for other HPV vaccine candidates, namely our recombinant HPV bivalent vaccine candidates REC601 and REC602 and adjuvanted second-generation HPV vaccine candidates REC604a and REC604b	14,240	2%	13,442	798
2. Preclinical and clinical studies, registration of recombinant COVID-19 vaccines, namely recombinant COVID-19 vaccine, REC611, mRNA COVID-19 vaccine, REC618	153,454	23%	153,454	–
3. Preclinical and clinical studies, registration of recombinant shingles vaccine, REC610	80,464	12%	59,523	20,941
4. Preclinical and clinical studies, registration of adult TB vaccine	273	0%	273	–
5. Preclinical and clinical studies, registration of recombinant HFMD vaccine, REC605; recombinant influenza quadrivalent vaccine, REC617 and other vaccines	3,630	1%	3,630	–
(i) Recombinant HFMD vaccine, REC605	91	0%	91	–
(ii) Recombinant influenza quadrivalent, REC617	6	0%	6	–
(iii) Other vaccines	3,533	1%	3,533	–
6. Further enhancement of R&D capabilities and improvement of operating efficiencies, including:	44,513	7%	42,283	2,230
(i) Enhancement of technology platforms to support continuous demands	18,010	3%	16,295	1,715
(ii) Establishment of manufacturing and quality control system and upgrade of information technology infrastructure	26,503	4%	25,988	515
7. Working capital and general corporate purposes	70,747	11%	70,738	9
Total	**669,714**	**100%**	**504,216**	**165,498**

The expected timetable for certain uses of the above-mentioned proceeds is delayed compared with that disclosed in the Prospectus, primarily due to (i) the advancement and construction of some intended uses has been delayed resulting from the impact of the COVID-19 pandemic and the market environment; and (ii) the use of some proceeds has been delayed because of the impact of the payment cycle. It is expected that the unused proceeds will be fully utilized by the end of 2025.

The Company will continuously review the plan of the use of the unutilized net proceeds and may amend such plan where necessary so as to cope with the changing market conditions and strive for better business performance of the Company.

Where the net proceeds are not immediately applied to the above purposes and to the extent permitted by the relevant law and regulations, so long as they are deemed to be in the best interests of our Company, we may hold such funds in short-term deposits with licensed banks or authorized financial institutions in Hong Kong.

FINAL DIVIDENDS

The Board did not recommend the distribution of a final dividend for the year ended December 31, 2023 (FY 2022: Nil).

REVIEW OF ANNUAL RESULTS

The combined financial statements of the Group for the year ended December 31, 2023 were audited by Ernst & Young. The Audit Committee of the Company has also reviewed the audited annual results of the Group for the year ended December 31, 2023. The figures in respect of the Group's results for the year ended December 31, 2023 as set out in this annual results announcement have been agreed by the auditor of the Company, Ernst & Young, to be consistent with the amounts set out in the Group's audited consolidated financial statements for the year ended December 31, 2023.

ANNUAL GENERAL MEETING AND CLOSURE OF REGISTER OF MEMBERS OF H SHARES

The register of members of H Shares of the Company will be closed from Friday, May 3, 2024 to Wednesday, May 8, 2024, both days inclusive, during which period no transfer of H Shares will be registered, in order to determine the holders of H Shares of the Company who are entitled to attend and vote at the forthcoming AGM to be held on Wednesday, May 8, 2024. To be eligible to attend and vote at the AGM, all properly completed transfer documents accompanied by the relevant share certificates must be lodged with the Company's H Share Registrar, Computershare Hong Kong Investor Services Limited, at Shops 1712-1716, 17th Floor, Hopewell Centre, 183 Queen's Road East, Wanchai, Hong Kong no later than 4:30 p.m. on Thursday, May 2, 2024 for registration.

PUBLICATION OF ANNUAL RESULTS AND ANNUAL REPORT

This annual results announcement will be published on the websites of the Stock Exchange (www.hkexnews.hk) and the Company (www.recbio.cn). The annual report of the Group for the year ended December 31, 2023 will be published on the websites of the Stock Exchange and the Company in accordance with the Listing Rules in due course.

NO FURTHER EXTENSION OF VALIDITY PERIOD OF RESOLUTIONS ON ISSUANCE OF DOMESTIC SHARES FOR 2023

References are made to the announcements of the Company dated October 31, 2022, December 28, 2022, February 8, 2023, April 19, 2023 and December 28, 2023 and the circular of the Company dated December 13, 2022 in relation to, among other things, the particulars of the Company's proposed issuance of Domestic Shares and the related matters and the resolution to extend the validity period of resolutions on the issuance of Domestic Shares (the "**Resolutions on the Issuance of Domestic Shares for 2023**") from the date of expiry of the previous validity period, i.e. December 28, 2023 to April 12, 2024, i.e. the date of lapse of the reply from the CSRC.

The market environment and financing environment experienced new situations and new changes during the course of preparation. As such, in order to safeguard the interests of the investors, the Company decided not to extend the validity period of the Resolutions on the Issuance of Domestic Shares for 2023. Currently, the Company is actively contacting investors and considering new financing plans.

The termination of the issuance of Domestic Shares for 2023 will not have any material adverse effect on the normal business activities and financial position of the Company. If the Company intends to launch the financing plan again, it will re-fulfill the corporate governance procedures and information disclosure obligations in accordance with relevant regulations.

DEFINITIONS AND GLOSSARY OF TECHNICAL TERMS

"Annual General Meeting" or "AGM"	the annual general meeting of our Company proposed to be held on May 8, 2024;
"Audit Committee"	the audit committee of our Company;
"Beijing ABZYMO"	Beijing ABZYMO Biosciences Co., Ltd. (北京安百勝生物科技有限公司), a limited liability company established in the PRC on March 7, 2011 and our wholly-owned subsidiary;
"Board"	the board of Directors of our Company;
"CDE"	the Center for Drug Evaluation of National Medical Products Administration (國家藥品監督管理局藥品審評中心), a division of the NMPA mainly responsible for review and approval of IND and BLA;
"CG Code"	the Corporate Governance Code contained in Appendix C1 to the Listing Rules, as amended, supplemented or otherwise modified from time to time;
"China" or "PRC"	the People's Republic of China, but for the purpose of the announcement and for geographical reference only and except where the context requires, references in the announcement to "China" and the "PRC" do not include Hong Kong, the Macau Special Administrative Region and Taiwan of the PRC;
"Code Provision(s)"	the principles and code provisions set out in the CG Code;
"Companies Ordinance"	the Companies Ordinance (Chapter 622 of the Laws of Hong Kong), as amended, supplemented or otherwise modified from time to time;
"Company" or "our Company"	Jiangsu Recbio Technology Co., Ltd. (江蘇瑞科生物技術股份有限公司), a joint stock company incorporated in the PRC with limited liability, the H Shares of which are listed on the Stock Exchange (stock code: 2179);
"Core Product"	has the meaning ascribed to it in Chapter 18A of the Listing Rules; for the purpose of this announcement, our Core Product refers to REC603, a recombinant HPV 9-valent vaccine candidate;
"CSRC"	China Securities Regulatory Commission;

"Director(s)"	the director(s) of our Company;
"Domestic Share(s)"	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. Liu"	Dr. Liu Yong, the executive Director and general manager of our Group;
"FDA"	the United States Food and Drug Administration;
"Global Offering"	the global offering of 30,854,500 H Shares (subject to over-allotment option) as described in the Prospectus;
"Group", "our Group", "we" or "us"	our Company and all of our subsidiaries or, where the context so requires, in respect of the period before our Company became the holding company of its present subsidiaries, the businesses operated by such subsidiaries or their predecessors (as the case may be);
"H Share(s)"	overseas listed foreign share(s) in the share capital of our Company, with a nominal value of RMB1.00 each, which are listed on the Stock Exchange and traded in Hong Kong dollars;
"H Share Registrar"	Computershare Hong Kong Investor Services Limited;
"HK$" or "Hong Kong dollars"	Hong Kong dollars, the lawful currency of Hong Kong;
"Hong Kong"	the Hong Kong Special Administrative Region of the PRC;
"IASB"	International Accounting Standards Board;
"IFRS"	the International Financial Reporting Standards, which as collective term includes all applicable individual International Financial Reporting Standards, International Accounting Standards and Interpretations issued by the IASB;
"Jiangsu MPA"	Jiangsu Medical Products Administration
"Listing"	the listing of our H Shares on the Stock Exchange;
"Listing Date"	March 31, 2022, on which dealings in our H Shares first commenced on the Main Board of the Stock Exchange;
"Listing Rules"	the Rules Governing the Listing of Securities on The Stock Exchange of Hong Kong Limited, as amended, supplemented or otherwise modified from time to time;

"Main Board"	the stock exchange (excluding the option market) operated by the Stock Exchange, which is independent from and operated in parallel with the Growth Enterprise Market of the Stock Exchange;
"Model Code"	the Model Code for Securities Transactions by Directors of Listed Issuers set out in Appendix C3 to the Listing Rules, as amended, supplemented or otherwise modified from time to time;
"NMPA"	the National Medical Products Administration of the PRC (國家藥品監督管理局) and its predecessor, the China Food and Drug Administration (國家食品藥品監督管理總局);
"Prospectus"	the prospectus issued by our Company on March 21, 2022 in relation to our Global Offering and Listing;
"Reporting Period"	the year ended December 31, 2023;
"RMB" or "Renminbi"	Renminbi, the lawful currency of the PRC;
"Share(s)"	share(s) 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;
"Shareholders"	holders of our Shares;
"Stock Exchange"	The Stock Exchange of Hong Kong Limited;
"subsidiary(ies)"	has the meaning ascribed thereto in Section 15 of the Companies Ordinance;
"Supervisor(s)"	supervisor(s) of our Company;
"United States" or "U.S."	the United States of America, its territories, its possessions and all areas subject to its jurisdiction;
"Unlisted Foreign Share(s)"	ordinary share(s) issued by our Company with a nominal value of RMB1.00 each and are held by foreign investors and are not listed on any stock exchange;
"U.S. dollars", "US$" or "USD"	United States dollars, the lawful currency of the United States;
"Wuhan Recbio"	Wuhan Recbio Biotechnology Co., Ltd. (武漢瑞科生物技術有限公司), a limited liability company established in the PRC on September 28, 2021.
"Wuhan Recogen"	Wuhan Recogen Biotechnology Co., Ltd. (武漢瑞科吉生物科技有限公司), a limited liability company established in the PRC on September 28, 2021.

Glossary of Technical Terms

"adjuvant"	a substance that may be added to a vaccine to enhance the body's immune response to an antigen;
"adjuvant system"	formulations of classical adjuvants mixed with immunomodulators, specifically adapted to the antigen and the target population;
"AE"	adverse events, any untoward medical occurrences in a patient or clinical investigation subject administered with a drug or other pharmaceutical product during clinical trials and which do not necessarily have a causal relationship with the treatment;
"antigen"	the substance that is capable of stimulating an immune response, specifically activating lymphocytes, which are the body's infection-fighting white blood cells;
"AS01"	a liposome-based vaccine adjuvant system, which contains 3-O-desacyl-4'-monophosphoryl lipid A (MPL), as well as the saponin QS-21;
"AS03"	an adjuvant system composed of α-tocopherol, squalene and polysorbate 80 in an oil-in-water emulsion;
"AS04"	an adjuvant system composed of aluminum salt and monophosphoryl lipid A (MPL), a clinically utilized TLR4 agonist;
"B cell(s)"	a type of white blood cell that differ(s) from other lymphocytes like T-cells by the presence of the BCR on the B-cell's outer surface, also known as B-lymphocytes;
"BLA"	biologics license application;
"CD4"	a transmembrane glycoprotein that is expressed as a single polypeptide chain on the MHC class II-restricted T-cells;
"CD4 + T cells"	a type of important T lymphocyte that helps coordinate the immune response by stimulating other immune cells to fight infections;
"CD8 + T cells"	a type of important T lymphocytes for immune defense against intracellular pathogens, including viruses and bacteria, and for tumour surveillance;
"CDC"	Centre for Disease Control and Prevention;
"cervical cancer"	cancer that occurs in the cervix – the lower part of the uterus that connects to the vagina;
"CHO cell"	Chinese Hamsters Ovary Cell, which is widely used in biopharmaceutical industry to produce recombinant proteins;

"CMO(s)"	a company that serves other companies in the pharmaceutical industry on a contract basis to provide comprehensive services from drug development through drug manufacturing;
"COVID-19"	Coronavirus Disease 2019, an infectious disease caused by the most recently discovered coronavirus, first reported in December 2019;
"E.coli"	Escherichia coli expression system, an expression system used in vaccine R&D and manufacturing;
"emulsion"	a mixture of two or more liquids that are normally immiscible (unmixable or unblendable) owing to liquid-liquid phase separation;
"epitope"	part of an antigen that is recognized by the immune system, specifically by antibodies, B cells, or T cells;
"GFA"	gross floor area;
"GMP"	good manufacturing practices;
"GMT"	geometric mean titers;
"H. polymorpha"	Hansenula polymorpha, a well-known model organism, which can utilize methanol as the carbon source and energy source, used widely for studying cellular, metabolic, and genetic issues, and used in vaccine industry for expression of recombinant proteins;
"HFMD"	hand-foot-mouth disease, a common infectious disease among infants and children, characterized by fever, sores in the mouth and a rash with blisters on hands, feet and also buttocks;
"HPV"	human papillomavirus, persistent infection of high-risk types can cause cervical cancer;
"HPV 9-valent vaccine"	a vaccine that can help protect individuals against the infections and diseases caused by nine types of HPV;
"HPV bivalent vaccine"	vaccines that can prevent infections of two HPV types;
"HPV quadrivalent vaccine"	vaccines that can prevent infections of four HPV types;

"immune response"	the process by which the body is stimulated by antigens;
"immunogenicity"	the ability of an antigen to provoke immune response;
"IND"	investigational new drug or investigational new drug application;
"influenza" or "flu"	highly infectious respiratory diseases caused by influenza viruses. It is characterised by sudden onset of high fever, aching muscles, headache, fatigue and a hacking cough. Serious outcome of influenza can result in hospitalization or death;
"IPD"	Integrated Product Development, a structure of work and best practices that causes people to work together more effectively with better communications and metrics that connect the entire value chain which is the standard of the matrix management mode;
"MF59"	an adjuvant system that uses a derivative of shark liver oil called squalene;
"mRNA"	messenger ribonucleic acid, a single-stranded molecule of RNA that corresponds to the genetic sequence of a gene, and is read by a ribosome in the process of synthesizing a protein;
"neutralizing antibodies" or "NAb"	an antibody that is responsible for defending cells from pathogens, which are organisms that cause disease;
"NTD"	N-terminal domain, a region of the protein's polypeptide chain located at the start of the protein that is self-stabilizing and that folds independently from the rest;
"Omicron variant"	variant of lineage B.1.1.529 of SARS-Co-2, the virus that causes COVID-19;
"OPTI"	the management philosophy adopted by our Company, which referred to Opportunity, Prudence, Technology and Intellectual Property;
"pathogens"	a bacteria, virus, or other microorganism that can cause disease;
"QS-21"	a purified plant extract used as a vaccine adjuvant;
"R&D"	research and development;

"SAE"	serious adverse events, any untoward medical occurrence in human drug trials that at any dose: results in death; is life threatening; requires inpatient hospitalization or causes prolongation of existing hospitalization; results in persistent or significant disability and/or incapacity; may have caused a congenital anomaly/birth defect, or requires intervention to prevent permanent impairment or damage;
"SARS-CoV-2"	severe acute respiratory syndrome coronavirus 2, the strain of coronavirus that causes COVID-19;
"shingles"	a viral infection that causes a painful rash;
"T cell(s)"	cell(s) that originate in the thymus, mature in the periphery, become activated in the spleen/nodes if their T-cell receptors bind to an antigen presented by an MHC molecule and they receive additional costimulation signals driving them to acquire killing (mainly CD8 + T cells) or supporting (mainly CD4 + T cells) functions;
"TB"	tuberculosis, an infection caused by Mycobacterium tuberculosis that primarily affects the lungs;
"TLR4"	a receptor for lipopolysaccharide (LPS), which has a pivotal role in the regulation of immune responses to infection;
"tolerability"	the degree to which overt AEs of a drug can be tolerated by a patient. Tolerability of a particular drug can be discussed in a general sense, or it can be a quantifiable measurement as part of a clinical study;
"varicella"	an acute infectious disease caused by the first infection of varicella zoster virus;
"VLPs"	virus-like particles, are molecules that closely resemble viruses;
"WHO"	World Health Organization.

Certain amounts and percentage figures included in this announcement have been subject to rounding adjustments.

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

By order of the Board
Jiangsu Recbio Technology Co., Ltd.
Dr. Liu Yong
Chairman

Jiangsu Province, the PRC, March 20, 2024

As at the date of this announcement, the Board comprises Dr. Liu Yong as the chairman of the Board and an executive Director, Dr. Chen Jianping, Mr. Li Bu and Ms. Chen Qingqing as executive Directors, Dr. Hong Kunxue, Dr. Zhou Hongbin, Mr. Zhang Jiaxin and Mr. Hu Houwei as non-executive Directors, and Mr. Liang Guodong, Dr. Xia Lijun, Professor Gao Feng and Professor Yuen Ming Fai as independent non-executive Directors.