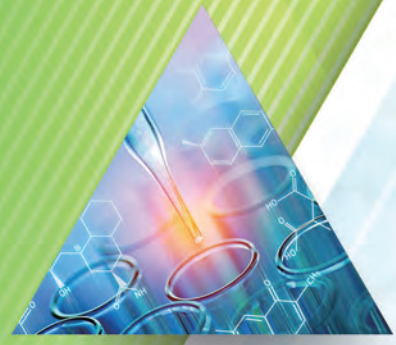
WuXi Biologics
Global Solution Provider

WuXi Biologics (Cayman) Inc.
藥明生物技術有限公司*

(Incorporated in the Cayman Islands with Limited Liability)
Stock Code: 2269



ANNUAL REPORT
2019

*For identification purpose only

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Corporate Information

BOARD OF DIRECTORS

Executive Directors

Dr. Zhisheng Chen *(Chief Executive Officer)*
Dr. Weichang Zhou *(Chief Technology Officer)*

Non-executive Directors

Dr. Ge Li *(Chairman)*
Mr. Edward Hu
Mr. Yibing Wu
Mr. Yanling Cao

Independent Non-executive Directors

Mr. William Robert Keller
Mr. Teh-Ming Walter Kwauk
Mr. Wo Felix Fong

AUDIT COMMITTEE

Mr. Teh-Ming Walter Kwauk *(Chairman)*
Mr. William Robert Keller
Mr. Edward Hu

REMUNERATION COMMITTEE

Mr. William Robert Keller *(Chairman)*
Mr. Wo Felix Fong
Mr. Edward Hu

NOMINATION COMMITTEE

Dr. Ge Li *(Chairman)*
Mr. William Robert Keller
Mr. Teh-Ming Walter Kwauk

STRATEGY COMMITTEE

Dr. Zhisheng Chen *(Chairman)*
Dr. Ge Li
Mr. Yibing Wu

AUTHORISED REPRESENTATIVES

Dr. Zhisheng Chen
Ms. Sham Ying Man

JOINT COMPANY SECRETARIES

Mr. Huang Yue
Ms. Sham Ying Man

REGISTERED OFFICE

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Cayman Islands

CORPORATE HEADQUARTER

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Wuxi
China

PRINCIPAL PLACE OF BUSINESS IN HONG KONG

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183 Queen's Road East
Hong Kong

CAYMAN ISLANDS PRINCIPAL SHARE REGISTRAR AND TRANSFER OFFICE

Maples Fund Services (Cayman) Limited
PO Box 1093, Boundary Hall
Cricket Square
Grand Cayman KY1–1102
Cayman Islands

Corporate Information

HONG KONG BRANCH SHARE REGISTRAR

Tricor Investor Service Limited
Level 54, Hopewell Centre
183 Queen's Road East
Hong Kong

HONG KONG LEGAL ADVISER

Fangda Partners
26/F One Exchange Square
8 Connaught Place, Central
Hong Kong

AUDITOR

Deloitte Touche Tohmatsu
Certified Public Accountants
Registered Public Interest Entity Auditors
35/F One Pacific Place
88 Queensway
Hong Kong

STOCK CODE

2269

COMPANY WEBSITE

www.wuxibiologics.com

Chairman and CEO Statement

Dear Shareholders,

On behalf of the board (the "Board") of directors (the "Directors") of WuXi Biologics (Cayman) Inc. (the "Company") and its subsidiaries (collectively the "Group"), we are pleased to present the annual results of the Group for the year ended December 31, 2019.

WuXi Biologics once again achieved outstanding performance in 2019. Leveraging our cutting-edge technologies, best-in-industry timelines, excellent track record and unparalleled capacity, the Group's revenue growth continued to be robust, increased 57.2% year-on-year, with our gross profit increased 63.0% year-on-year. In terms of regional market success, North America, China and Europe all maintained strong momentum, registering high revenue growth of 66.5%, 43.6% and 81.4%, respectively. In addition, we added 59 integrated projects to the Group's pipeline in 2019, resulting in a total of 250 integrated projects, and two of the 16 late-phase projects submitted BLAs.

We would like to highlight some of our strategic achievements resulting from our "Follow-the-Molecule" strategy and "Global Dual Sourcing within WuXi Bio" manufacturing paradigm:

- Our Manufacturing Facility 1 (MFG1) at Wuxi site was approved by both the U.S. FDA and the EU EMA, which distinguished the Group as the first and only biologics manufacturing company in China approved by both world-leading regulatory agencies.

- Our industry-leading technology platforms, including but not limited to the WuXiBody™ bispecific antibody platform and ADC technology platform, were increasingly recognized and adopted in the industry and brought in more than 20 of our 59 new projects into our pipeline in 2019.

- Our global capacity expansion plan was implemented at "WuXi Bio Speed" in 2019. Our Manufacturing Facility 4 (MFG4), Drug Product Facility 4 (DP4), and ADC Drug Product Facility 3 (DP3) have all commenced GMP manufacturing in 2019. Our "Factory of the Future" in Ireland has achieved "weather-tight" status and our acquisition of Bayer's final drug product manufacturing facility in Germany has completed. The global supply chain network we are building will boost our capacity and enhance our "Global Dual Sourcing within WuXi Bio" strategy.

- Our vaccines CDMO business entered into a twenty-year strategic partnership agreement with a global vaccine leader. This partnership has a total estimated contract value of more than US$3 billion. Pursuant to this agreement, we will invest US$240 million to build a state-of-the-art vaccine facility in Ireland to manufacture vaccines for the global market, supported by our world-class technology and quality standard.

The Group sustained momentum in pioneering the biologics CDMO industry, extending its leadership in providing advanced capabilities and capacity to the global biologics industry in 2019. New growth drivers will ensure that the Group can deliver sustainable high growth, and further strengthen the role we are playing as a global open-access biologics technology platform in enabling any company to discover, develop and manufacture biologics to benefit patients worldwide.

Chairman and CEO Statement

As we write this statement, the COVID-19 outbreak continues to pose significant risks to public health and the global economy. Nevertheless, the Group's operations have been fully restored as a result of our immediate and effective implementation of our Business Continuity Plan (BCP) and all of the efforts contributed by our nearly six thousand employees.

Whenever there is a crisis, great opportunities also emerge. The outbreak of COVID-19 reminds us of the urgent need for new biologics and vaccines for disease prevention and treatment. We have mobilized a large R&D team in cooperation with global companies seeking potential treatments and are responding to a surge of requests for COVID-19 related projects.

On behalf of our Board and management team, we would like to express our gratitude to our shareholders and clients for your support throughout the years. Looking to the remainder of 2020, we will focus on improving our efficiency and add more business development resources globally to continue to drive our diversified business engines of mAb, bispecific, ADCs, vaccines and microbial fermentation-based products. We will further enable our global partners to work at home, increase our market share with an industry-leading development timeline and increased capacity, improve efficiency of our operations and continue to accelerate the development of our global footprint to deliver outstanding performance. We will continue to do the right thing and do it right; and to improve our core competencies to deliver sustainable high growth and enable our global partners to develop medicines for the benefit of patients worldwide.

Dr. Ge Li
Chairman
March 26, 2020

Dr. Zhisheng Chen
CEO
March 26, 2020

Financial Highlights

	For the year ended December 31,				
	2015 RMB'000	2016 RMB'000	2017 RMB'000	2018 RMB'000	**2019 RMB'000**
Operating results					
Revenue	557,042	989,029	1,618,829	2,534,453	**3,983,687**
Gross profit	180,721	389,110	660,557	1,017,755	**1,658,829**
Profit before tax	65,402	175,846	303,687	737,722	**1,126,633**
Net profit	44,509	141,096	252,628	630,465	**1,010,337**
Profit attributable to equity shareholders of the Company	44,509	141,096	252,628	630,592	**1,013,805**
Adjusted net profit[(1)]	71,370	220,527	432,872[(2)]	751,557	**1,204,964**
Adjusted net profit attributable to equity shareholders of the Company	71,370	220,527	432,872	751,684	**1,208,432**
Profitability					
Gross margin (%)	32.4%	39.3%	40.8%	40.2%	**41.6%**
Net profit margin (%)	8.0%	14.3%	15.6%	24.9%	**25.4%**
Adjusted net profit margin (%)	12.8%	22.3%	26.7%	29.7%	**30.2%**

	As at December 31,				
	2015 RMB'000	2016 RMB'000	2017 RMB'000	2018 RMB'000	**2019 RMB'000**
Financial position					
Total assets	1,356,716	1,984,996	4,848,962	9,393,150	**17,602,269**
Total liabilities	1,210,715	1,714,529	824,602	1,398,922	**4,706,169**
Total equity	146,001	270,467	4,024,360	7,994,228	**12,896,100**
Equity attributable to equity shareholders of the Company	146,001	270,467	4,024,360	7,993,755	**12,784,363**
Bank balances and cash	158,229	169,102	503,881	4,084,395	**6,205,496**

(1) Calculation of adjusted net profit is modified and calculated as net profit for the Reporting Period, excluding share-based compensations, foreign exchange gains or losses and listing expenses to better reflect the Group's current business and operations.

(2) The adjusted net profit for the year ended December 31, 2017 disclosed herein is recalculated based on the revised calculation stated in (1). The same financial figure disclosed in the 2017 annual report of the Company was RMB408.1 million, calculated by excluding share-based compensation expenses, listing expenses and a foreign exchange loss due to translation loss from the IPO proceeds.

Non-IFRS Measures

To supplement the Group's consolidated financial statements which are presented in accordance with the IFRS, the Company has provided adjusted net profit, adjusted net profit margin, adjusted EBITDA, adjusted EBITDA margin and adjusted basic and diluted earnings per share (excluding the share-based compensation expenses, Listing expenses and foreign exchange gains or losses) as additional financial measures, which are not required by, or presented in accordance with, the IFRS. The Company believes that the adjusted financial measures are useful for understanding and assessing underlying business performance and operating trends, and that the Company's management and investors may benefit from referring to these adjusted financial measures in assessing the Group's financial performance by eliminating the impact of certain unusual and non-recurring items that the Group does not consider indicative of the performance of the Group's business. However, the presentation of these non-IFRS financial measures is not intended to be considered in isolation or as a substitute for the financial information prepared and presented in accordance with the IFRS. You should not view the adjusted results on a stand-alone basis or as a substitute for results under the IFRS.

Business Review

Overall Performance

The Group continues to implement the "Follow-the-Molecule" strategy and fulfill the "Global Dual Sourcing within WuXi Bio" manufacturing paradigm. During the Reporting Period and riding on its unparalleled capabilities and capacity and improved operational efficiency, the Group once again delivered outstanding results.

- The total number of integrated projects increased by 22.0% from 205 as at the same time last year to 250 as at December 31, 2019.
- The total number of pre-clinical projects increased by 24.7% from 97 as at the same time last year to 121 as at December 31, 2019.
- The total number of early-phase (phase I and II) projects increased by 19.1% from 94 as at the same time last year to 112 as at December 31, 2019 (85 in phase I and 27 in phase II).
- The number of late-phase (phase III) projects increased by 23.1% from 13 as at the same time last year to 16 as at December 31, 2019.
- The Group also achieved great success in progressing projects from pre-IND stage to post-IND stage: 21 projects progressed from pre-clinical development stage to early phase stage during the Reporting Period.

The following table sets forth the status of the on-going integrated projects of the Group as at December 31, 2019:

Biologics development process stage	Number of on-going integrated projects[1]	Typical duration	Typical Revenue[2]
Pre-IND			
— Drug discovery	—	2 years	US$1.5–2.5 mm
— Pre-clinical development	121	2 years	US$4–6 mm
Post-IND			
— Early-phase (phases I & II) clinical development	112	3 years	US$4–6 mm
— Phase I clinical development	(85)		
— Phase II clinical development	(27)		
— Late-phase (phase III) clinical development	16	3–5 years	US$20–50 mm
— Commercial manufacturing	1	Annually	US$50–100 mm[3]
Total	**250**		

Notes:

(1) Integrated projects are projects that require the Group to provide services across different divisions/departments within the Group and across various stages of the biologics development process.

(2) Milestone fees can be paid at different research and development ("**R&D**") stages, while royalty fees will be charged for 5–10 years or until the patent expires once the new drug launches in the market.

(3) Estimated value when biologic drug reaches its peak sales. A biologic drug typically reaches its peak sales after a ramp-up period.

The Group's revenue for the year ended December 31, 2019 increased by 57.2% year-on-year to RMB3,983.7 million, together with a 63.0% year-on-year growth in gross profit to RMB1,658.8 million. The Group's total backlog, including the service backlog and upcoming potential milestone fees, also soared sharply by 40.2% from US$3,639.0 million as of December 31, 2018 to US$5,102.0 million as of December 31, 2019, of which service backlog increased from US$1,633.0 million to US$1,686.0 million and upcoming potential milestone fees increased 70.3% from US$2,006.0 million to US$3,416.0 million. The service backlog represents the amount the Group has contracted but is yet to perform. The total upcoming potential milestone fees represent the total amount for upcoming milestone fees, which the Group has contracted but has not yet performed nor received and will take longer to charge at various development stages, depending on the success rate and progress of the projects which may not be within the Group's control.

During the Reporting Period, the Group further diversified its customer base by working with 13 out of the 20 largest pharmaceutical companies in the world and 26 of the 50 largest pharmaceutical companies in China. The Group provided services to 266 customers for the year ended December 31, 2019, compared with 220 customers last year. The average revenue per customer among the top ten customers grew 65.6% from approximately RMB119.3 million for the year ended December 31, 2018 to approximately RMB197.6 million for the year ended December 31, 2019 as a result of more projects progressing into later stages and additional customer projects. The Group believes that continuous capability and capacity expansion as well as cooperation with and commitment to its existing customers will enhance its value chain and continue to capture the opportunities in this growing market in the future.

Strategic Highlights

The Group has been constantly embracing the changes in the global biologics industry and leading technology innovation through biologics discovery, development and manufacturing. During the Reporting Period, the Group sustained momentum in pioneering the biologics CDMO industry through, among others, the following achievements in its core business:

- The Group's state-of-the-art Antibody Drug Conjugates ("**ADC**") Drug Product Facility 3 ("**DP3**") commenced GMP manufacturing during the Reporting Period. Together with our ever-evolving WuXiBody™ bispecific antibody platform, the Group established itself as one of the few CDMOs across the globe capable of providing one-stop service from Drug Substance ("**DS**") to Drug Product ("**DP**") for both bispecific antibody and ADC biologics.

- The Group's first commercial manufacturing project has commenced production in the Wuxi site Manufacturing Facility 1 ("**MFG1**"), which is the first and only biologics manufacturing facility in China approved by both the U.S. FDA and the EU EMA. The dual-approval fully validated the Group's commitment to maintaining the highest global quality standards while providing powerful support for its unique manufacturing paradigm "Global Dual Sourcing within WuXi Bio".

- The Group started significant deployment of more than 280,000 liters total planned biologics production capacity globally. This global capacity expansion lays a solid foundation for the Group's "Global Dual Sourcing within WuXi Bio" manufacturing paradigm, with which the Group's partners can manufacture from facilities within the Group's global supply network in China, the EU and the U.S. to ensure their global supply and eliminate the risks associated with inter-company technology transfer.

- The Group's vaccines CDMO business also entered into a strategic partnership manufacturing agreement with a global vaccine leader ("**Vaccine Partner**"). We also initiated an investment in a new vaccine manufacturing facility in Ireland. Under this strategic partnership manufacturing agreement, WuXi Vaccines Ireland Limited ("**WuXi Vaccines**"), the Group's subsidiary, will build an integrated vaccine manufacturing facility, including drug substance and drug product manufacturing as well as quality control labs, and manufacture certain vaccines for the Group's Vaccine Partner in Ireland. The agreement's initial term is twenty years with a total contract value estimated to be over US$3 billion. This strategic partnership with a global vaccine leader to manufacture vaccines for the global market showcases the Group's technical strengths and premier quality standards. The vaccine business will contribute substantially to the Group's future overall business growth.

Our Technology Platforms

During the Reporting Period, the Group stepped up its investments in the innovation and improvement of cutting-edge technology platforms throughout the life cycle of biologics discovery, development and manufacturing, which will not only generate further milestones and royalty revenues but also introduce more biologics projects into the Group's pipeline under the "Follow-the-Molecule" strategy.

Antibody Drug Conjugate (ADC)

ADC is a new class of highly potent biologics composed of an antibody linked, via a chemical linker, to a biologically active drug or cytotoxic compound. Such extremely complex "guided missiles" carrying, for example, a powerful anti-cancer drug by an antibody are often the last-attempted treatments. Compared to traditional chemotherapies and monoclonal antibodies ("**mAbs**"), ADCs show superior efficacy, lower off-target toxicity and a larger therapeutic window, and relevant studies show they helped patients whose survival outlooks were discouraging. In 2019, three of the 14 new biologics approved by the U.S. FDA were ADCs, the most ever approved in a single year for ADCs. With the growing number of ADC candidates at unprecedented levels, the industry is optimistic that an ADC era may have arrived.

As a global leading biologics CDMO service provider, the Group gained considerable experience in working with numerous different antibody or other biological molecules, linker and payload chemistries and combinations thereof, which uniquely qualified the Group to provide its partners with tailor-made options and solutions on ADC development strategies. Through its world-class R&D efforts, the Group has also developed a novel linker for lysine-based conjugation that demonstrates higher reactivity, better solubility and a more flexible range of conjugation temperatures. A unique payload chemistry to provide more homogenous drug loading for cysteine-based conjugation was also developed.

Following the guideline of "WuXi Bio Speed", the Group's first facility of its world-leading integrated biologics conjugate solution center, Drug Product Facility 3 ("**DP3**"), was released in August 2019 for GMP manufacturing, a mere 17 months from its inception in March 2018. The DP3 encompasses an area of approximately 6,000 square meters and provides integrated solutions from process development, technology transfer, pilot scale to cGMP production for ADCs and other complex protein conjugates, strictly complying with global quality standards. To meet a variety of conjugation technologies including traditional lysine and cysteine conjugation and novel site-specific conjugation, DP3 is equipped with the world's leading conjugation production line, which includes single-use reactor systems ranging from 5L to 500L, purification systems taking advantage of state-of-the-art filtration and chromatography technologies, a temperature control unit with agile operation and high accuracy, and a well-developed rapid cooling system for specific products. The flexible plant has other critical equipment that can be adapted as needed depending on the clients' requirements. DP3's filling line adopts the advanced fully isolated automatic aseptic filling system, which can produce 2/6/10/20/50 ml liquid and freeze-dried products. The DP3 provides the flexibility to meet the production requirements of global clinical trials and product launch. Furthermore, DP3 has two pilot plants for conjugation process development and drug product process development, including lyophilized drug product, to efficiently perform scale up activities.

In October 2019, only two months after its release, DP3 officially commenced production of an ADC drug substance and drug product, which again solidified the Group's leading role in the biologics CDMO industry. During the Reporting Period, DP3 successfully completed multiple batches of ADC production.

Building on the Group's extensive experiences, cutting-edge technologies and unparalleled capacity in ADC development and manufacturing, it has taken the lead in offering a single-source service technology platform for global ADC biologics. 28 ADCs have been or are being developed for our clients and partners at the Group and 13 ADC projects have been successfully advanced by the Group to IND filing stage.

The Group has also further planned to expand the integrated biologics conjugate solution center with additional facilities to enhance the R&D capability, solidify the quality control system and enable cGMP commercial manufacturing for ADC drug substance and drug product to keep pace with growing global demand for ADC outsourcing services.

Bispecific Antibody

By harnessing the specificities of two antibodies and combining them to simultaneously recognize different antigens or epitopes, bispecific antibodies aim to treat multifaceted, complex diseases and continue to show significant and impressive therapeutic value. Currently there are more than 100 different bispecific formats available, and approximately 80 bispecific antibodies in clinical trials. Many believe that bispecific antibodies are the next-generation protein therapeutic for cancer and other diseases.

Despite how promising they are, bispecific antibodies have been difficult to develop because of their unique biology and complex structure compared with traditional mAbs. Based on the Group's extensive experience in antibody development and its top team of scientists, the Group developed and launched the innovative WuXiBody™ bispecific antibody platform to empower clients to develop novel bispecific antibodies in a better and faster way.

WuXiBody™ allows complete flexibility and also permits almost any mAbs pair to be easily joined to build a bispecific antibody. Using the WuXiBody™ platform, it only takes approximately 2–4 months to engineer a bispecific after receiving the monoclonal antibody sequences. After that, the development and manufacturing timeline from this new bispecific to IND is only 16–18 months, which compares similarly to mAb development timelines. Furthermore, WuXiBody™ offers many other benefits, including high yield, high solubility, good stability in serum and increased in vivo half-life, amongst others.

With its flexibility, versatility and efficiency, WuXiBody™ can considerably expedite bispecific development at a much lower cost. Since its market launch, WuXiBody™ has been steadily adopted in the industry. The Group's scientists have also been invited to present on the WuXiBody™ platform at various world renowned antibody conferences including but not limited to PEGS (Protein Engineering Summit) and the Antibody Engineering and Therapeutics Conference. During the Reporting Period, the Group signed 20 WuXiBody™ molecule licensing agreements with 12 partners. Relevant businesses working with WuXiBody™ platform have delivered strong growth for the Group.

Other key technology platforms

In addition to its industry-leading ADC and bispecific technology platforms, the Group also offers various advanced technology platforms for biologics discovery, development and manufacturing.

WuXia, the Group's proprietary cell line development platform enables the Group to conduct more than 60 IND-enabling projects per year, one of the largest capacities in the world. WuXia has provided more than 277 cell lines for pre-clinical development and beyond. Utilizing the proprietary expression vector system, top 3 clones with high titers can be obtained and utilized for process development and cGMP manufacturing. Combined with the Group's cGMP cell banking and cell line characterization services, the WuXia platform is ideal for the production of a variety of therapeutic proteins including mAbs, bispecific antibodies, fusion proteins and recombinant proteins.

WuXiUP, the Group's proprietary continuous manufacturing platform, utilizes 2,000L disposable bioreactors to achieve comparable productivity as a traditional 20,000L stainless steel bioreactor while still providing similar or even better purification yield. Through this, it accelerates biologics development and manufacturing and improves the affordability of biologics. The intensified and continuous cell culture process can be rapidly developed or converted from traditional fed-batch process while maintaining excellent scalability and robustness. Coupled with continuous product capture column chromatography, the WuXiUP platform enables continuous direct product capture with a similar or better purification yield as the traditional purification process for almost any biologics. During the Reporting Period, this continuous direct product capture platform was established and successfully scaled up at the Shanghai site for production of clinical supplies with consistent process performance and product quality profiles. WuXiUP has been implemented in more than 17 projects for production of mAbs, bispecific antibodies, fusion proteins and enzymes achieving ultra-high productivity.

Strategic Collaboration with Global Partners

Leveraging cutting-edge technologies, best-in-industry timelines, an excellent track record and unparalleled capacity, together with the combination of the "Follow-the-Molecule" strategy and the "Global Dual Sourcing within WuXi Bio" manufacturing paradigm, more strategic collaborations were formed and more biologics projects were introduced into the Group's pipeline, including without limitation:

- Exclusive commercial manufacturing partnership with Amicus Therapeutics ("**Amicus**"), a global, patient-dedicated biotechnology company listed on NASDAQ (Stock code: FOLD), for Amicus' Pompe biologic ATB200. ATB200 was initiated at the Group in 2012 at the initial drug concept stage and now the drug has progressed into a pivotal study. Pursuant to the partnership agreement, the Group enables and supports Amicus by manufacturing both the drug substance and drug product at two sites across its global commercial supply network in China, the EU and the U.S. During the Reporting Period, batches of drug substance and drug products for ATB200 were produced at the Group's Wuxi site.

- Expanded strategic collaboration with ABL Bio, a South Korean listed biotechnology company (Stock code: 298380), by which the Group licensed technology platforms, including WuXiBody™, to ABL Bio for development of novel bispecific antibodies and immune-oncology program.

- Comprehensive development and manufacturing partnership with NBE-Therapeutics ("NBE"), a Swiss biotech company developing best-in-class, next-generation ADC products, for NBE's first ADC lead product NBE-002. NBE-002 is a best-in-class immune-stimulatory ADC treatment against the ROR1 cancer target. The Group will enable the supply of NBE's product for clinical trials under IND applications worldwide.

- Long-term strategic partnership with I-Mab Biopharma ("**I-Mab**"), a NASDAQ listed biotech company (Stock code: IMAB) focusing exclusively on innovative biologics in immuno-oncology and auto-immune diseases, on biologics process development, clinical and commercial manufacturing of I-Mab's highly innovative pipelines. I-Mab will leverage the Group's expertise and capabilities for CMC (Chemistry, Manufacturing and Control) development of at least five programs and commercial manufacturing of at least one program for its proprietary monoclonal antibody, bispecific antibody and fusion protein pipelines.

- Strategic collaboration with NovoCodex Biopharmaceuticals Co., Ltd. (浙江新碼生物醫藥有限公司, "**NovoCodex**"), a subsidiary of the Shanghai Stock Exchange listed company Zhejiang Pharmaceutical Co., Ltd. (浙江醫藥股份有限公司, Stock code: 600216), by which the Group will provide comprehensive development and clinical and commercial manufacturing services for NovoCodex's innovative ADC drug ARX788.

- Strategic collaboration with Almirall, a leading skin health-focused global pharmaceutical company listed on the Spanish Stock Exchange (Stock code: ALM), to enable Almirall to leverage the Group's various technology platforms including the proprietary WuXiBody™ platform to develop bispecific antibodies for dermatological diseases. The Group will receive an upfront payment as well as development, regulatory and commercial milestone payments for each bispecific antibody generated from this platform, and will also be entitled to royalties based on global sales generated by these projects.

Our Facilities

During the Reporting Period, we had three operational sites in Wuxi, Shanghai and Suzhou, conveniently located within driving distance from each other.

Wuxi Site

The Wuxi Site houses part of the Group's clinical and commercial manufacturing facilities, and also provides services such as assay, formulation and process development, process validation, lot release testing, stability studies, drug product formulation, fill and finish, and regulatory support services for recombinant protein, monoclonal antibodies and antibody drug conjugates.

The Group's MFG1, the first and only biologics manufacturing facility in China approved by both the U.S. FDA and the EU EMA, has been manufacturing commercial products for customers since 2018. MFG1 performs cGMP and maintained a high capacity utilization rate during the Reporting Period.

The Group's Manufacturing Facility 2 ("**MFG2**") deploys fourteen 2,000L-capacity and two 1,000L-capacity disposable bioreactors. The combination of multiple single-use bioreactors offers a highly flexible manufacturing strategy and competitive cost structure compared with traditional stainless steel bioreactor facilities. MFG2 began its cGMP biologics manufacturing in December 2017 and conducted a process validation campaign at 6,000L scale to support global product registration and launch for a key partner in July 2018. MFG2 is primarily used for late-phase projects manufacturing.

The Group's Manufacturing Facility 4 ("**MFG4**") was GMP released in July 2019. MFG4 is the Group's fourth GMP released drug substance facility and the first facility in China to use a 4,000L-capacity bioreactor, which is the industry's largest disposable bioreactor in production. In addition, the facility has installed two 2,000L-capacity and two 1,000L-capacity single-use bioreactors for flexible production options for its customers. The facility can support fed-batch and other new types of cell culture processes.

In July 2019, the Group's Drug Product Facility 4 ("**DP4**") at the Wuxi site was GMP released for GMP manufacturing and successfully completed the first product engineering run under GMP conditions. DP4 is the first robotic aseptic filling line for biologics in China and the second GMP released sterile filling DP facility of the Group. With its key advantages of vacuum stoppering and nitrogen protection, process flexibility, container flexibility and aseptic assurance, DP4 is capable of manufacturing both pre-filled syringe ("**PFS**") and vial products for early stage clinical supplies. The unique design of the system used in this facility aligns well with the Group's scale-out manufacturing strategy.

Please also refer to the section headed "Our Technology Platforms" for our ADC facility at the Wuxi site.

Shanghai Site

The Group's Shanghai site houses drug discovery and pre-clinical development facilities and part of the Group's cGMP clinical manufacturing facilities. Services provided include novel mAb discovery, bispecific antibody engineering, ADC discovery and development, cell line engineering and development, assay, formulation and process development, assay and process validation, process and product analytical characterization, and cGMP cell banking, manufacturing and release of clinical supplies.

With the 7,000L capacity of the Group's Manufacturing Facility 3 ("**MFG3**"), the Shanghai site now offers complete one-stop biologics development and manufacturing services in one central location, thus streamlining clinical CMC (Chemistry, Manufacturing and Control) activities even further to enable the Group's customers to reach their clinical manufacturing goals within the shortest time possible.

The Group's global innovation center in the Fengxian district of Shanghai has made progress in its initial construction phase during the Reporting Period. Once put into operation, this new state-of-the-art biologics center will have 150,000 square meters for biologics discovery, development, clinical and commercial manufacturing facilities, and will be one of the largest facilities of its kind globally.

Suzhou Site

The Suzhou site houses biosafety testing facilities, providing services such as viral clearance, cell bank testing and cell line characterization studies. The Suzhou site has built state-of-the-art biosafety testing facilities that can support all biosafety testing requirements for biologics manufacturing. The quality system and testing capability of Suzhou site were further enhanced by obtaining certifications from both China Inspection Body and Laboratory Mandatory Approval ("**CMA**") and China National Accreditation Service for Conformity Assessment ("**CNAS**"), which validated the Group's high level of quality commitment to its global customers.

The Suzhou site continued to improve its operational excellence during the Reporting Period, which significantly shortened the turnaround times for all the biosafety tests and viral clearance validation studies. Various awards from key customers were received by the Suzhou site during the Reporting Period, in recognition of many achievements to enable our key customers to release biologics products for clinical and commercial applications. The Suzhou site also signed several strategic cooperation agreements with a number of key customers for late-phase and commercial projects, including those for commercial product bulk release and Biologics License Application (BLA) viral clearance services. These agreements strengthened the long-term relationships between the Group's partners and the Suzhou site.

During the Reporting Period, the Suzhou site increased its capacity significantly by putting its new laboratory building into operation. With its 16,000 square meter area equipped with advanced instruments, the Suzhou site is further enabling the Group's partners with much broader service spectrum and aims to become one of the top Asia-Pacific biosafety testing service providers.

Research and Development ("R&D")

During the Reporting Period, the Group's R&D team continuously focused on: (i) enhancing innovative biologics generation capabilities and optimizing several existing technological platforms, including traditional hybridoma technology, premium humanization and antibody optimization platforms, phage display technology, fully human antibodies, bispecifics, multispecifics, nanobodies and antibody fragments to expedite the discovery of novel therapeutic biologics; (ii) supporting the Group's global partners in using the proprietary bispecific antibody platform WuXiBody™, enabling them to considerably accelerate the development process of new bispecific biologics; (iii) enhancing the Group's in vitro and particularly in vivo biology capabilities and capacity to enable the screening, identification and characterization of desired biologics as drug development candidates; (iv) continuously identifying and prioritizing new areas of biologic innovation and developing proprietary technologies to enable the Group's customers to discover and develop differentiated novel biologic drugs; (v) continuously enhancing R&D capabilities in the design and discovery of best-in-class and novel preclinical candidates ("**PCC**") driven by deep understanding of disease biology and target biology and mastery of state-of-the-art biologics engineering technologies; and (vi) refining system and team building for more efficient business operations and optimized cost control to ensure the provision of quality and efficient technical solutions to customers. Through R&D activities, the Group developed various proprietary technologies, which enabled us to receive milestone and royalty fees from customers utilizing such technologies.

For the year ended December 31, 2019, the R&D expenditure was RMB259.7 million, which accounted for 6.5% of the Group's revenue. The Company's R&D team has approximately 250 scientists, many of whom have multiple years of biologics drug discovery experience at multinational pharmaceutical companies.

The Group endeavors to improve and innovate its technologies to optimize and enlarge the entire spectrum of services offered to the global biologics industry and to provide the new biologics R&D solutions to our customers and partners so as to ultimately benefit patients worldwide.

Sales and Marketing

The Group takes a multichannel approach in achieving its marketing goals. The objectives of the marketing plan are to build awareness of the Group's brand and its open-access technology platforms and to communicate to the market the key technical, operational and business strategies of the Group. Marketing efforts strive to influence existing and potential clients to develop positive two-way communication with the Group in addition to furthering its overall business growth objectives.

The multichannel marketing approach involves both technical and sales presence at various global industry trade conferences. Through the first half of 2019, the Group invited C-level and other senior management in the industry to meet in January during the week of the J.P. Morgan Healthcare Conference in San Francisco and then again six months later at the annual "BIO" conference in Philadelphia. Both conferences brought together over 16,000 executives and other key industry leaders from biopharma/pharma companies worldwide and allowed the Group's business development and senior management staff to discuss with existing key accounts and potential clients how the Group can help them in their critical biologics development efforts. The Group also attended events held in regional venues like BioEurope, BioKorea and CPhI Japan to further discuss with senior-level executives on the advantages and competitiveness of the Group's one-stop biologics development platform. The Group also attended or presented its various platform technologies at technology-centric conferences dedicated to biologics discovery, development and manufacturing. Multiple presentations on the Group's disruptive WuXiBody™ bispecific antibody platform were given at events like the PEGS (Protein Engineering Summit) Conference in Boston, Next Generation Protein Therapeutics Summit in San Francisco and Antibody Engineering and Therapeutics Conference in Amsterdam.

During the Reporting Period, the Group used various marketing and promotional strategies that included company press releases, advertisements and social media to promote its various technologies, including the exciting WuXiBody™ bispecific platform, WuXia cell line development platform and WuXiUP continuous manufacturing platform. Using the global multichannel marketing approach to highlight its differentiated competitive strengths, the Group once again solidified its role as the world's leading premier supplier and partner in the biologics industry.

Quality Assurance

The Quality Department, which includes quality assurance, quality control, global quality compliance, regulatory affairs and training center functions, is committed to the highest standard of regulatory compliance while providing high-quality services and products that meet customer needs.

The Quality Department is responsible for implementing the Group's global quality system and supervising quality operations to ensure GMP compliance within the Group's manufacturing environment. In March 2019, the U.S. FDA licensed DS and DP manufacturing facilities in the Wuxi site MFG1, and together with the cell banking facility in the Shanghai site, received GMP certificates from the EU EMA following pre-approval inspections conducted in January 2019.

The U.S. FDA and the EU EMA approvals distinguish the Group as the first and only biologics manufacturing company in China approved by both regulatory agencies. This also validates that the DS and DP operations, as well as the cell banking facility of the Group are in compliance with applicable regulations and that the Quality Department has established a global quality system in line with international standards.

In April 2019, the DS and DP manufacturing facilities in the Wuxi site MFG1 successfully completed the U.S. FDA's routine post-approval GMP inspection. The outcome of this inspection again reinforces that the quality system at the Group strictly adheres to U.S. FDA GMP regulations.

In addition, the Group's Biosafety Testing Laboratory at the Suzhou site, accredited by CMA and CNAS in 2018, has successfully completed a pre-approval inspection, with solid support and comprehensive oversight from the Quality Department, by the EU EMA for a different Market Authorization Application in December 2019.

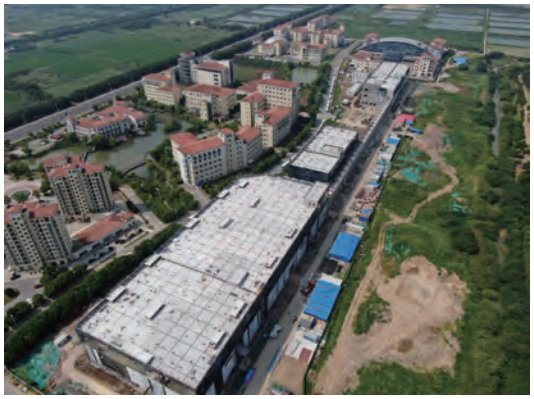
Capacity Expansion Plan

The Group is continuously investing in its global capacity expansion plan to satisfy the burgeoning capacity demands from the increasing number of late-phase projects, upcoming customer orders and "Global Dual Sourcing within WuXi Bio" manufacturing paradigm. The total planned capacity of biologics production reached more than 280,000 liters as of December 31, 2019.

Facility	Designed Capacity	Location	Comments
MFG5	60,000L fed-batch	Wuxi	Commercial
MFG6	6,000L perfusion	Ireland	Commercial
MFG7	48,000L fed-batch	Ireland	Commercial
MFG8	48,000L fed-batch	Shijiazhuang	Commercial
MFG9	6,000L fed-batch	Wuxi	Clinical/Commercial
MFG10	4,500L fed-batch/perfusion	Singapore	Clinical/Commercial
MFG11	4,500L fed-batch/perfusion	Worcester, US	Clinical/Commercial
MFG12	48,000L fed-batch	Chengdu	Commercial

The Group's MFG5 Facility construction and start-up progressed well during the Reporting Period. Once completed, MFG5 will be the world's largest single-use bioreactor based cGMP biologics facility. It will host a nine 4,000L bioreactor line and a twelve 2,000L bioreactor line.

The Ireland site (MFG6 and MFG7), which will be the Group's first overseas site, progressed well in its construction during the Reporting Period. As at December 2019, main buildings have achieved "weather-tight" status. Once completed, this "Factory of the Future" will become one of the world's largest facilities using single-use bioreactors with a next generation continuous manufacturing process technology.



MFG8 broke ground in 2018 in Shijiazhuang, the capital city of Hebei Province in Northern China. With a planned capacity of 48,000L and one of the largest single-use platform technology facilities globally, MFG8 was designed to meet the international advanced cGMP standards of the U.S., EU and China. As of December 31, 2019, MFG8 has completed outer shells of certain auxiliary buildings and started piling on the main buildings.

MFG9, MFG10 and MFG11 are actively in design and planning stage. MFG9 will be the first benchmark facility of the Group's next generation manufacturing platform, which enjoys the advantage of high flexibility, cost effectiveness and high output.

During the Reporting Period, the Group launched the construction of a new 120,000 square meters integrated manufacturing center for innovative biologics ("MFG12") in Chengdu, one of the largest cities in southwest China. This new integrated manufacturing center will include biologics development and commercial manufacturing facilities with initial bioreactor capacity of 48,000L.

Company Awards

During the Reporting Period, the Company received many recognitions and awards for the outstanding performance achieved in the provision of high-quality and best-in-class service to accelerate and transform biologics development. Its top honors included the following:

- Asia's Best CMO of 2018 (IMAPAC「二零一八年亞洲最佳CMO獎」) by a leading consulting firm IMAPAC; the Company has now received IMAPAC Awards three years in a row;

- 2019 CMO Leadership Awards from Life Science Leader Magazine (Life Science Leader Magazine「CMO領軍企業獎」) in all six core categories: quality, reliability, service, expertise, capabilities and compatibility across the group of Big Pharma; this represents a significant leap from 2018 which saw recognition in one category — reliability;

- Golden Hong Kong Stock and Most Valuable Pharmaceutical Stock from 2018 Golden Hong Kong Stock Awards (智通財經和同花順「金港股大獎」及「最具價值醫藥股獎」); the Company was the only pharmaceutical company awarded the Golden Hong Kong Stock Award;

- Best Investor Relationship Management Hong Kong Listed Company from Newfortune, China's leading finance media (中國知名財經媒體新財富「最佳IR港股公司」);

- 2019 Most Growth Hong Kong Stock Listed Company from Gelonghui, China's leading global investment research platform (格隆匯首屆二零一九年度「港股上市公司最具成長獎」);

- 2019 Excellent Biopharmaceutical Company Award from Hong Kong leading financial magazine China Financial Market (《中國融資》二零一九年度「卓越生物醫藥企業大獎」); and

- Special Award to Investors in Ireland presented at the 2019 Global Business Summit held by Asia Matters, Ireland's only dedicated Asia think tank focusing on EU-Asia trade, investment, economics and international relations.

Investors Relations

The Company strives to maintain high standards of corporate governance so as to ensure its sustainable long-term development strategy. The Company uses a range of communications, including but not limited to, announcements, press releases, general meetings, interim and annual reports and circulars, to keep shareholders and investors informed of key business updates.

To promote effective communication, the Company has proactively participated in a number of investment forums and roadshows to get closer to investors and shareholders domestically and globally, including the annual J.P. Morgan Healthcare Conference in San Francisco, J.P. Morgan "Best of Asia" Conference in London, Morgan Stanley China Summit in Beijing, Goldman Sachs Annual Global Healthcare Conference in Los Angeles, J.P. Morgan Healthcare CEO-CFO Forum in Suzhou, UBS Hong Kong Stock Corporate Day, Credit Suisse China Investment Conference in Shenzhen, Citi China Investor Conference in Macau, Deutsche Bank China Healthcare Industry Forum in Shanghai, Morgan Stanley Asia Pacific Summit in Singapore and Bank of America Merrill Lynch China Conference in Beijing amongst others. The Company also held its first Investor Day in June 2019 in Wuxi City, gathering its management team and over 200 global investors.

Moreover, the Company offered frequent factory visits to worldwide investors, at both the Shanghai and Wuxi sites, in order to deepen their understanding of the Company's strategy, business and culture.

As part of efforts to increase transparency, the Company provides easy access via its website for investors and shareholders to get the latest corporate presentations, documents and filings. In addition, agendas from historical and upcoming teleconferences, meetings and roadshows are made available online. The Company also provided contact details, trying to answer every inquiry from investors effectively and efficiently.

During the Reporting Period, the Company was included in Hang Seng Hong Kong-Listed Biotech Index and received awards for its professional and efficient management of investor relations. Please refer to the section headed "Company Awards".

Index Inclusion

- Hang Seng Composite LargeCap & MidCap Index (2017)
- Hang Seng Healthcare Index (2017)
- Hang Seng Global Composite Index (2017)
- Hang Seng Stock Connect Hong Kong MidCap & SmallCap Index (2017)
- Hang Seng SCHK HK Companies Index (2017)
- Hang Seng SCHK ex-AH Companies Index (2017)
- Hang Seng Stock Connect Hong Kong Index (2018)
- Loncar China BioPharma Index (2018)
- MSCI China Index (2018)
- Hang Seng HK 35 Index (2018)
- Hang Seng Hong Kong-Listed Biotech Index (2019).

Future and Outlook

2019 was an exciting year for the biologics industry with the U.S. FDA's approval of approximately 14 new biologics as well as China's substantial healthcare sector reform intended to accelerate innovation. Driven by the rapid pace of innovation with legions of biologics in the drug pipeline, increasing investment, advantageous regulatory environment and surging demand across the world, the biologics market is expected to continue its meteoric rise in the coming years.

Biologics is the fastest-growing sector of the pharmaceutical market as eight biologics appeared in the top ten selling drugs as of the end of 2018. The global biologics market was valued at USD251.5 million in 2018 and is expected to reach USD625.6 million by 2026, at a CAGR of 11.9%. In addition, although a relatively niche subset of biologics industry, ADC therapeutics gained traction in 2019, with almost 50% of all ADC drugs on the market receiving approval from the U.S. FDA in a single year. Based on drug company pipeline data, it appears that this growth trend will continue into the foreseeable future. Some estimate that commercial sales of ADCs will grow 22% annually for the next 5 to 10 years. Another biologics super star, bispecific antibody — although still rather complicated and challenging in development — may evolve to replace monoclonal antibodies as safer, more effective antibody-like treatments.

Along with the market growth and the continuous complexities of biologics, extensive expertise, experience and massive capital expenditure are necessary to develop these innovative biologics. Outsourcing to experienced and reputable CDMOs is being viewed increasingly as a silver bullet by both large pharmaceutical companies and small and medium-sized biotechnology companies in order to maintain competitiveness and bridge the gap between performance and opportunity. A significant number of new biologics launched in the U.S. in the last five years were developed and manufactured at CDMOs, highlighting pharma's growing dependency on reliable CDMOs. Furthermore, biopharma is also resorting to single-source CDMOs, from proof of concept to commercialization, in order to take advantage of the inherent speed and advanced technologies and expertise. A shift to a more cost effective, efficient and professional integrated outsourcing paradigm is more attractive to biopharma.

China has the world's second-biggest pharmaceutical market. Pharmaceutical sales in 2018 reached US$137 billion, doubling in just six years, and are projected to be worth half of the U.S. market by 2030, up from a quarter now. While China's biotech sector is just 12% of its overall pharmaceutical market, it is still only half the global average of 25%. It's clear that enormous market potential has not been unlocked. Backed with such an exponentially increasing and developing market, China has begun its biologics industry makeover by, including without limitation, growing alignment of China's drug regulation with international standards. In 2019, China promulgated a major revision of its Drug Administration Law, the cornerstone of China's pharmaceutical legal framework, which officially adopted the Clinical Trial Notification and Self-reporting of Clinical Trial Sites. In addition, the new Vaccine Administration Law, which took effect on December 1, 2019, officially recognized the vaccine CMO model. Together with the sustained momentum of various NMPA (National Medical Products Administration) reforms, the review and approval process for innovative biologics accelerated considerably. At the same time, consolidation of drug procurement by state hospitals that began in 2015 squeezed the bloated prices of generic drugs. By one estimate, this freed up USD30 billion a year for more costly novel medicines, especially innovative biologics.

Meanwhile, the private sector is pouring money into biologics research and researchers. China's legions of science graduates are also sharpening their edges in biologics innovation. 2019 witnessed the capital market's unabated enthusiasm for providing diversified financing channels for biologics. The Stock Exchange and Scientific-Technology Innovation Board in Shanghai stock markets provide much needed funding sources for young and yet-to-profit biologics firms. A total of US$2.3 billion has been raised from eight Chinese biologics firms' initial public offerings on the Stock Exchange in 2019, almost ten times that of its European competitors, and three of those IPOs are ranked in the top 10 global biologics IPOs.

Empowered by favorable policies, together with experienced biologics scientist teams and capital market support, China has a growing role and is becoming an indispensable player in the global biologics research and development industry. It is very likely that China-developed biologics can make the transition from being fast followers to true innovators in the near future. The biologics outsourcing industry, which has developed along with innovative drug development, is in lock-step and thus is also experiencing a long-term upward trend.

The burgeoning global biologics market continues to spur new partnerships and business expansions for CDMOs. Instead of one-off transactions with clients, CDMOs want to give a full portfolio of offerings to clients and be more strategic in their relationships. On the other hand, biologics startups rely heavily on one-stop service CDMOs' expertise, experience and infrastructure, while big pharmas are also increasingly reaching out to CDMOs for partnerships in order to shed assets and drive down biologics costs.

Boosted by the rapid ascent of the biologics outsourcing market, the Group will continue to maintain its strong growth in rhythm with the global biologics industry. The Group offers end-to-end solutions empowering anyone and any company to discover, develop and manufacture biologics from concept to commercial manufacturing in a cost-effective and time-sensitive manner. With constant investments in its capabilities and capacity, especially the industry-leading ADC center, bispecific antibody technology platform WuXiBody™ and the "Factory of the Future" and the integrated vaccines manufacturing facility in Ireland, the Group will capture more development opportunities in the biologics industry and boost its milestones and royalty revenue streams by attracting additional customers and introducing more biologics into the combination of the "Follow-the-Molecule" strategy and "Global Dual Sourcing within WuXi Bio" paradigm.

Looking into 2020, under the principle of "Striving for Excellence and Executing for Results", we believe that our "WuXi Bio Grit" will empower us to mitigate the impact of COVID-19 outbreak on our business and continue to build our capabilities and capacity, reinforce our technology platforms, and enable our partners. We believe in our efforts and dedication and we envision a — where "every drug can be made and every disease can be treated".

Financial Review

Revenue

The revenue of the Group increased by 57.2% from approximately RMB2,534.5 million for the year ended December 31, 2018 to approximately RMB3,983.7 million for the year ended December 31, 2019. Such an increase was mainly attributable to (i) leading technology platform, best-in-industry timeline and excellent execution track record contributing to more market share and new integrated projects added to our pipeline; (ii) the Group's innovative proprietary technology platforms, including but not limited to the bispecific antibody technology platform WuXiBody™, have been steadily adopted in the industry; and (iii) strong growth in revenue, including milestone revenue generated from the WuXiBody™ platform, as well as milestone revenue generated from projects progressed along the value chain, as a result of the success of the Group's "Follow-the-Molecule" strategy.

The revenue of the Group has maintained strong growth during the Reporting Period. The Group derived the vast majority of its revenue from providing services to customers headquartered in North America and the PRC. The table below shows the revenue distribution by countries/regions:

	Year ended December 31			
	2019		2018	
Revenue	***RMB million***	*%*	*RMB million*	*%*
— North America	**2,137.5**	**53.7%**	1,284.0	50.6%
— PRC	**1,407.6**	**35.3%**	980.0	38.7%
— Europe	**311.5**	**7.8%**	171.7	6.8%
— Rest of the World *(Note)*	**127.1**	**3.2%**	98.8	3.9%
Total	**3,983.7**	**100.0%**	2,534.5	100.0%

Note: Rest of the world primarily includes Singapore, Japan, South Korea and Australia.

For the year ended December 31, 2019, the pre-IND services revenue of the Group increased by 24.6% to approximately RMB1,808.4 million, accounting for 45.4% of the total revenue. The post-IND services revenue of the Group showed a rapid increase of 98.6% to approximately RMB2,152.0 million, accounting for 54.0% of the total revenue, as a result of more projects progressing from pre-IND to subsequent stages such as early-phase and late-phase stages by implementing the "Follow-the-Molecule" strategy.

The following table sets forth a breakdown of the Group's revenue by pre-IND services, post-IND services and others for the periods indicated:

	Year ended December 31			
	2019		2018	
	RMB million	**%**	*RMB million*	*%*
Pre-IND services	**1,808.4**	**45.4%**	1,451.0	57.2%
Post-IND services	**2,152.0**	**54.0%**	1,083.5	42.8%
Others	**23.3**	**0.6%**	—	—
Total	**3,983.7**	**100.0%**	2,534.5	100.0%

The top 5 customers' revenue increased by 57.6% from approximately RMB796.6 million for the year ended December 31, 2018 to approximately RMB1,255.7 million for the year ended December 31, 2019, accounting for 31.5% of the total revenue for the year ended December 31, 2019, as compared to 31.4% for the year ended December 31, 2018.

The top 10 customers' revenue increased by 65.6% from approximately RMB1,193.1 million for the year ended December 31, 2018 to approximately RMB1,976.3 million for the year ended December 31, 2019, accounting for 49.6% of the total revenue for the year ended December 31, 2019, as compared to 47.1 % for the year ended December 31, 2018.

Cost of Services

The cost of services of the Group increased by 53.3% from approximately RMB1,516.7 million for the year ended December 31, 2018 to approximately RMB2,324.9 million for the year ended December 31, 2019. The increase of the cost of services was in line with the Group's business growth.

Gross Profit and Gross Profit Margin

The gross profit of the Group increased by 63.0% from approximately RMB1,017.8 million for the year ended December 31, 2018 to approximately RMB1,658.8 million for the year ended December 31, 2019. The Group's gross profit margin increased from 40.2% for the year ended December 31, 2018 to 41.6% for the year ended December 31, 2019. The increase in the gross profit margin was primarily attributable to (i) the Group's strong business growth, along with the rapid increase in the number of integrated projects; (ii) significant improvement on capacity utilization of MFG3, which commenced production in the second half of 2018; (iii) more milestone revenue with relatively high gross margin earned during the Reporting Period; (iv) favorable impact from U.S. dollar appreciated against Renminbi in the year of 2019; and (v) significant improvement of operational efficiency, which was partially offset by the ramp-up of new sites that commenced production in the second half of 2019.

Other Income

The other income of the Group decreased by 7.4% from approximately RMB194.2 million for the year ended December 31, 2018 to approximately RMB179.9 million for the year ended December 31, 2019, primarily due to (i) the decrease of the bank interest income received; and (ii) the decrease of the government grants recognized in profit and loss, which was partially offset by (iii) a gain on non-refundable purchase option fee amounting to US$2.0 million (equivalent to approximately RMB13.8 million) which was recognized, after the Group acknowledged receipt of a termination notice to an option to purchase certain of its biologics manufacturing facilities from an independent third party; and (iv) an increase in the interest income arising from the financial products invested.

Impairment Losses, Net of Reversal

Impairment losses, net of reversal of the Group, decreased by 87.8% from approximately RMB55.9 million for the year ended December 31, 2018 to approximately RMB6.8 million for year ended December 31, 2019, as a result of management's enhanced credit control throughout the year.

Other Gains and Losses

The amount of the net other gains of the Group was approximately RMB21.5 million for the year ended December 31, 2019, representing a slightly increase of 1.9% as compared to approximately RMB21.1 million for the year ended December 31, 2018.

Selling and Marketing Expenses

The selling and marketing expenses of the Group increased by 81.8% from approximately RMB42.4 million for the year ended December 31, 2018 to approximately RMB77.1 million for the year ended December 31, 2019, mainly due to continuous investments in the capability enhancement of business development by attracting and recruiting experienced talent globally. The proportion of the selling and marketing expenses to the Group's total revenue was 1.9% for the year ended December 31, 2019, being relatively stable as compared to 1.7% for the year ended December 31, 2018.

Administrative Expenses

The Group's administrative expenses increased by 61.3% from approximately RMB227.7 million for the year ended December 31, 2018 to approximately RMB367.3 million for the year ended December 31, 2019, primarily due to (i) workforce expansion to support the Group's rapid business growth throughout the world and long term development strategy; (ii) an increase in depreciation expenses, along with the Group's business expansion; and (iii) an increase in office administrative costs, etc., in line with the Group's business growth and headcount growth.

Research and Development Expenses

The research and development expenses of the Group increased by 53.4% from approximately RMB169.3 million for the year ended December 31, 2018 to approximately RMB259.7 million for the year ended December 31, 2019, as a result of our enhanced investment in innovation and technologies to intensify the Group's core competitiveness in the evolving industry.

Finance Costs

Finance costs mainly include (i) interest expense on lease liabilities upon application of IFRS 16 Lease effective from January 1, 2019; and (ii) interest expense on bank borrowings, as the Group has borrowed bank loans, which strengthened the Group's financial capability in the second half of 2019.

Income Tax Expense

The income tax expense of the Group increased by 8.4% from approximately RMB107.3 million for the year ended December 31, 2018 to approximately RMB116.3 million for the year ended December 31, 2019, as a result of the Group's business growth. The effective income tax rate decreased from approximately 14.5% for the year ended December 31, 2018 to approximately 10.3% for the year ended December 31, 2019, primarily due to (i) more additional-tax-deductible research and development expenses recognized during the Reporting Period; and (ii) one-time tax refund received during the Reporting Period.

Net Profit and Net Profit Margin

As a result of the foregoing, the net profit of the Group increased by 60.2% from approximately RMB630.5 million for the year ended December 31, 2018 to approximately RMB1,010.3 million for the year ended December 31, 2019. The net profit margin of the Group for the year ended December 31, 2019 was 25.4%, as compared to 24.9% for the year ended December 31, 2018. The increase in net profit margin was primarily due to (i) the Group's steady increase in the number of integrated projects and as a result, strong growth in revenue; and (ii) solid cost control and improvement of operational efficiency, which was partially offset by the increase of administrative expenses that is in line with the Group's business growth.

The adjusted net profit[1] of the Group increased by 60.3% from approximately RMB751.5 million for the year ended December 31, 2018 to approximately RMB1,205.0 million for the year ended December 31, 2019. The adjusted net profit margin of the Group for the year ended December 31, 2019 was 30.2%, representing a slight increase as compared to 29.7% for the year ended December 31, 2018. The expansion of adjusted net profit margin followed the same set of reasons as discussed above.

EBITDA

The EBITDA[2] of the Group increased by 53.5% from approximately RMB962.1 million for the year ended December 31, 2018 to approximately RMB1,476.4 million for the year ended December 31, 2019. The EBITDA margin of the Group for the year ended December 31, 2019 was 37.1%, keeping quite stable as compared to 38.0% for the year ended December 31, 2018.

The adjusted EBITDA[3] of the Group increased by 54.3% from approximately RMB1,083.1 million for the year ended December 31, 2018 to approximately RMB1,671.1 million for the year ended December 31, 2019. The adjusted EBITDA margin of the Group for the year ended December 31, 2019 was 41.9%, quite stable as compared to 42.7% for the year ended December 31, 2018.

Basic and Diluted Earnings Per Share

The basic earnings per share of the Group increased by 57.7% from RMB0.52 for the year ended December 31, 2018 to RMB0.82 for the year ended December 31, 2019. The diluted earnings per share of the Group increased by 58.3% from RMB0.48 for the year ended December 31, 2018 to RMB0.76 for the year ended December 31, 2019. The increase in the basic and diluted earnings per share was primarily due to the increase in the net profit resulting from the strong business growth of the Group.

1 The adjusted net profit is calculated as net profit for the Reporting Period, excluding share-based compensations and foreign exchange gains or losses to better reflect the Group's current business and operations.

2 EBITDA represents net profit before (i) interest expenses, income tax expenses; and (ii) amortization and depreciation.

3 The adjusted EBITDA is calculated as net profit for the Reporting Period, excluding (i) interest expenses, income tax expenses; (ii) certain non-cash expenses, consisting of share-based compensations, amortization and depreciation; and (iii) foreign exchange gains or losses to better reflect the Group's current business and operations.

The adjusted basic earnings per share for the year ended December 31, 2019 amounted to RMB0.98, representing an increase of 58.1% as compared with that of RMB0.62 for the year ended December 31, 2018. The adjusted diluted earnings per share of the Group for the year ended December 31, 2019 amounted to RMB0.91, representing an increase of 59.6% as compared with that of RMB0.57 for the year ended December 31, 2018. The increase in the adjusted basic and diluted earnings per share was primarily due to the increase in the adjusted net profit as discussed above.

Property, Plant and Equipment

The balance of the property, plant and equipment of the Group increased by 118.3% from approximately RMB2,903.9 million as at December 31, 2018 to approximately RMB6,338.5 million as at December 31, 2019, primarily as a result of the expansion of research, development and manufacturing capacities in China and overseas, following the Group's "Global Dual Sourcing within WuXi Bio" manufacturing paradigm.

Right-of-Use Assets/Prepaid Lease Payments

As a result of the application of IFRS 16 Leases, distinctions of operating leases and finance leases are removed for lessee accounting and replaced by a model where a right-of-use asset and a corresponding liability have to be recognized for all leases by lessees, except for short-term leases and leases of low value assets. Right-of-use assets are measured at cost, less any accumulated depreciation and impairment losses, and adjusted for any remeasurement of lease liabilities. As at December 31, 2019, the carrying amount of right-of-use assets was approximately RMB457.9 million.

Upfront payments for leasehold lands were classified as prepaid lease payments as at December 31, 2018. Upon application of IFRS 16, the current and non-current portion of prepaid lease payments amounting to approximately RMB2.9 million and approximately RMB168.6 million respectively were reclassified to right-of-use assets.

Goodwill

In 2019, the Group entered into agreements to acquire 50.1% equity interests of Pinghu U-Pure Biosciences Co., Ltd. ("**U-Pure**") and BestChrom (Shanghai) Biosciences Co., Ltd. ("**BestChrom**"), two affiliated companies registered in China, with a cash consideration of approximately RMB300.6 million. U-Pure and BestChrom primarily engage in production and sale of biologics purification medium and chromatographic column.

This acquisition has been accounted for using the acquisition method. Goodwill arising as a result of the acquisition amounted to approximately RMB185.4 million. For the year ended December 31, 2019, management of the Group determined that there was no impairment for this goodwill.

Intangible Assets

The intangible assets of the Group increased by 25.3% from approximately RMB331.8 million as at December 31, 2018 to approximately RMB415.8 million as at December 31, 2019, mainly due to the addition of technology and customer relationship recognized during the acquisition of subsidiaries, U-Pure and BestChrom, which was partially offset by the amortization of intangible assets during the Reporting Period.

Investment in an Associate/Share of Loss of an Associate

In April 2019, the Group acquired 9.32% of the equity interest in Shanghai Duoning Biotechnology Co., Ltd. ("**Duoning**") for a total purchase price of US$5.0 million (equivalent to approximately RMB33.8 million). In December 2019, other investors further invested in Duoning and the Group's equity interest was diluted to 8.13%. Duoning focuses on the sales of serum-free media and disposable products, formulation production and services.

An associate is an entity over which the Group has significant influence. Significant influence is the power to participate in the financial and operating policy decisions of the investee but is not control or joint control over those policies. The results and assets and liabilities of associates are incorporated into the Group's consolidated financial statements using the equity method of accounting.

The Group is able to exercise significant influence over Duoning because it has the power to appoint one out of the five directors of Duoning under the Articles of Association of Duoning.

Equity Instruments at Fair Value Through Other Comprehensive Income ("FVTOCI")

Equity instruments at FVTOCI of the Group amounted to approximately RMB138.8 million as at December 31, 2019, representing a slight increase of 1.6% as compared to approximately RMB136.6 million as at December 31, 2018, mainly due to the exchange alignment of USD in which the equity instruments were denominated.

Equity instruments at FVTOCI mainly include 19.9% of the equity interests of Tysana Pte. Ltd. ("**Tysana**") and Privus Biologics, LLC ("**Privus**") respectively, which were subscribed by the Group in the year of 2018. No additional investment was incurred during the Reporting Period.

Financial Assets at Fair Value Through Profit or Loss ("FVTPL") (Current Portion & Non-current Portion)/Other Financial Assets

The other financial assets of the Group represented the financial products invested in certain banks, of which the principals were guaranteed and interest rates were fixed. These financial products were recognized as other financial assets at amortized costs. As of December 31, 2019, the amount of these financial products was approximately RMB458.0 million and the interest rates ranged from 3.2% to 3.8% per annum (as at December 31, 2018: nil).

The financial assets at FVTPL in the current assets of the Group represented the financial products invested in banks, most of which were principal guaranteed. As at December 31, 2019, the fair value of these financial products were approximately RMB85.0 million and the expected return rates varied from 3.15% to 3.5% per annum (as at December 31, 2018: nil).

The financial assets at FVTPL in the non-current assets of the Group increased by 407.2% from approximately RMB55.7 million as at December 31, 2018 to approximately RMB282.5 million as at December 31, 2019, mainly due to several new investments of unlisted shares during the Reporting Period, including: (i) 1,719,197 Series Mezzanine 2 Preferred Shares of Inhibrx, Inc. ("**Inhibrx**") for a cash consideration of US$12.0 million (equivalent to approximately RMB82.2 million) in January 2019 (for the year ended December 31, 2018: 429,799 shares with a cash consideration of US$3.0 million); (ii) 481,454 Series C-3 Preferred Shares of CANBridge Pharmaceuticals Inc. ("**Canbridge**") for a cash consideration of US$5.0 million (equivalent to approximately RMB33.7 million) in January 2019 (for the year ended December 31, 2018: 481,454 Series C-1 Preferred Shares with a cash consideration of US$5.0 million); (iii) 2,856,055 Series A Preferred Shares of Virtuoso Therapeutics, Inc. ("**Virtuoso**") for a cash consideration of approximately US$1.9 million (equivalent to approximately RMB12.6 million) in March 2019; (iv) 1,428,571 Series C-1 Preferred Shares of I-Mab for a cash consideration of US$10.0 million (equivalent to approximately RMB68.7 million) in July 2019; and (v) aggregate US$3.0 million (equivalent to approximately RMB21.2 million) investment in BB Pureos Bioventures, LP ("**BB Pureos**"), as a limited partnership and strategic investor in the second half of 2019.

The Group managed and evaluated the unlisted investment purchased on a fair value basis in accordance with the Group's investment strategy. For the year ended December 31, 2019, the fair value change of the above unlisted investment recognized included (i) gain on fair value change of approximately RMB6.5 million (for the year ended December 31, 2018: RMB0.8 million) from Canbridge; and (ii) loss on fair value change of approximately RMB3.0 million from BB Pureos.

Inventories

The inventories of the Group increased by 75.8% from approximately RMB227.2 million as at December 31, 2018 to approximately RMB399.4 million as at December 31, 2019, due in large part to (i) the Group's business growth; and (ii) the consolidation of U-Pure and BestChrom. Along with the Group's increased number of ongoing integrated projects, the Group is required to reserve a higher inventory level for safe service provision.

Contract Costs

The contract costs of the Group decreased by 3.5% from approximately RMB294.6 million as at December 31, 2018 to approximately RMB284.2 million as at December 31, 2019, primarily due to (i) the higher production turnover along with the improvement of capacity utilization; and (ii) more write-down of contract costs provided in a more prudent way.

Trade and Other Receivables

The trade and other receivables of the Group increased by 62.7% from approximately RMB1,067.2 million as at December 31, 2018 to approximately RMB1,736.7 million as at December 31, 2019, primarily due to the increases in trade receivables and value added tax recoverable, as a result of the Group's business growth.

Contract Assets

The contract assets of the Group increased by 11.1% from approximately RMB36.0 million as at December 31, 2018 to approximately RMB40.0 million as at December 31, 2019, in line with the Group's revenue growth, which was partially offset by transfer to trade receivables when projects have achieved the milestones as stipulated in the contract.

Trade and Other Payables

The trade and other payables of the Group increased by 159.0% from approximately RMB711.8 million as at December 31, 2018 to approximately RMB1,843.7 million as at December 31, 2019, primarily due to (i) the receipt of advance amounting to US$55.0 million (equivalent to approximately RMB390.1 million) as the Group reached a cooperation intention with an independent global vaccine leader to enter into a vaccine manufacturing agreement; (ii) an increase in payable for purchase of property, plant and equipment along with the Group's continuous investment in its laboratory and manufacturing capacities around the world; (iii) an increase in other payables and accrual along with the Group's business expansion; and (iv) an increase in salary and bonus payables in line with the Group's workforce growth.

Contract Liabilities

The contract liabilities of the Group decreased by 32.7% from approximately RMB499.7 million as at December 31, 2018 to approximately RMB336.4 million as at December 31, 2019, primarily because more projects have been carried forward along with the contracts during the Reporting Period.

Lease Liabilities (Current Portion & Non-current Portion)

As a result of the application of IFRS 16 Leases effective from January 1, 2019, the lease liability is initially measured at the present value of lease payments that are unpaid at that date. After the commencement date, lease liabilities are adjusted by interest accretion and lease payments.

Liquidity and Capital Resources

The Group's bank balances and cash amounted to approximately RMB6,205.5 million as at December 31, 2019, as compared to approximately RMB4,084.4 million as at December 31, 2018, as a result of (i) the receipt of placement proceeds of approximately RMB3,512.2 million in November 2019; (ii) the net proceeds (after deducting repayment) of bank borrowings amounting to approximately RMB1,909.8 million in total in the second half of 2019; and (iii) cash provided by operating activities, which was partially offset by payment for the purchase of property, plant and equipment and other non-current assets.

Currently, the Group follows a set of funding and treasury policies to manage its capital resources and prevent risks involved. The Group expects to fund its working capital and other capital requirements from a combination of various sources, including but not limited to internal financing and external financing at reasonable market rates. In order to better control and minimize the cost of funds, the Group's treasury activities are centralized and all cash transactions are dealt with the state-owned banks and international banks with good reputation.

The Group's treasury policies are also designated to mitigate the impact of fluctuations in foreign currency exchange rates arising from the Group's global operations. The cash and cash equivalents held by the Group are mainly composed of Renminbi and U.S. dollars. The Group principally uses foreign currency forward contracts to hedge the foreign currency risks in the ordinary course of business.

Significant Investments, Material Acquisitions and Disposals

As at December 31, 2019, there were no significant investment held by the Company, nor were there any material acquisitions or disposals of subsidiaries, associates and joint ventures during the Reporting Period.

Indebtedness

Borrowings

As at December 31, 2019, the Group had aggregated borrowings of approximately RMB1,901.3 million. Fixed rate borrowings amounting to approximately RMB280.0 million were denominated in RMB with the effective interest rate ranging from 3.70% to 3.92% per annum; floating interest rate borrowings amounting to approximately RMB1,409.2 million were denominated in USD with the effective interest rate ranging from 3.01% to 3.33% per annum; and floating interest rate borrowings amounting to approximately RMB212.1 million were denominated in EUR with the effective interest rate around 1.50% per annum, respectively.

Of the total borrowings, approximately RMB506.1 million will be due within one year; approximately RMB139.5 million will be due in more than one year but within two year; and approximately RMB1,255.7 million will be due after two years but within five years.

As at December 31, 2019, all borrowings were unsecured.

Contingent Liabilities and Guarantees

As at December 31, 2019, the Group did not have any material contingent liabilities or guarantees.

Charges of Assets

As at December 31, 2019, the Group pledged bank deposits with approximately RMB431.6 million in total, which increased by 1,612.7% from approximately RMB25.2 million as at December 31, 2018, primarily due to (i) more bank deposits pledged as collateral for the banks to issue the letter of credit for the Group's imported raw materials and equipment, along with the growth of the Group's business; and (ii) bank deposits amounting to EUR50.0 million (equivalent to approximately RMB390.8 million) pledged as collateral for the facility construction in Ireland.

Gearing Ratio

Gearing ratio is calculated using interest-bearing borrowings divided by total equity and multiplied by 100%. As at December 31, 2019, gearing ratio was 14.7%.

Employees and Remuneration Policies

As at December 31, 2019, the Group employed a workforce totaling 5,666 employees: 2,477 were located in Shanghai; 2,719 were located in Wuxi, Jiangsu Province; 258 were located in Suzhou, Jiangsu Province; 17 were located in Shijiazhuang, Hebei Province; 68 were located in Hangzhou, Zhejiang Province; 5 were located in Chengdu, Sichuan Province and 122 were located overseas. The staff costs, including Directors' emoluments but excluding any contributions to retirement benefit scheme contributions and share-based payment expenses, were approximately RMB1,078.8 million for the year ended December 31, 2019, as compared to approximately RMB690.3 million for the year ended December 31, 2018. The remuneration package of employees generally includes salary and bonus elements.

In general, the Group determines the remuneration package based on the qualifications, position and performance of its employees. The Group also makes contributions to the social insurance fund, including basic pension insurance, medical insurance, unemployment insurance, childbirth insurance, work-related injury insurance funds, and housing reserve fund as applicable to the countries where the Group operates.

The Group has adopted the Pre-IPO Share Option Scheme and the Restricted Share Award Scheme to provide incentive or reward to eligible participants for their contribution or potential contribution to the Group. Details of the Pre-IPO Share Option Scheme and the Restricted Share Award Scheme are set out on pages 60 to 63 and note 43 to the consolidated financial statements in this annual report.

In addition, the Group has an effective training system for its employees, including orientation and continuous on-the-job training, to accelerate the learning progress and improve the knowledge and skill levels of its workforce. Its orientation process covers subjects, such as corporate culture and policies, work ethics, introduction to the biologics development process, quality management, and occupational safety, and its periodic on-the-job training covers streamlined technical know-hows of its integrated services, environmental, health and safety management systems and mandatory training required by applicable laws and regulations.

The remuneration of the Directors and senior management is reviewed by the Remuneration Committee and approved by the Board. The relevant experience, duties and responsibilities, time commitment, working performance and the prevailing market conditions are taken into consideration in determining the emoluments of the Directors and senior management.

Events after the Reporting Period

The Group has the following events taken place subsequent to December 31, 2019:

- Since January 2020, the COVID-19 pandemic has posed significant risks to public health and the global economy. In response to the outbreak, the Group immediately activated its Business Continuity Plan (BCP) — a comprehensive contingency plan covering R&D, manufacturing, logistics, workplace safety, employee health monitoring and customer communications — to minimize the impact on operations, business development and employee safety. In addition, the Group mobilized a large R&D team of more than 240 scientists in cooperation with global companies seeking to develop a potential treatment.

  The Group expects that operations in China will assume even greater responsibilities than usual for keeping the R&D and manufacturing engine humming and supporting global clients to work from home and strive to achieve their project milestones. Looking ahead, the Group expects to explore more opportunities to expand clinic manufacturing capabilities and capacities in the U.S., via both acquisitions and new site build-outs to meet global customers' future supply chain needs.

- In January 2020, WuXi Biologics Germany GmbH ("WuXi Biologics Germany"), an indirect wholly owned subsidiary of the Company, has entered into an asset purchase agreement with Bayer Aktiengesellschaft ("Bayer"), a publicly limited company incorporated in Germany, pursuant to which WuXi Biologics Germany will purchase from Bayer certain facility assets of the biologics drug product cGMP fill and finish manufacturing plant located in Leverkusen, Germany, so as to continue the Group's capacity expansion to further capture the growing global demand for biologics manufacturing. For more details, please refer to the Company's announcements dated January 16, 2020 and January 20, 2020.

- In February 2020, WuXi Vaccines entered into a master contract manufacturing agreement for vaccine products with the Vaccine Partner, pursuant to which WuXi Vaccines shall build an integrated vaccine manufacturing facility, including drug substance and drug product manufacturing as well as quality control labs in Ireland, and manufacture for, and supply to, the Vaccine Partner certain vaccine products for an initial term commencing from February 14, 2020 to December 31, 2039, subject to an option to renew for successive three years by the Vaccine Partner, with a total contract value of up to approximately US$3 billion. For more details, please refer to the Company's announcement dated February 18, 2020.

Directors and Senior Management

DIRECTORS

Executive Directors

Dr. Zhisheng Chen (陳智勝), aged 47, was appointed as an executive Director and chief executive officer in February 2014 and January 2016, respectively. He is also the chairman of the Strategy Committee of the Company. Dr. Chen is primarily responsible for the overall management of the business of the Group. He joined the Group in June 2011 and also serves as a director of most subsidiaries of the Company. From June 2011 to January 2016, Dr. Chen served as a senior vice president of WuXi AppTec (Shanghai) Co., Ltd. (上海藥明康德新藥開發有限公司), and was responsible for the management of biologics development and manufacturing. From August 2008 to June 2011, Dr. Chen served as the chief operating officer of Shanghai Celgen Bio-Pharmaceutical Co., Ltd. (上海賽金生物醫藥有限公司), and was responsible for the development, manufacturing and quality control of biologics. From November 2005 to August 2008, Dr. Chen served as a director and senior engineering consultant of Eli Lilly and Company, a global pharmaceutical company listed on NYSE (stock code: LLY), and was responsible for running a clinical manufacturing facility and providing technical guidance to biologics development and manufacturing. From June 2000 to November 2005, Dr. Chen served as a process engineer and manager of Merck & Co. Inc., a pharmaceutical company listed on NYSE (stock code: MRK) ("**Merck**"), and was responsible for providing technical support and trouble-shooting manufacturing issues of biologics and recombinant vaccines. Dr. Chen obtained a bachelor's degree in chemical engineering from Tsinghua University in June 1994 and a Ph.D. degree in chemical engineering from University of Delaware in June 2000. In November 2018, Dr. Chen was appointed by International Society for Pharmaceutical Engineering (ISPE) to serve on the International Board of Directors for two-year term.

Dr. Weichang Zhou (周偉昌), aged 56, was appointed as an executive Director, chief technology officer and executive vice president in May 2016, November 2016 and October 2019, respectively. He is primarily responsible for overseeing the development and manufacturing of biologics. He joined the Group in December 2012 as the vice president, responsible for the management of biologics development and manufacturing. Prior to joining the Group, Dr. Zhou served as a senior director of Genzyme Corporation from March 2008 to December 2012, and was responsible for commercial cell culture process development. From October 2002 to February 2008, Dr. Zhou served as a senior director of PDL BioPharma Inc., a biopharmaceutical company listed on NASDAQ (stock code: PDLI), and was responsible for process sciences and engineering functions. From May 1994 to October 2002, Dr. Zhou served as up to an associate director of Merck, and was responsible for fermentation and cell culture process development. Dr. Zhou obtained a bachelor's degree in chemical engineering from Jiangxi University of Technology (江西工學院) in the PRC in July 1982. He also obtained a Ph.D. degree in chemical engineering and biotechnology from University of Hannover in Germany in June 1989.

Non-executive Directors

Dr. Ge Li (李革), aged 53, was appointed as the chairman and non-executive Director in February 2014. He is also the chairman of the Nomination Committee and a member of the Strategy Committee of the Company. Dr. Li is primarily responsible for providing overall guidance on the business, strategy and corporate development of the Group. He founded the Group in May 2010 and also serves as a director of most subsidiaries of the Company. Dr. Li has been serving as the chairman and the chief executive officer since December 2000 of WuXi AppTec, a company dual-listed on Shanghai Stock Exchange (上海證券交易所) (stock code: 603259) and the Main Board of the Stock Exchange (stock code: 2359), and has been responsible for the overall management of its business, strategy and corporate development. From August 2007 to December 2015, Dr. Li served as the chairman and the chief executive officer of WuXi PharmaTech. From May 1993 to December 2000, Dr. Li was one of the founding scientists and latest served as a research manager of Pharmacopeia Inc., a biopharmaceutical company listed on NASDAQ (stock code: PCOP), and was responsible for managing external research collaboration. Dr. Li obtained a Ph.D. degree in organic chemistry from Columbia University in the United States in February 1994. He was appointed as a director of the Scripps Research Institute (TSRI), a private non-profit research organization, in February 2017.

Dr. Li is a director of Biologics Holdings, a controlling shareholder of the Company, and director of New WuXi Life Science Investment Limited and WuXi NextCode Holdings Limited, close associates of the controlling shareholders of the Company, and director of WuXi Diagnostic Investment (Cayman) Limited, subsidiary of close associate of controlling shareholder of the Company.

Mr. Edward Hu (胡正國), aged 57, was appointed as a non-executive Director in February 2014. He is a member of the Audit Committee and Remuneration Committee of the Company. Mr. Hu is primarily responsible for providing guidance on the business strategy, financial management and new business development of the Group. He joined the Group in May 2010 and also serves as a director of most subsidiaries of the Company. Since March 2016, Mr. Hu has been serving as a director of WuXi AppTec, and is responsible for the overall business and management of its group. Mr. Hu joined WuXi AppTec in August 2007 and has served as the company's Co-Chief Executive Officer since August 2018. He previously served as the company's Chief Financial Officer, Chief Investment Officer and Chief Operating Officer. From October 2000 to July 2007, Mr. Hu served on various roles to become a senior vice president and chief operating officer of Tanox Inc., and was responsible for company operations, quality control, finance and information technology. From April 1998 to October 2000, Mr. Hu served as a business planning manager of Biogen Inc., a global biotechnology company listed on NASDAQ (stock code: BIIB), and was responsible for business planning and budget management of its research and development division. From May 1996 to December 1998, Mr. Hu served as a senior financial analyst of Merck, and was responsible for financial planning and analysis. Mr. Hu obtained a bachelor's degree in physics from Hangzhou University, now known as Zhejiang University (浙江大學), in the PRC in July 1983. He also obtained a master's degree in chemistry and a master degree in business administration from Carnegie Mellon University in the United States in May 1993 and May 1996, respectively.

Mr. Hu is a director of Biologics Holdings, a controlling shareholder of the Company, director of New WuXi Life Science Investment Limited and WuXi NextCode Holdings Limited, close associates of the controlling shareholders of the Company.

Mr. Yibing Wu (吳亦兵), aged 52, was appointed as a non-executive Director in May 2016. He is also a member of the Strategy Committee of the Company. Mr. Wu is primarily responsible for providing guidance on corporate strategy and governance for the Group. He joined the Group in May 2016. Prior to joining the Group, Mr. Wu. has been serving as a director of WuXi AppTec since March 2016. Since November 2015, Mr. Wu has been serving as a director of Summer Bloom Investments Pte. Ltd. Since October 2013, Mr. Wu has been working with Temasek International Pte. Ltd. and is currently the joint head of Enterprise Development Group and the head of China. From April 2011 to April 2014, Mr. Wu served as a director of Neptune Orient Lines Limited, a company listed on the Singapore Exchange Limited (stock code: RE2). From December 2009 to September 2013, Mr. Wu served as the president of CITIC Private Equity Funds Management Co., Ltd. From January 2012 to September 2013, Mr. Wu served as the chairman and chief executive officer of CITIC Goldstone Investment Co. Ltd. From May 2009 to July 2013, Mr. Wu served as a non-executive director of Lenovo Group Limited, a company listed on the Main Board of the Stock Exchange (stock code: 0992). From September 2008 to November 2009, Mr. Wu served as the executive vice president of Legend Holdings Co., Ltd. From August 2004 to August 2008, Mr. Wu was seconded from McKinsey & Company as the chief strategy officer, chief integration officer, chief transformation officer and chief information officer of Lenovo Group Ltd. From September 1996 to August 2008, he worked with McKinsey & Company, where he was a senior partner, the head of Asia Pacific M&A practice and general manager of Beijing office. Mr. Wu obtained a bachelor's degree in molecular biology from University of Science and Technology of China (中國科學技術大學) in the PRC in July 1989 and a Ph.D. degree in biochemistry and molecular biology from Harvard University in the United States in June 1996.

Mr. Wu is a director of Biologics Holdings, Life Science Holdings, Life Science Limited and WuXi PharmaTech, controlling shareholders of the Company, and also a director of WuXi NextCode Holdings Limited and New WuXi Life Science Investment Limited, close associates of the controlling shareholders of the Company.

Mr. Yanling Cao (曹彥凌), aged 36, was appointed as a non-executive Director in May 2016. He is primarily responsible for providing guidance on corporate strategy and governance to the Group. He joined the Group in May 2016. Prior to joining the Group, Mr. Cao has been serving as the managing director of Boyu Capital Advisory Company Limited (博裕投資顧問有限公司) and has been responsible for sourcing, evaluating and managing private equity transactions, with a particular focus in the healthcare industry. Since February 2019, Mr. Cao has become the partner of Boyu Capital Advisory Company Limited (博裕投資顧問有限公司). From December 2007 to January 2011, Mr. Cao served as an investment professional of General Atlantic LLC, and was responsible for private equity and venture capital investment. From July 2006 to November 2007, Mr. Cao served as an investment banker of Goldman Sachs Asia LLC, and was responsible for providing investment banking advisory services to clients in Asia. Mr. Cao obtained a bachelor's degree in economics and mathematics from Middlebury College in the United States in June 2006. In addition, Mr. Cao was a director of CStone Pharmaceuticals for the period from April 1, 2016 to March 27, 2017. He was then appointed as a non-executive director of CStone Pharmaceuticals (基石藥業), a company listed on the main board of the Stock Exchange (stock code: 2616), on May 15, 2019.

Mr. Cao is a director of Biologics Holdings, Life Science Holdings, Life Science Limited and WuXi PharmaTech, controlling shareholders of the Company, and a director of WuXi NextCode Holdings Limited and New WuXi Life Science Investment Limited, close associates of the controlling shareholders of the Company.

Independent Non-Executive Directors

Mr. William Robert Keller, aged 72, was appointed as an independent non-executive Director on May 17, 2017. He is the chairman of the Remuneration Committee, a member of the Audit Committee and Nomination Committee of the Company. Mr. Keller is primarily responsible for supervising and providing independent opinion to the Board. He joined the Group in May 2017. Prior to joining the Group, he has been serving as the chairman of Coland Pharmaceutical Co.,Ltd. (康聯藥業有限公司), a company listed on Taiwan Stock Exchange (stock code: 4144) since December 2010, and has been responsible for providing business advice to the company. From September 2014 to December 2015, Mr. Keller served as an independent director of WuXi PharmaTech and was responsible for providing independent advice to the board of the company. From December 2009 to May 2015, Mr. Keller served as a director of Alexion Pharmaceuticals, Inc., a company listed on NASDAQ (stock code: ALXN), and was responsible for providing independent advice to the board of the company. From February 2003 to June 2014, Mr. Keller served as the founder and principal of Keller Pharma Consultancy (Shanghai) Co. Ltd. (凱樂醫藥諮詢(上海)有限公司) and was responsible for market entry and strategy consulting. From March 2003 to June 2014, Mr. Keller served as the deputy general manager of Shanghai Zhangjiang Biotech and Pharmaceutical Base Development Co., Ltd. (上海張江生物醫藥基地開發有限公司) and was responsible for consulting of pharmaceutical and biotechnological startups' industry development in the park. From May 2007 to April 2010, Mr. Keller served as the chairman of HBM Biomed China Partners Ltd. and was responsible for investment in biotechnology companies. From December 2007 to December 2014, Mr. Keller served as a director and later a supervisor of TaiGen Biopharmaceuticals Holding Limited (太景醫藥研發控股股份有限公司), a company listed on Taiwan Stock Exchange (stock code: 4157), and was responsible for overseeing financial matters. From June 1997 to December 2013, Mr. Keller served as the deputy chairman of the Shanghai Association of Enterprises with Foreign Investment (上海市外商投資企業協會), and was responsible for supporting foreign invested companies as a business advisor. From March 2003 to December 2013, Mr. Keller served as a senior consultant of the Shanghai Foreign Investment Development Board (上海市外國投資促進中心) and was responsible for providing advice regarding foreign investment development. Since September 14, 2018, Mr. Keller has been serving as an independent non-executive director of Hua Medicine (華領醫藥), a company listed on the Main Board of the Stock Exchange (stock code: 2552) ("**Hua Medicine**"). Mr. Keller obtained a bachelor of science's degrees from the School of Economics and Business Administration in Zurich, Switzerland in July 1972.

Mr. Teh-Ming Walter Kwauk (郭德明), aged 67, was appointed as an independent non-executive Director on May 17, 2017. He is the chairman of the Audit Committee and a member of the Nomination Committee of the Company. Mr. Kwauk is primarily responsible for supervising and providing independent opinion to the Board. Mr. Kwauk joined the Group in May 2017. Prior to joining the Group, he has been serving as an independent director and chairman of the audit committee of Alibaba Group Holding Limited (阿里巴巴集團控股有限公司), a company listed on NYSE (stock code: BABA) since September 2014. Since September 2018, Mr. Kwauk served as an independent non-executive director of Hua Medicine, responsible for supervising and providing independent judgment to the board of the company. Mr. Kwauk also served as an independent non-executive director and the chairman of the audit committee of China Fordoo Holding Limited (中國虎都控股有限公司), a company listed on the Main Board of the Stock Exchange (stock code: 2399) from June 2014 to August 2016. From August 2014 to December 2015, Mr. Kwauk served as an independent director of WuXi PharmaTech, and was responsible for providing independent judgement to the board of the company. Since October 2012, he has been serving as an independent non-executive director and the chairman of the audit committee of Sinosoft Technology Group Limited (中國擎天軟件科技集團有限公司), a company listed on the Main Board of the Stock Exchange (stock code: 1297).Since January 2003, Mr. Kwauk has been serving as a senior consultant and a vice president of Motorola Solutions (China) Co., Ltd. (摩托羅拉系統(中國)有限公司), and has been responsible for providing advice on corporate strategic, finance and tax. Mr. Kwauk was a partner of KPMG, an accounting firm primarily engaged in providing audit, advisory and tax services from 1977 to 2002, and was responsible for audit. Mr. Kwauk obtained a bachelor's degree in science in April 1975 and a licentiate's degree in accounting in April 1977 from the University of British Columbia in Canada. He has been an associate member of Hong Kong Institute of Certified Public Accountants since March 1983.

Mr. Wo Felix Fong (方和), BBS, JP, aged 69, was appointed as an independent non-executive Director on May 17, 2017. He is member of the Remuneration Committee of the Company. Mr. Fong is primarily responsible for supervising and providing independent opinion to the Board. Mr. Fong joined the Group in May 2017. Since August 1988, he has been working in King & Wood Mallesons (formerly known as Robert Lee & Fong, Felix Fong & Hon, Fong & Ng, Arculli Fong & Ng and King & Wood) and has been responsible for legal matters in corporate and financial areas of practice. From May 2010 to May 2016, Mr. Fong served as an independent non-executive director of China Oilfield Services Limited (中海油田服務股份有限公司), a company listed on the Main Board of the Stock Exchange (stock code: 2883) and on Shanghai Stock Exchange (stock code: 601808). From April 2011 to July 2018, Mr. Fong also served as an independent non-executive director of China Investment Development Limited (中國投資開發有限公司), a company listed on the Main Board of the Stock Exchange (stock code: 204). Mr. Fong also served as an independent non-executive director of various companies listed on the Main Board of the Stock Exchange, namely Television Broadcast Limited (電視廣播有限公司) (stock code: 00511) since December 2019, Xinming China Holdings Limited (新明中國控股有限公司) (stock code: 2699) since June 2015, Sheen Tai Holdings Group Company Limited (順泰控股集團有限公司) (stock code: 1335) since June 2012, Evergreen International Holdings Limited (長興國際(集團)控股有限公司) (stock code: 238) since October 2010, Guangdong Land Holdings Limited (粵海置地控股有限公司) (stock code: 124) since January 2007 and Greenland Hong Kong Holdings Limited (綠地香港控股有限公司) (stock code: 337) since September 2006. Mr. Fong obtained a bachelor's degree in engineering from McMaster University in Canada in June 1974 and a Juris Doctor degree from Osgoode Hall Law School of York University in Canada in June 1978. Mr. Fong was admitted as a solicitor in England and Wales in September 1986 and in Hong Kong in February 1987. Mr. Fong is appointed by the Ministry of Justice of China (中華人民共和國司法部) as one of the China-appointed Attesting Officers in Hong Kong in June 1993.

SENIOR MANAGEMENT

For the biographies of Dr. Zhisheng Chen (陳智勝) and Dr. Weichang Zhou (周偉昌), please refer to "Directors — Executive Directors".

Ms. Christine Shaohua Lu-Wong (**盧韶華**), aged 51, is Chief Financial Officer (CFO) of WuXi Biologics. Serving in this role since January 2016, Ms. Lu-Wong is primarily responsible for the financial management, capital market management, and merger and acquisition activities of the Group.

Prior to joining the Group, Ms. Lu-Wong served as CFO of Xueda Education Group, previously listed on the New York Stock Exchange (stock code:XUE), from 2012 to 2015, where she led the privatization of the company. She previously served as the CFO of HiSoft Technology International Limited (later Pactera Technology International Ltd., NASDAQ stock code: PACT), primarily engaged in IT consulting and technology services, from 2010 to 2012. In this role, Ms. Lu-Wong was responsible for the IPO, mergers and acquisitions, and overall financial management of the company. From 2007 to 2009, Ms. Lu-Wong served as Vice President of Finance of WuXi PharmaTech, where she oversaw the financial operation of the company. Prior to joining WuXi PharmaTech, Ms. Lu-Wong worked for 13 years in the United States in financial management capacities at Fortune 500 enterprises such as Google, Oracle, HP and PricewaterhouseCoopers LLP.

Ms. Lu-Wong obtained her bachelor's degree in foreign trade and economics from Guangdong University of Foreign Studies in 1990, and a Master in Business Administration with a focus in accounting from Golden Gate University, San Francisco in 1994. Ms. Lu-Wong received her certificate of public accountant (CPA) in California in 1998.

Dr. Chiang Syin (辛強), aged 65, is Senior Vice President and Chief Quality Officer of WuXi Biologics. Dr. Syin oversees the Company's quality operations, including quality assurance, quality control, global quality compliance, regulatory affairs and its training center.

Dr. Syin has over 28 years of experience in FDA regulatory review and GMP compliance of biological and biotech products. Prior to joining WuXi Biologics, Dr. Syin was appointed as the Associate Country Director of the FDA's China Office, where he directed the medical product inspection program until his retirement in early 2017. Before working in the China Office, he served as a Branch Chief in the Division of Manufacturing and Product Quality at the FDA's Center for Biologics Evaluation and Research (CBER). Here, Dr. Syin provided leadership and guidance to the staff. He engaged in Chemistry, Manufacturing, and Control (CMC) reviews as well as GMP inspections for pre-marketing license applications and post-marketing changes of biological products.

During his career, Dr. Syin established the biotech inspection team at the FDA's Center for Drug Evaluation and Research (CDER), when all therapeutic biological products were transferred from CBER to CDER in 2003. He was actively involved in FDA drug/biologics regulatory policy and guidance development that included drafting Vaccines CMC, Phase I GMP guidance documents and the 2011 Process Validation guidance revision. Dr. Syin served as a Gates Project International Expert in 2017, advising the Center for Food and Drug Inspection (CFDI) of National Medical Products Administration (formerly China FDA).

Dr. Syin obtained his bachelor's degree in biology from Tunghai University in Taiwan and his Ph.D. in Chemistry from the Catholic University of America. He undertook further post-doctorate study at the National Institute of Allergy and Infectious Diseases at the U.S. National Institutes of Health.

Dr. Jijie Gu (顧繼傑), aged 54, serves as Executive Vice President and Chief Scientific Officer of WuXi Biologics. Dr. Gu brings more than 20 years of experience to the firm, including 18 years of target discovery, drug discovery and the building and management of several functional areas. He also has significant expertise in therapeutic design, antibody generation, protein engineering, biologic drug discovery, and preclinical and early clinical development.

Prior to joining WuXi Biologics, Dr. Gu served as a function head at AbbVie Cambridge Research Center, where he led target validation and lead discovery in AbbVie Immunology for both small and large molecule drugs. Before that, he was a function head of Oncology Biologics in Global Biologics at AbbVie Bioresearch Center.

While at Abbott/AbbVie, Dr. Gu made critical contributions to building antibody platform technologies. He led the construction of novel biologics platform technologies, including Fc engineering, ADC technology, TCR technology, bispecific and multispecific antibody technologies and T cell engagers, and led projects in multiple therapeutic areas relating to oncology, immunology, immuno-oncology, metabolic disease, neuroscience and ophthalmology. He contributed broadly to AbbVie Biologics portfolio and delivered several New Biological Entities (NBEs) into clinical development.

Throughout his extensive career, Dr. Gu has co-invented more than 20 filed and issued U.S. patents and has coauthored 40 publications. He currently serves on the editorial boards of the peer-reviewed journals *mAbs* and *Antibody Therapeutics*.

Dr. Gu obtained his Ph.D. in Molecular Biology and Biochemistry from Peking Union Medical School. He received postdoctoral training in Tumor Immunology at the Dana Farber Cancer Institute, a principal teaching affiliate of Harvard Medical School, and in Cancer Cell Biology at the Harvard School of Public Health.

Dr. Jing Li (李競), aged 48, is Senior Vice President of Discovery Service at WuXi Biologics, where he leads innovative biologics drug product pipeline, portfolio management, pre-clinical and IND filings. He joined WuXi Biologics in 2013 as Vice President of Biologics Discovery. Since then, Dr. Li has formed a first-class biologics drug discovery team, built multiple proprietary state-of-the-art biologics drug discovery platforms, established a comprehensive working process from identifying targets for IND filings and formed partnerships with WuXi Biologics' global clients. Several programs he has led have submitted IND applications, and five have been approved for clinical trials in China, Australia and the United States.

Dr. Li has over 20 years of professional experience in antibody engineering and over 18 years of industry experience in drug discovery and development. He has filed over 30 patents and authored 20 publications. Prior to joining Wuxi Biologics, Dr. Li was Lab Head and Program Team Head at Novartis Oncology, Senior Manager of Portfolio & Alliance Management at Novartis Biologics Center and Senior Scientist and Project Leader at Wyeth (now Pfizer).

Dr. Li received his M.D. and Ph.D. degrees in molecular immunology and oncology from Peking University School of Medicine (former Beijing Medical University) and an MBA from Yale University School of Management. He obtained his post-doctorate training at Tufts University. He is a member of the American Association for Cancer Research, the American Society of Clinical Oncology and the Federation of Clinical Immunology Societies.

Mr. Jian Dong (董健), aged 56, joined WuXi Biologics in 2014 and has since been named Senior Vice President of Global Biomanufacturing. In this role, he oversees global clinical and commercial biologics manufacturing and new facility development.

Mr. Dong has over 30 years' experience in bio-pharmaceutical production and process development. He has extensive experience managing the design, construction, qualification and operation of new current GMP (cGMP) biologics manufacturing facilities with 30,000 L bioreactor capacities.

Prior to WuXi Biologics, Mr. Dong served as Deputy Chief Engineer at Shenzhen Kangtai Biological Products, Senior Process Engineer at Eli Lilly & Co., Vice President of Manufacturing and Vice President of Quality at Shanghai Celgen and Deputy General Manager of Unilab Bioscience and Shanghai United Cell Biotechnology, the subsidiaries of UNILAB.

Mr. Dong obtained his Master's degree in Biology from Wuhan University in China and his MBA from Webster University in the United States. He was subsequently granted a Senior Pharmaceutical Engineer certification by the Personnel Department of Guangdong Province in 1996.

Mr. Angus Scott Marshall Turner, aged 52, is Vice President of Global business development and Alliance Management at WuXi Biologics. Mr. Turner, who joined the Company in 2016, is responsible for business development, strategic alliances and partnerships.

Prior to joining WuXi Biologics, Mr. Turner served from 2010 to 2016 as Director of Sales Europe and Asia and Head of Sales Europe for Lonza AG, a Swiss supplier of products and services to the global pharmaceutical, healthcare and life science industries. In addition to building the sales team there, he oversaw the successful implementation of sales strategies across all technologies in the contract manufacturing business unit. Before working at Lonza AG, Mr. Turner was Director of Business Development Europe and Asia for AppTec Laboratory Services, Inc. with a focus on biopharmaceutical and medical device testing, as well as biologics-based manufacturing and related services. Upon the acquisition of AppTec Laboratory Services, Inc. by WuXi PharmaTech in 2008, Mr. Turner served as Director of International Biopharmaceutical Business Development for WuXi PharmaTech. Mr. Turner also worked for Bayer AG for several years in sales and marketing, including supporting the launch of Kogenate ® FS Antihemophilic Factor (Recombinant).

Mr. Turner obtained a bachelor's degree in biology from Stirling University, a master's degree in biotechnology from Strathclyde University and an MBA from Warwick Business School, with a scholarship to Copenhagen Business School.

The Directors are pleased to present this annual report and the audited consolidated financial statements of the Group for the year ended December 31, 2019.

Principal Activities

The Group is principally engaged in the provision of end-to-end solutions and services for biologics discovery, development and manufacturing to customers involving in biologics industry in both the PRC and other overseas countries.

A list of the Company's subsidiaries, together with their places of incorporation, principal activities and particulars of their issued shares/paid up capital, is set out in note 44 to the consolidated financial statements in this annual report.

Business Review

A review of the business of the Group during the year, a discussion and analysis on the Group's future business development and the financial and operational key performance indicators employed by the Directors in measuring the performance of the Group's business are set out in the sections headed "Chairman and CEO Statement" on pages 4 to 5 of this annual report, "Financial Highlights" on pages 6 to 7 of this annual report, and "Management Discussion and Analysis" on pages 8 to 39 of this annual report. The financial risk management objectives and policies of the Group are set out in note 37 to the consolidated financial statements in this annual report. Significant events that have an effect on the Group subsequent to the financial year ended December 31, 2019 are set out in note 48 to the consolidated financial statements in this annual report. Besides, principal risks and uncertainties faced by the Group, key relationship between the Group and its employees, customers and suppliers, environmental policies of the Group and compliance with the relevant laws and regulations which have significant impact are set out below. These sections constitute part of this Directors' Report.

In addition, more details regarding the Group's performance by reference to environmental and social-related key performance indicators and policies, as well as compliance with relevant laws and regulations which have a significant impact on the Company are provided in the section headed "Environmental, Social and Governance Report" of the on pages 87 to 154 of this annual report.

Directors' Report

Directors

The Directors during the Reporting Period and up to the date of this Directors' Report were:

Executive Directors

Dr. Zhisheng Chen *(Chief Executive Officer)*
Dr. Weichang Zhou *(Chief Technology Officer)*

Non-executive Directors

Dr. Ge Li *(Chairman)*
Mr. Edward Hu
Mr. Yibing Wu
Mr. Yanling Cao

Independent non-executive Directors

Mr. William Robert Keller
Mr. Teh-Ming Walter Kwauk
Mr. Wo Felix Fong

Biographies of the Directors and Senior Management

The biographical details of the Directors and the senior management of the Company are set out in the section headed "Directors and Senior Management" on pages 40 to 48 of this annual report.

Service Contracts of the Directors

Each of the Directors has entered into a three-year service contract with the Company, subject to termination before expiry by either party giving not less than three months' notice in writing to the other.

None of the Directors proposed for re-election at the forthcoming AGM has a service contract with the Company or any member of the Group which is not determinable by the employer within one year without payment of compensation (other than statutory compensation).

Remuneration of the Directors and Five Individual with Highest Emoluments

Details of the Directors' remuneration and the five highest paid individuals in the Group are set out in note 11 to the consolidated financial statements in this annual report.

No Director has waived or has agreed to waive any emoluments during the year ended December 31, 2019.

Changes in information in respect of Directors

Pursuant to Rule 13.51B of the Listing Rules, the changes in Directors' information after the publication of the 2019 interim report are set out below.

- Mr. Felix Wo Fong, independent non-executive director of the Company, was appointed as an independent non-executive director of Television Broadcast Limited (電視廣播有限公司) (stock code: 00511), with effect from December 3, 2019.

- Dr. Weichang Zhou, executive director of the Company, has been promoted from senior vice president to executive vice president of the Company with effect from October 1, 2019.

Save as disclosed above, there were no changes in information which are required to be disclosed and had been disclosed by Directors pursuant to paragraphs (a) to (e) and (g) of Rule 13.51(2) of the Listing Rules.

Independence of Independent Non-Executive Directors

The Company has received from each of the independent non-executive Directors an annual confirmation of his independence pursuant to Rule 3.13 of the Listing Rules. The Company considers that all of the independent non-executive Directors are independent in accordance with the guidelines set out in the Listing Rules.

Non-Competition Undertakings

As disclosed in the Prospectus, each of the Controlling Shareholders has undertaken to the Company in a deed of non-competition that, subject to and except as mentioned in the Prospectus, it would not, and would procure their close associates (except any member of the Group) not to, directly or indirectly (whether in the capacity of principal or agent, whether for its own benefit or jointly with or on behalf of any person, firm or company, whether within or outside China), commence, engage in, participate in or acquire any business which competes or may compete directly or indirectly with the Group's core business of providing services for the discovery, development and manufacturing of biologics or own any rights or interests in such business. Each of the Controlling Shareholders has confirmed in writing to the Company of its compliance with the deed of non-competition for disclosure in this annual report during the year ended December 31, 2019. No new business opportunity was informed by them as at December 31, 2019.

The independent non-executive Directors have reviewed the implementation of the deed of non-competition and are of the view that the non-competition undertakings have been complied with by the Controlling Shareholders for the year ended December 31, 2019.

Directors' Interests in Competing Businesses

Saved as disclosed in this annual report, as at December 31, 2019, none of the Directors or their respective associates had engaged in or had any interest in any business which competes or may compete with the business of the Group.

Directors' Interests in Transaction, Arrangement or Contract of Significance

Save as disclosed in this annual report, there was no transaction, arrangement or contract of significance subsisted in which a Director or an entity connected with a Director was materially interested, whether directly or indirectly, during or at the end of the Reporting Period.

Connected Transactions

Details on related party transactions for the year ended December 31, 2019 are set out in note 42 to the consolidated financial statements. As the Founding Individuals have ceased to control 30% or more voting power of WuXi AppTec upon its Hong Kong listing on December 13, 2018, WuXi AppTec is no longer an associate of the Founding Individuals and therefore, is not a connected person of the Company. Accordingly, the related party transactions between the Group and WuXi AppTec Group do not fall under the definition of "connected transaction" or "continuing connected transaction" under Chapter 14A of the Listing Rules.

During the Reporting Period, there was no connected transaction or continuing connected transaction of the Group which has to be disclosed in accordance with the Listing Rules.

Risk Management

The Company believes that risk management is essential to the Group's efficient and effective operation. The Company's management assists the Board in evaluating material risk exposure arising internally and externally from the Group's business, including operational risks, financial risks, regulatory risks, etc., and proactively setting up appropriate risk management and internal control mechanism which is embedded in daily operation management.

Regulatory Risk

The biologics industry, being a division of the pharmaceutical and healthcare industry has experienced drastic changes in recent years. On the one hand, the National Medical Products Administration (NMPA) has introduced certain measures to improve the standards of the approval of pharmaceutical research and development and the efficiency of the approval of drug applications, i.e., the "NMPA Notice No. 126 (2017)" which is the Opinion on Implementing Priority Review and Approval to Encourage Drug Innovation and the "Notice No. 23 (2018)" which is the Announcement on Optimizing the Review and Approval of Drug Registration. On the other hand, while government policies toward the pharmaceutical industry are expected to remain stable and the government is expected to remain committed to increasing innovation as well as overall healthcare spending which is in line with the "Healthy China 2030" goals set by the State Council of the PRC, it is also observed that the companies of this industry are to comply with more stringent regulations which is more close to international standards, the punishment becomes much stricter and supervision and inspection from government will become more frequent. In response to this, the Group sticks to the strategies of "Innovation" and "Globalization" to handle the keep-changing regulations. The Group has formed a dedicated Regulatory Affairs team which comprises professionals with years of experiences and diversified backgrounds in both domestic and overseas markets. The team members are responsible for actively following new laws, regulations and guidelines published by regulatory agencies and promoting improvements in compliance with such laws, regulations and guidelines.

Pandemic Risk

The unprecedented outbreak of novel coronavirus (COVID-19) has swept the world with significant impact since early January 2020. In view of increasing spread, World Health Organization has declared the spread of COVID-19 to be a pandemic. Various restrictive actions have been adopted in different nations to contain COVID-19, including but not limited to the lock-down of cities and suspension of certain business activities, travelling restrictions and quarantine requirements. Consequently, not only does business continuity in enterprises is severely undermined, the far-reaching impact on global economy, industry growth, or social stability is yet to be revealed in the long run. Same as many other businesses, the Group is also susceptible to the uncertainties and challenges brought by COVID-19.

Since the outbreak of COVID-19 in January, the Group has implemented a series of contingency measure in order to minimize its potential negative impact, including forming a crisis management team led by the senior management. Besides, the Group's well-established BCP (Business Consulting) program has successfully minimized significant business disruptions resulting from COVID-19, albeit a brief slow-down in February as most of the Group's facilities are located in China. Nonetheless, normal business operation is gradually resumed with more than 98% of the staff back to work by the end of March.

Despite the spread of COVID-19 is gradually under control in China, it remains rampant in the rest of the world. As an avant-garde of biologics CDMO provider, the Group is willing to live up to its mission and stand in frontline in combating the virus. A team of top-tier scientists is mobilized to work with different parties in the development of potential treatments for COVID-19. Being the top priority of the Group, and thereby created various business opportunities to the Group too. The Group will stay vigilant to the development of COVID-19 and make necessary arrangements or measures as and when appropriate.

Global Politics and Economy Uncertainty Risk

Despite the continuous global economic growth, there are still a number of uncertainties and risks affecting the global economy, such as increasing trade tensions between the U.S. and certain major nations, the Brexit, the fluctuation of the U.S. dollar against major currencies, the fluctuation of the oil price, the impact of the wide outbreak of COVID-19 and the continuing geopolitical tensions creating uncertainties in the world economy and global financial market. A slowdown in global economic growth or even recession may lead to economic contractions in certain markets, commercial and consumer delinquencies, weakened consumer confidence and increased market volatility. The Group has taken actions to realize its globalization strategy, by making investments in different countries around the world to set up development and manufacturing facilities to offer customers with the new manufacturing paradigm of "Global Dual Sourcing within WuXi Bio", which in turn will mitigate such global uncertainty risk. In addition, the management team are also looking at the cost-effectiveness and operation efficiency in internal management to strengthen the cost control and cultivate a high-performance culture to maintain sustainable growth.

Interest Rate Risk

The Group is exposed to fair value interest rate risk in relation to fixed-rate bank borrowings and fixed-rate pledged bank deposits and lease liabilities. The Group currently does not have an interest rate hedging policy to mitigate interest rate risk; nevertheless, the management monitors interest rate exposure and will consider hedging significant interest rate risk should the need arise.

The Group is also exposed to cash flow interest rate risk in relation to variable-rate bank balances and variable-rate bank borrowings. The Group aims at keeping borrowings at variable rates. The Group manages its interest rate exposures by assessing the potential impact arising from any interest rate movements based on interest rate level and outlook. The management will review the proportion of borrowings in fixed and variable rates and ensure they are within reasonable range.

Credit Risk

During the Reporting Period, the Group's maximum exposure to credit risk which will cause a financial loss to the Group due to failure to discharge an obligation by the counterparties is the carrying amount of the respective recognized financial assets as stated in the consolidated statements of financial position. In order to minimize the credit risk, the management has designated a team responsible for reviewing and monitoring the credit exposure of customers by evaluating customers' credit qualification, monitoring credit records, sending confirmations and initiating collection procedures to promptly recover overdue debts. With more new customers introduced, the management has also made efforts to assess credit limits, approve credit term granted and other monitoring procedures to monitor the overall risk exposure. In addition, the Board considers that the impairment losses under ECL (Expected Credit Loss) model have been of a more conservative view in credit risk control. The management has been continuously managing the credit risk through periodic review and monitoring on the doubtful debts.

The Board is of the view that the credit risk on time deposits, pledged bank deposits, bank balances and financial assets at FVTPL is limited because the majority of the counterparties are state-owned banks with good reputation or banks and financial institutions with good credit rating. In addition, to regulate the management of surplus fund, the Group has set up relevant policies and procedures, which clearly state that no speculative transaction is allowed. Also the criteria for evaluating the available products in the market are set in the following sequence of priority: safety, liquidity and then returns. Other requirements like the approved list of financial institutions, the maximum placement per transaction and the aggregate amount in the individual financial institution are also clearly defined. With all the above, the Directors consider the credit risk in relation to time deposits, pledged bank deposits, bank balances and financial assets at FVTPL has been significantly reduced.

Liquidity Risk

The Group's primary uses of cash are to fund working capital and capital expenditures. During the Reporting Period, the Group funded its cash requirements principally from cash generated from operations and funds raised from global offerings and subsequent primary placings.

By continuously monitoring the operating cash flow and capital expenditure needs, the Group manages the liquidity risk.

As at December 31, 2019, there was a balance of unutilized net proceeds from Placing kept in the bank accounts of the Group. For more details, please refer to the section headed "Use of Net Proceeds" in this annual report.

Currency Risk

The Group principally operates in China. Following the "Global Dual Sourcing within WuXi Bio" manufacturing paradigm, it has accelerated its business expansion around the world. The Group's entities are exposed to foreign exchange risk of foreign currencies other than their functional currencies, primarily with respect to USD.

During the Reporting Period, a majority of the Group's revenue was generated from sales denominated in USD, while most of the purchase of raw materials, property, plant and equipment and expenditures were settled in RMB and facility construction in Ireland was settled in EUR. As a result, the Group's operating margins were impacted when the foreign exchange rates fluctuated, especially between USD and RMB.

The Group seeks to limit its exposure to foreign currency risk by closely monitoring and minimizing its net foreign currency position. The Group has engaged in a series of forward contracts to manage its currency risk. Hedge accounting is also adopted by the Group for derivatives to mitigate the impact on profit or loss due to the fluctuation in foreign currencies.

Risks related to international trade agreements, tariffs and import/export regulations

Since 2018, more material uncertainties arose in international trade agreements, tariffs and import/export regulations, especially the bilateral trade between the U.S. and the PRC. The U.S. and the PRC government have carried out numerous rounds of negotiations. If any new legislation and/or regulations are implemented, or if existing trade agreements are renegotiated, or if the U.S. or the PRC imposes additional burdens on international trade that negatively affect the ability of both countries to import and export goods, it may lead to a decline in material supply and demand of the Group's services. We are closely monitoring the relevant impact.

Directors' and Chief Executive's Interests and Short Positions in Shares, Underlying Shares and Debentures of the Company or its Associated Corporations

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

I. Interests in shares or underlying shares of the Company

Name of Director	Capacity/ Nature of interest	Number of Shares[1]	Number of underlying Shares	Aggregate interest[1]	Approximate percentage of shareholding interest
Dr. Ge Li	Interests of controlled corporations	520,880,600 (L)[2]	—	520,880,600 (L)	40.24%
Mr. Edward Hu	Beneficial owner	712,500 (L)	5,655 restricted shares (L)[3]	718,155 (L)	0.06%
Dr. Zhisheng Chen	Beneficial owner and founder of a discretionary trust	1,211,418 (L)[4]	986,500 restricted shares (L)[3] 39,544,000 share options (L)[5]	41,741,918 (L)	3.22%
Dr. Weichang Zhou	Beneficial owner	—	157,840 restricted shares (L)[3] 5,931,000 share options (L)[5]	6,088,840 (L)	0.47%
Mr. William Robert Keller	Beneficial owner	—	2,828 restricted shares (L)[3]	2,828 (L)	0.00%
Mr. Wo Felix Fong	Beneficial owner	—	5,655 restricted shares (L)[3]	5,655 (L)	0.00%

Notes:

(1) The letter "L" denotes the person's long position in the Shares.

(2) Dr. Ge Li controlled, 22.32% of the issued share capital of Biologics Holdings and 58.96% of the voting power at its general meetings. Hence, Dr. Ge Li is deemed to be interested in 520,880,600 Shares held by Biologics Holdings.

(3) Interests in restricted shares granted pursuant to the Restricted Share Award Scheme.

(4) The 1,211,418 Shares held by Dr. Zhisheng Chen through a trust of which Dr. Zhisheng Chen is the settlor (founder) and his spouse and child are the beneficiaries.

(5) Interests in share options granted pursuant to the Pre-IPO Share Option Scheme.

II. Interests in shares or underlying shares of the associated corporations of the Company

Name of Director	Name of associated corporation	Capacity/ Nature of interest	Number and class of underlying shares in the associated corporation[1]	Approximate percentage of interest in the associated corporation
Dr. Ge Li	Biologics Holdings	Interests of controlled corporations	188,753 Class A ordinary shares (L)[2]	58.96%

Notes:

(1) The letter "L" denotes the person's long position in the Shares.

(2) Dr. Ge Li controlled, 22.32% of the issued share capital of Biologics Holdings and 58.96% of the voting power at its general meetings.

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

Substantial Shareholders' Interests and Short Positions in Shares, Underlying Shares of the Company

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

Interests in shares or underlying shares of the Company

Name of Shareholder	Capacity/ Nature of interest	Number of Shares[1]	Approximate percentage of shareholding interest
Dr. Ge Li	Interests of controlled corporations	520,880,600 (L)[2]	40.24%
Dr. Ning Zhao	Interests of spouse; Interests of parties acting in concert	520,880,600 (L)[3][4]	40.24%
Mr. Zhaohui Zhang	Interests of parties acting in concert	520,880,600 (L)[4]	40.24%
Mr. Xiaozhong Liu	Interests of parties acting in concert	520,880,600 (L)[4]	40.24%
Life Science Holdings	Interests of controlled corporations	520,880,600 (L)[5]	40.24%
Life Science Limited	Interests of controlled corporations	520,880,600 (L)[5]	40.24%
WuXi PharmaTech	Interests of controlled corporations	520,880,600 (L)[5]	40.24%
Biologics Holdings	Beneficial owner	520,880,600 (L)[5]	40.24%
JPMorgan Chase & Co.	Interests of controlled corporations	75,568,868 (L)[6]	5.84%
		9,322,474 (S)[6]	0.72%
		9,677,624 (LP)[6]	0.75%
Citigroup Inc.	Interests of controlled corporations	64,840,191 (L)	5.01%
		131,500 (S)	0.01%
		61,334,911 (LP)	4.74%

Notes:

(1) The letter "L" denotes the person's long position in the Shares; the letter "S" denotes the person's short position in the Shares; and the letter "LP" denotes the person's lending pool in the Shares.

(2) Dr. Ge Li controlled, 22.32% of the issued share capital of Biologics Holdings and 58.96% of the voting power at its general meetings. Hence, Dr. Ge Li is deemed to be interested in 520,880,600 Shares held by Biologics Holdings.

(3) Dr. Ning Zhao is the spouse of Dr. Ge Li and is deemed to be interested in the Shares interested by Dr. Ge Li.

(4) Dr. Ge Li, Dr. Ning Zhao, Mr. Zhaohui Zhang and Mr. Xiaozhong Liu entered into an acting-in-concert agreement on June 30, 2016 to acknowledge and confirm their acting-in-concert relationship in relation to the Company. Hence, Dr. Ge Li, Dr. Ning Zhao, Mr. Zhaohui Zhang and Mr. Xiaozhong Liu are deemed to be interested in the Shares held by each other.

(5) Life Science Holdings wholly owned Life Science Limited, which wholly owned WuXi PharmaTech, which in turn controlled 41.04% of the voting power at general meetings of Biologics Holdings. Biologics Holdings directly owned 520,880,600 Shares. Life Science Holdings, Life Science Limited and WuXi PharmaTech are deemed to be interested in the Shares held by Biologics Holdings.

(6) The Shares held by JPMorgan Chase & Co. were held via different entities in the following capacities:

No. of Shares[1]	Capacity
12,257,609 (L)	Interest of corporation controlled by you
9,322,474 (S)	
50,791,572 (L)	Investment manager
2,842,063 (L)	Person having a security interest in shares
9,677,624 (L)	Approved lending agent

(7) The Shares held by Citigroup Inc. were held via different entities in the following capacities:

No. of Shares[1]	Capacity
116,500 (L)	Person having a security interest in shares
3,388,780 (L)	Interest of corporation controlled
131,500 (S)	
61,334,911 (L)	Approved lending agent

Controlling Shareholders' Interests in Contract of Significance

Save as disclosed in this annual report, no Controlling Shareholders or their subsidiaries had a material interest, either directly or indirectly, in any contract of significance, whether for the provision of services or otherwise, to the Group to which the Company or any of its subsidiaries was a party during the Reporting Period.

Pre-IPO Share Option Scheme

The Company adopted the Pre-IPO Share Option Scheme pursuant to the resolutions of its Shareholders passed on January 5, 2016, which was subsequently amended on August 10, 2016 pursuant to the resolutions of the Board.

The purpose of the Pre-IPO Share Option Scheme is to attract, retain and motivate employees, Directors and such other participants of the Group, to provide a means of compensating them through the grant of options under the Pre-IPO Share Option Scheme for their contribution to the growth and profits of the Group, and to allow them to participate in the growth and profitability of the Group. Participants of the Pre-IPO Share Option Scheme include (a) any employee (whether full-time or part-time) of the Company or its subsidiaries, including any executive Director, (b) any non-executive Director or independent non-executive Director of the Company appointed or proposed to be appointed prior to the Listing Date, or any director of any of the subsidiaries, and (c) any other person who in the sole opinion of the Board, will contribute or have contributed to the Group. No further option would be granted under the Pre-IPO Share Option Scheme on or after the Listing Date. The total number of securities available for issue under the Pre-IPO Share Option Scheme is 91,590,098, representing approximately 7.06% of the issued Shares as at the date of this annual report. The remaining life of the Pre-IPO Share Option Scheme is 7 years.

The table below shows details of the share options granted under the Pre-IPO Share Option Scheme during the Reporting Period:

			Number of Share Options					
Category of Participants	Date of Grant	Exercise Price	Outstanding as at January 1, 2019	Granted during the Reporting Period	Exercised during the Reporting Period	Cancelled during the Reporting Period	Lapsed during the Reporting Period	Outstanding as at December 31, 2019
Directors								
Dr. Zhisheng Chen	January 7, 2016	USD0.50	35,000,000	—	1,300,000	—	—	33,700,000
	March 15, 2017	USD1.02	5,844,000	—	—	—	—	5,844,000
			40,844,000	—	1,300,000	—	—	39,544,000
Dr. Weichang Zhou	January 7, 2016	USD0.50	5,100,000	—	—	—	—	5,100,000
	March 15, 2017	USD1.02	831,000	—	—	—	—	831,000
			5,931,000	—	—	—	—	5,931,000
Sub-total			46,775,000	—	1,300,000	—	—	45,475,000
Employees in aggregate								
230 employees	January 7, 2016	USD0.50	36,012,259	—	7,483,600	—	108,000	28,420,659
24 employees	March 28, 2016	USD0.50	1,276,275	—	346,575	—	—	929,700
102 employees	August 10, 2016	USD0.66	5,006,438	—	974,355	—	102,314	3,929,769
92 employees	November 11, 2016	USD0.79	5,032,000	—	1,315,200	—	156,000	3,560,800
321 employees	March 15, 2017	USD1.02	13,172,500	—	1,944,700	—	650,400	10,577,400
74 employees	May 12, 2017	USD1.80	3,718,000	—	535,300	—	664,000	2,518,700
Sub-total			64,217,472	—	12,599,730	—	1,680,714	49,937,028
Total			110,992,472	—	13,899,730	—	1,680,714	95,412,028

In respect of the share options exercised during the Reporting Period, the weighted average closing price of the Shares immediately before the dates on which the options were exercised was HK$79.94.

In accordance with the Pre-IPO Share Option Scheme, the total number of Shares issued and to be issued upon exercise of the options granted to each participant (including exercised, cancelled and outstanding options) in any 12-month period shall not exceed 1% of the Shares in issue. The exercise price was determined by the Board, as it thought fit taking into account a participant's contribution to the development and growth of the Group.

The options granted under the Pre-IPO Share Option Scheme shall be exercisable during a period from the vesting date of the option until the expiry of ten years from the date of the grant of the options. Details of the terms and movement of the options granted during the Reporting Period and the impact of options granted under the Pre-IPO Share Option Scheme on the financial statements are set out in the Prospectus and under note 43 to the consolidated financial statements in this annual report.

Restricted Share Award Scheme

The Company has adopted the Restricted Share Award Scheme on January 15, 2018 to (i) recognize the contributions by Selected Participants; (ii) encourage, motivate and retain the Selected Participants, whose contributions are beneficial to the continual operation, development and long-term growth of the Group; and (iii) provide additional incentive for the Selected Participants to achieve performance goals, with a view to achieving the objectives of increasing the value of the Group and aligning the interests of the Selected Participants to the shareholders of the Company through ownership of Shares. The Restricted Share Award Scheme became effective on January 15, 2018. Subject to earlier termination by the Board, the Restricted Share Award Scheme shall be valid and effective for a period of 10 years from the adoption date. The maximum number of shares which can be awarded under the Restricted Share Award Scheme and to a Selected Participant are limited to 3% (i.e. 34,953,032 Shares) of the issued share capital of the Company as at the adoption date.

The Company shall comply with the relevant Listing Rules when granting the Restricted Shares. If awards are made to the directors or substantial shareholders of the Group, such awards shall constitute connected transaction under Chapter 14A of the Listing Rules and the Company shall comply with the relevant requirements under the Listing Rules.

The table below shows details of the Restricted Shares granted under the Restricted Share Award Scheme during the Reporting Period:

		Number of Restricted Shares					
Category of Participants	Date of Grant	Outstanding as at January 1, 2019	Granted during the Reporting Period	Vested during the Reporting Period	Forfeited during the Reporting Period	Outstanding as at December 31, 2019	Vesting Period
Directors							
Dr. Zhisheng Chen	June 5, 2019	—	986,500	—	—	986,500	5 years
Dr. Weichang Zhou	June 5, 2019	—	157,840	—	—	157,840	5 years
Mr. Edward Hu	June 5, 2019	—	5,655	—	—	5,655	1 year
Mr. William Robert Keller	June 5, 2019	—	2,828	—	—	2,828	1 year
Mr. Wo Felix Fong	June 5, 2019	—	5,655	—	—	5,655	1 year
Sub-total		—	1,158,478	—	—	1,158,478	

		Number of Restricted Shares					
Category of Participants	Date of Grant	Outstanding as at January 1, 2019	Granted during the Reporting Period	Vested during the Reporting Period	Forfeited during the Reporting Period	Outstanding as at December 31, 2019	Vesting Period
Employees in aggregate							
259 employees	January 15, 2018	2,778,660	—	—	271,000	2,507,660	5 years
540 employees	March 20, 2018	1,750,883	—	—	99,153	1,651,730	5 years
170 employees	June 13, 2018	741,702	—	—	94,265	647,437	5 years
202 employees	August 21, 2018	1,326,060	—	—	138,474	1,187,586	5 years
124 employees	November 20, 2018	1,021,371	—	—	137,872	883,499	5 years
6 employees	March 19, 2019	—	64,986	—	9,865	55,121	5 years
846 employees	June 5, 2019	—	3,306,712	—	107,533	3,199,179	5 years
335 employees	August 20, 2019	—	1,610,661	—	47,220	1,563,441	5 years
67 employees	November 20, 2019	—	545,498	—	9,824	535,674	5 years
Sub-total		7,618,676	5,527,857	—	915,206	12,231,327	
Total		7,618,676	6,686,335	—	915,206	13,389,805	

Details of the purpose and movement of the Restricted Shares granted during the Reporting Period are set out under note 43 to the consolidated financial statements in this annual report. For more details of the Restricted Share Award Scheme, please refer to the Company's announcements dated January 15, 2018 and January 18, 2018.

Major Customers and Suppliers

Major Customers

For the year ended December 31, 2019, the Group's sales to its five largest customers accounted for 31.5%, as compared to 31.4% of the Group's total revenue for the year ended December 31, 2018, and the Group's sales to the largest customer accounted for 9.1%, as compared to 11.1% of the Group's total revenue for the year ended December 31, 2018.

Major Suppliers

For the year ended December 31, 2019, the Group's five largest suppliers accounted for 65.7%, as compared to 64.9% of the Group's total purchases for the year ended December 31, 2018. The Group's single largest supplier accounted for 22.0%, as compared to 21.2% of the Group's total purchases for the year ended December 31, 2018.

During the year ended December 31, 2019, none of the Directors or any of their close associates or any Shareholders (which, to the knowledge of the Directors, own more than 5% of the number of issued shares of the Company) had any interest in the Group's five largest customers and suppliers.

Management Contracts

During the Reporting Period, the Company has not entered into any contract with any individuals, firm or body corporate to manage or administer the whole or any substantial part of any business of the Group.

Directors' Permitted Indemnity Provision

Each Director or other officer of the Company shall be entitled to be indemnified out of the assets of the Company against all losses or liabilities which he may sustain or incur in or about the execution of the duties of his office or otherwise in relation thereto in accordance with the Articles of Association. The Company has arranged appropriate directors' and officers' liability insurance coverage for the Directors and officers of the Group during the year ended December 31, 2019, which is still in force.

Results and Dividends

The results of the Group for the Reporting Period are set out in the consolidated statement of profit or loss and other comprehensive income on pages 161 to 162 of this annual report. The Board does not recommended any payment of final dividend for the year ended December 31, 2019.

Share Capital

Details of movements in share capital of the Company during the Reporting Period are set out in note 35 to the consolidated financial statements in this annual report.

Reserves

Details of movements in the reserves of the Group and of the Company during the year are set out in the consolidated statement of changes in equity and note 46 to the consolidated financial statements in this annual report.

Details of the Company's reserves available for distribution to the Shareholders as at December 31, 2019 are set out in note 46 to the consolidated financial statements in this annual report.

Donations

During the Reporting Period, charitable and other donations made by the Group amounted to RMB150,000 (2018: RMB198,000).

Property, Plant and Equipment

Details of movements in property, plant and equipment of the Group during the Reporting Period are set out in note 13 to the consolidated financial statements in this annual report.

Use of Proceeds from Listing

The total proceeds from the issue of new Shares by the Company in its Listing (after deducting the underwriting fees and related expenses) amounted to approximately RMB3,437.8 million[(1)]. The net proceeds from the Listing (adjusted on a pro rata basis based on the actual net proceeds) have been fully utilized in accordance with the purposes set out in the Prospectus by the end of December 2019.

The below table sets out the planned applications of the net proceeds and actual usage up to December 31, 2019:

Use of proceeds	Planned applications (RMB million)	Percentage of total net proceeds	Actual usage up to December 31, 2019 (RMB million)	Net proceeds brought forward for the Reporting Period (RMB million)	Unutilized net proceeds as at December 31, 2019 (RMB million)
To repay all of the Group's outstanding bank facilities	1,238.6	37%	1,238.6	—	—
To construct new facilities and existing facility improvement and maintenance	1,739.7	52%	1,739.7	561.0	—
For the Group's working capital and other general corporate purposes	275.9	8%	275.9	180.9	—
To improve and maintain the Group's existing facilities	113. 7	3%	113. 7	—	—
Total	3,367.9[(1)]	100%	3,367.9	741. 9	—

Note:

(1) It included approximately RMB69.9 million which forms part of the Listing expenses payable settled after the receipt of IPO proceeds. By excluding this portion, the net proceeds planned for applications amount to approximately RMB3,367.9 million.

Use of Proceeds from Placing

On March 21, 2018, the Company entered into a placing agreement with Morgan Stanley & Co. International plc (the "**Placing Agent**"), pursuant to which the Placing Agent agreed to place 57,000,000 shares (or, failing which, to purchase itself as principal) on a fully underwritten basis to not less than six independent investors (the "**First Placing**"). The First Placing price was HK$70.00 per share.

The net proceeds from the First Placing were approximately RMB3,186.7 million, which have been and will be used for the future expansion of the Group, including the capital requirements to increase its laboratory and manufacturing capacity, as disclosed in the announcement of the Company dated March 22, 2018. The table below sets out the planned applications of the net proceeds and actual usage up to December 31, 2019:

Use of proceeds	Planned applications (RMB million)	Percentage of total net proceeds	Actual usage up to December 31, 2019 (RMB million)	Net proceeds brought forward for the Reporting Period (RMB million)	Unutilized net proceeds as at December 31, 2019 (RMB million)	Expected timeframe for utilizing the remaining unutilized net proceeds[1]
To construct new facilities and existing facility improvement and maintenance	3,186.7	100%	1,494.5	2,776.9	1,692.2	By the end of 2020

Note:

(1) The expected timeline for utilizing the remaining proceeds is based on the best estimation of the future market conditions made by the Group. It will be subject to change based on the current and future development of market conditions.

On October 31, 2019, the Company entered into a placing agreement with the Placing Agent, pursuant to which the Placing Agent agreed to place 46,500,000 shares (or, failing which, to purchase itself as principal) on a fully underwritten basis to not less than six independent investors (the "**Second Placing**"). The Second Placing price was HK$85.00 per share.

The net proceeds from the Second Placing were approximately RMB3,512.2 million, which will be used for the future expansion of the Group, including the capital requirements to support its development of vaccines and microbial based products as well as continuous global capacity expansion. For further details, please refer to the announcement of the Company dated November 1, 2019. The table below sets out the planned applications of the net proceeds and actual usage up to December 31, 2019:

Use of proceeds	Planned applications (RMB million)	Percentage of total net proceeds	Actual usage up to December 31, 2019 (RMB million)	Net proceeds brought forward for the Reporting Period (RMB million)	Unutilized net proceeds as at December 31, 2019 (RMB million)	Expected timeframe for utilizing the remaining unutilized net proceeds[(1)]
To support its development of vaccines and microbial based products as well as continuous global capacity expansion	3,512.2	100%	—	—	3,512.2	By the end of 2022

Note:

(1) The expected timeline for utilizing the remaining proceeds is based on the best estimation of the future market conditions made by the Group. It will be subject to change based on the current and future development of market conditions.

Purchase, Sale or Redemption of Listed Securities of the Company

During the year ended December 31, 2019, neither the Company nor any other subsidiary had purchased, sold or redeemed any of the Company's listed securities.

Arrangement to Purchase Shares or Debentures

Save for the Pre-IPO Share Option Scheme, at no time during the year ended December 31, 2019 did the Company or any of its holding companies, subsidiaries or fellow subsidiaries a part to any arrangements that would enable the Directors to acquire benefits by means of the acquisition of shares in, or debentures of, the Company or any other body corporate.

Equity-Linked Agreements

Save for the Pre-IPO Share Option Scheme as disclosed on pages 60 to 62 of this annual report, no equity-linked agreements were entered into by the Company, or existed during the Reporting Period.

AGM and Closure of Register of Members

The AGM of the Company will be held on June 9, 2020. A notice convening the AGM will be published and dispatched to the Shareholders in due course in accordance with the requirements of the Listing Rules.

For determining the qualification as shareholders of the Company to attend and vote at the AGM, the register of members of the Company will be closed from June 4, 2020 to June 9, 2020, both dates inclusive, during which period no transfer of Shares will be registered. In order to be eligible to attend and vote at the AGM, all transfer documents accompanied by the relevant share certificates must be lodged with the Company's Hong Kong branch share registrar, Tricor Investor Services Limited, at Level 54, Hopewell Centre, 183 Queen's Road East, Hong Kong for registration not later than 4:30 p.m. on June 3, 2020.

Corporate Governance

A report on the principle corporate governance practices adopted by the Company is set out in the Corporate Governance Report on pages 69 to 86 of this annual report.

Sufficiency of Public Float

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

Tax Relief and Exemption

The Directors are not aware of any tax relief and exemption available to the Shareholders by reason of their holding of the Company's listed securities.

Pre-emptive Rights

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

Auditor

The Company has appointed Deloitte Touche Tohmatsu as the auditor of the Company for the year ended December 31, 2019. A resolution will be proposed for approval by Shareholders at the forthcoming AGM to re-appoint Deloitte Touche Tohmatsu as the auditor of the Company.

On behalf of the Board

Dr. Ge Li
Chairman
Hong Kong, March 26, 2020

The Board is pleased to present the Corporate Governance Report for the year ended December 31, 2019.

CORPORATE GOVERNANCE PRACTICES

The Board is committed to maintaining high corporate governance standards.

The Board believes that good corporate governance standards are essential in providing a framework for the Company to safeguard the interests of shareholders, enhance corporate value, formulate its business strategies and policies, and enhance its transparency and accountability.

The Company has adopted the principles and code provisions of the CG Code contained in Appendix 14 to the Listing Rules as the basis of the Company's corporate governance practices.

The Board is of the view that the Company has complied with all applicable code provisions as set out in the CG Code throughout the Reporting Period. The Board will review the corporate governance structure and practices from time to time and shall make necessary arrangements when the Board considers appropriate.

MODEL CODE FOR SECURITIES TRANSACTIONS

The Company has adopted the Written Guidelines on terms no less exacting than the Model Code as set out in Appendix 10 to the Listing Rules as its own code of conduct regarding securities transactions by the Directors.

Specific enquiry has been made of all the Directors and the Directors have confirmed that they have complied with the Model Code and the Written Guidelines throughout the Reporting Period save for the dealings of 5,500 Shares by Mr. William Robert Keller, an independent non-executive Director, during the black-out period out of an inadvertent oversight, which has been disclosed under the section headed "Compliance with the Model Code for Securities Transactions" in the Company's interim results announcement dated August 19, 2019.

The Company has also established the Guidelines for Securities Transactions by Employees (the "**Employees' Written Guidelines**") on terms no less exacting than the Model Code for securities transactions by employees who are likely to be in possession of inside information of the Company. No incident of non-compliance of the Employees' Written Guidelines by the employees was noted by the Company.

BOARD OF DIRECTORS

The Board oversees the Group's businesses, strategic decisions and performance and should take decisions objectively in the best interests of the Company.

The Board should regularly review the contribution required of a Director to perform his responsibilities to the Company, and whether the Director is spending sufficient time in performing them.

Corporate Governance Report

The Board of the Company currently comprises the following Directors:

Executive Directors

Dr. Zhisheng Chen *(Chief Executive Officer)*
Dr. Weichang Zhou *(Chief Technology Officer)*

Non-executive Directors

Dr. Ge Li *(Chairman)*
Mr. Edward Hu
Mr. Yibing Wu
Mr. Yanling Cao

Independent Non-executive Directors

Mr. William Robert Keller
Mr. Teh-Ming Walter Kwauk
Mr. Wo Felix Fong

The biographical information of the Directors are set out in the section headed "Directors and Senior Management" on pages 40 to 45 of this annual report.

The Directors do not have financial, business, family or other material/relevant relationships with one another.

Board Meetings and Directors' Attendance Records

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

Code provision A.2.7 of the CG Code requires that the Chairman of the Board should at least annually hold meetings with independent non-executive Directors without the presence of other directors. Arrangements have been made for compliance with the code provision and three meetings were held during the Reporting Period.

During the Reporting Period, the Board held seven meetings and the Directors' attendance records are as follows:

Name of Directors	Attendance
Dr. Ge Li	7/7
Dr. Zhisheng Chen	7/7
Dr. Weichang Zhou	7/7
Mr. Edward Hu	6/7
Mr. Yibing Wu	6/7
Mr. Yanling Cao	7/7
Mr. William Robert Keller	7/7
Mr. Teh-Ming Walter Kwauk	6/7
Mr. Wo Felix Fong	7/7

Chairman and Chief Executive Officer

The positions of Chairman and Chief Executive Officer are held by Dr. Ge Li and Dr. Zhisheng Chen respectively. The Chairman provides leadership and is responsible for the effective functioning and leadership of the Board as well as provides overall guidance on the business, strategy and corporate development of the Group. The Chief Executive Officer focuses on the overall management of the business, strategy and corporate development of the Group.

Independent Non-executive Directors

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

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

Appointment and Re-election of Directors

Each of the Directors is engaged on a director's service agreement for a specific term of three years, which is renewable by mutual consent and subject to the Articles of Association of the Company.

Every Director (including those appointed for a specific term) shall be subject to retirement and re-election by rotation at least once every three years at the annual general meetings of the Company under the Articles of Association of the Company.

The Company's Articles of Association also provides that all Directors appointed to fill a casual vacancy or as an addition to the Board shall be subject to election by shareholders at the next following general meeting of the Company.

Responsibilities, Accountabilities and Contributions of the Board and Management

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

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

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

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

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

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

Continuous Professional Development of Directors

Directors shall keep abreast of regulatory developments and changes in order to effectively perform their responsibilities and to ensure that they remain informed and relevant for their contribution to the Board.

Every newly appointed Director will receive formal, comprehensive and tailored induction on the first occasion of his appointment to ensure appropriate understanding of the business and operations of the Company and full awareness of Director's responsibilities and obligations under the Listing Rules and relevant statutory requirements. Besides, meetings with senior management of the Company will also be arranged.

Directors should participate in appropriate continuous professional development to develop and refresh their knowledge and skills. Internally-facilitated briefings for Directors would be arranged and reading material on relevant topics would be provided to Directors where appropriate. All Directors are encouraged to attend relevant training courses at the Company's expenses.

During the Reporting Period, the Company organized training sessions conducted by the legal advisers and compliance consultants for all Directors. The training sessions covered a wide range of relevant topics including Directors' duties and responsibilities and notifiable transactions etc. In addition, relevant reading materials including legal and regulatory updates have been provided to the directors for their reference and studying.

The training records of the Directors for the Reporting Period are summarized as follows:

Directors	**Type of Training** *Note*
Executive Directors	
Dr. Zhisheng Chen	A & B
Dr. Weichang Zhou	A & B
Non-executive Directors	
Dr. Ge Li	A & B
Mr. Edward Hu	A & B
Mr. Yibing Wu	A & B
Mr. Yanling Cao	A & B
Independent Non-executive Directors	
Mr. William Robert Keller	A & B
Mr. Teh-Ming Walter Kwauk	A & B
Mr. Wo Felix Fong	A & B

Note:

Types of Training

A: Attending training sessions, including but not limited to, briefings, seminars, conferences and/or workshops

B: Reading relevant news alerts, newspapers, journals, magazines and/or relevant publications

BOARD COMMITTEES

The Board has established four committees, namely, the Audit Committee, Remuneration Committee, Nomination Committee and Strategy Committee for overseeing particular aspects of the Company's affairs. All Board committees of the Company are established with specific written terms of reference which deal clearly with their authority and duties. The terms of reference of the Audit Committee, Remuneration Committee and Nomination Committee are posted on the websites of the Company and Hong Kong Exchanges and Clearing Limited ("**HKEX**") and are available to shareholders upon request.

Audit Committee

The Audit Committee consists of two independent non-executive Directors and one non-executive Director, namely Mr. Teh-Ming Walter Kwauk, Mr. William Robert Keller and Mr. Edward Hu, with Mr. Teh-Ming Walter Kwauk as its chairman.

The terms of reference of the Audit Committee are of no less exacting terms than those set out in the CG Code. The main duties of the Audit Committee are to assist the Board in reviewing the Company's financial information, overseeing the Company's financial reporting system, risk management and internal control systems, reviewing and monitoring the effectiveness of the internal audit function, scope of audit and appointment of external auditors, reviewing the arrangements to enable employees of the Company to raise concerns about possible improprieties in financial reporting, internal control or other matters of the Company.

The Audit Committee is also responsible for performing the functions set out in code provision D.3.1 of the CG Code. These include developing and reviewing the Company's policies and practices on corporate governance and making recommendations to the Board; reviewing and monitoring the training and continuous professional development of directors and senior management of the Company; reviewing and monitoring the Company's policies and practices on compliance with legal and regulatory requirements; developing, reviewing and monitoring the code of conduct and compliance manual (if any) applicable to employees and directors of the Company; and reviewing the Company's compliance with the CG Code from time to time adopted by the Company and the disclosure in the corporate governance report to be contained in the Company's annual report.

During the Reporting Period, the Audit Committee held four meetings to review and consider annual financial results and report, Corporate Governance Report and Environmental, Social and Governance Report in respect of the year ended December 31, 2018, the interim financial results and report in respect of the six months ended June 30, 2019, and significant issues on the financial reporting, operational and compliance controls, the effectiveness of the risk management and internal control systems and internal audit function, appointment of external auditors and engagement of non-audit services and relevant scope of works, connected transactions, review and consider the reported case and investigation progress in accordance with the Whistleblowing & Investigation Policy, and evaluate and assess the adequacy of the terms of reference of the Audit Committee.

The Audit Committee also met the external auditors once during the Reporting Period without the presence of the executive Directors and the management.

The attendance records of the members of the Audit Committee are as follows:

Name of Members of the Audit Committee	Attendance
Mr. Teh-Ming Walter Kwauk	3/4
Mr. William Robert Keller	4/4
Mr. Edward Hu	4/4

Remuneration Committee

The Remuneration Committee consists of two independent non-executive Directors and one non-executive Director, namely Mr. William Robert Keller, Mr. Wo Felix Fong and Mr. Edward Hu, with Mr. William Robert Keller as its chairman.

The terms of reference of the Remuneration Committee are of no less exacting terms than those set out in the CG Code. The primary functions of the Remuneration Committee include making recommendations to the Board on the remuneration packages of individual executive directors and senior management, the remuneration policy and structure for all directors and senior management, establishing a formal and transparent procedure for developing remuneration policy and ensuring that no Director or any of his associates is involved in deciding his own remuneration.

During the Reporting Period, the Remuneration Committee held four meetings to review and make recommendation to the Board on the remuneration policy and structure of the Company, the remuneration packages of the executive Directors and senior management and the hiring and departure of the Company's senior/key staff, evaluate and assess the adequacy of the terms of reference of the Remuneration Committee and other related matters as well as consider and make recommendation to the Board on key terms of the new director's service agreement entered with an Executive Director, three Non-executive Directors, two Independent Non-executive Directors and the grant of restricted shares under the restricted share award scheme.

Pursuant to code provision B.1.5 of the CG Code, details of the remuneration of the senior management (other than Directors) by bands for the year ended December 31, 2019 is as follows:

	Number of employee
HK$6,500,001 to HK$7,000,000	1
HK$6,000,001 to HK$6,500,000	1
HK$2,000,001 to HK$4,500,000	4

The attendance records of the members of the Remuneration Committee are as follows:

Name of Members of the Remuneration Committee	Attendance
Mr. William Robert Keller	4/4
Mr. Wo Felix Fong	4/4
Mr. Edward Hu	4/4

Nomination Committee

The Nomination Committee consists of one non-executive Director and two independent non-executive Directors, namely Dr. Ge Li, Mr. William Robert Keller and Mr. Teh-Ming Walter Kwauk, with Dr. Ge Li as its chairman.

The terms of reference of the Nomination Committee are of no less exacting terms than those set out in the CG Code. The principal duties of the Nomination Committee include reviewing the structure, size and composition (including the skills, knowledge and experience) of the Board, identifying individuals suitably qualified to become Board members and selecting or making recommendation to the Board on the selection of individuals nominated for directorship, making recommendations to the Board on the appointment or re-appointment and succession planning of Directors, and assessing the independence of independent non-executive Directors.

In assessing the Board composition, the Nomination Committee would take into account various aspects as well as factors concerning Board diversity as set out in the Company's Board Diversity Policy. The Nomination Committee would discuss and agree on measurable objectives for achieving diversity on the Board, where necessary, and recommend them to the Board for adoption.

In identifying and selecting suitable candidates for directorships, the Nomination Committee would consider the candidate's relevant criteria as set out in the Director Nomination Policy that are necessary to complement the corporate strategy and achieve Board diversity, where appropriate, before making recommendation to the Board.

During the Reporting Period, the Nomination Committee met once to review the structure, size and composition of the Board, to consider the qualifications of the retiring directors standing for election at the 2019 annual general meeting and evaluate and assess the adequacy of the terms of reference of the Nomination Committee.

The attendance records of the members of the Nomination Committee are as follows:

Name of Members of the Nomination Committee	Attendance
Dr. Ge Li	1/1
Mr. William Robert Keller	1/1
Mr. Teh-Ming Walter Kwauk	1/1

Board Diversity Policy

The Board has adopted a Board Diversity Policy which sets out the approach to achieve diversity on the Board and is available on the website of the Company. The Company recognizes and embraces the benefits of having a diverse Board and sees increasing diversity at the Board level as an essential element in maintaining the Company's competitive advantage.

In accordance with the Board Diversity Policy, a truly diverse Board will include and make good use of differences in the skills, regional and industry experience, background, race, gender and other qualities of directors. These differences will be taken into account in determining the optimum composition of the Board. All Board appointments will be based on merit while taking into account diversity (including gender diversity).

The Company aims to build and maintain a Board with a diversity of Directors, in terms of skills, professional experience, educational background, knowledge, expertise, culture, independence, age and gender.

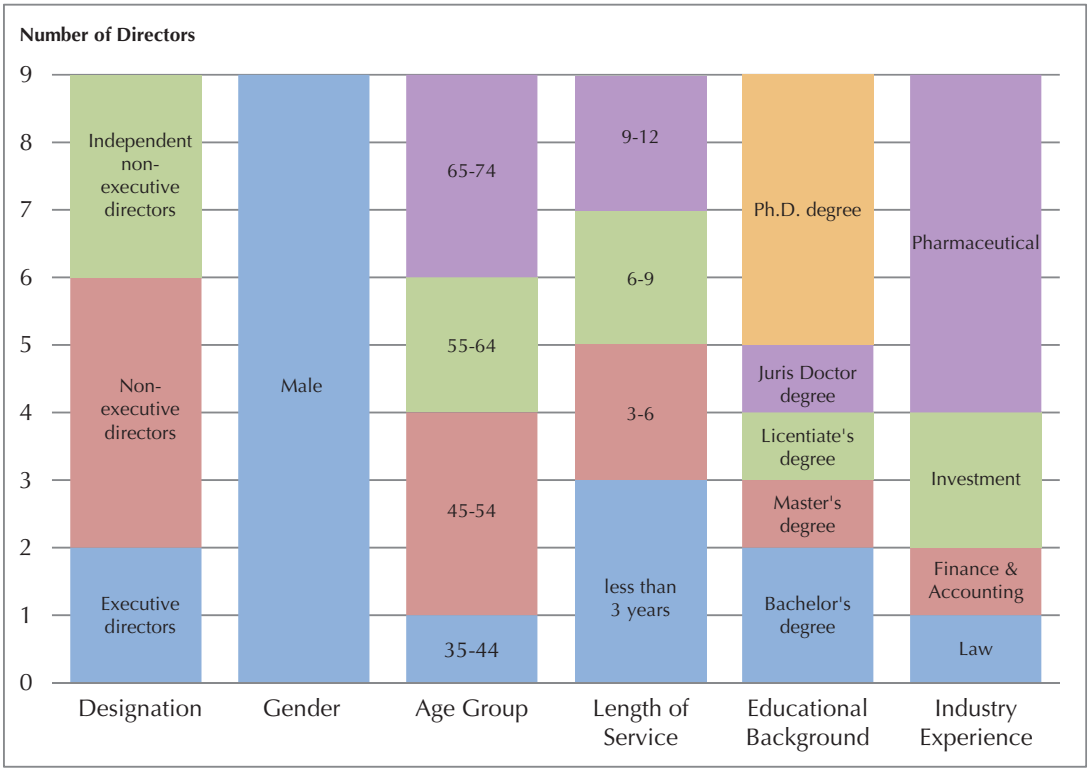
The Board will consider setting measurable objectives to implement the Board Diversity Policy and review such objectives from time to time to ensure their appropriateness and ascertain the progress made towards achieving those objectives.

At present, the Nomination Committee considered that the Board is sufficiently diverse and the Board has not set any measurable objectives.

The Nomination Committee will report annually, in the corporate governance report contained in the Company's annual report, on the Board's composition under diversified perspectives, and monitor the implementation of the Board Diversity Policy.

The Nomination Committee will review the Board Diversity Policy, as appropriate, to ensure its effectiveness. The Nomination Committee will discuss any revisions that may be required, and recommend any such revisions to the Board for consideration and approval.

The following chart shows the diversity profile of the Board as at December 31, 2019:



Director Nomination Policy

The Board has adopted a Director Nomination Policy which sets out the approach to guide the Nomination Committee in relation to the selection, appointment and re-appointment of the Directors and ensure that the Board has a balance of skills, experience, knowledge and diversity of perspectives appropriate to the requirements of the Company's business.

The Director Nomination Policy sets out the criteria for the selection of a proposed candidate, including but not limited to the following:

- Diversity required for the operation of the Company;
- Commitment for responsibilities of the Board in respect of available time and relevant interest;
- Skills, qualification and experiences;
- Independence from the Company and its subsidiaries;

- Reputation for integrity;
- Potential contributions that the individual(s) can bring to the Board; and
- Plan(s) in place for the orderly succession of the Board.

The Director Nomination Policy also sets out the criteria for evaluation and recommendation to the Board on the re-appointment of retiring Director(s) and the position(s) of the independent non-executive Directors, and the process and procedures for the nomination of Directors.

During the Reporting Period, there was no change in the composition of the Board.

The Nomination Committee will review the Director Nomination Policy, as appropriate, to ensure its effectiveness.

Strategy Committee

The Strategy Committee consists of one executive Director and two non-executive Directors, namely Dr. Zhisheng Chen, Dr. Ge Li and Mr. Yibing Wu, with Dr. Zhisheng Chen as its chairman.

The principal duties of the Strategy Committee include conducting research and making recommendations to the Board on the Group's mid-term and long-term strategies and their feasibility, conducting research and making recommendations to the Board on the Group's investment plans, major business decisions and investment earnings forecast and evaluating and monitoring the implementation of the strategy, plans and measures adopted by the Strategy Committee.

During the Reporting Period, the Strategy Committee met once to review and consider the implementation of the "Follow-the-Molecule" strategy, global footprint, mergers and acquisitions strategy and CMO model of the Company.

The attendance records of the members of the Strategy Committee are as follows:

Name of Members of the Strategy Committee	Attendance
Dr. Zhisheng Chen	1/1
Dr. Ge Li	1/1
Mr. Yibing Wu	1/1

RISK MANAGEMENT AND INTERNAL CONTROLS

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

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

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

The Company has developed its risk management policy to:

- Support effective decision-making that is guided by the Group's mission and vision;
- Ensure a consistent and effective approach to risk management;
- Formalize its commitment to the principles of risk management and incorporate them into all areas of the Group;
- Foster and encourage a risk-aware culture where risk management is seen as a positive attribute of decision-making rather than a corrective measure;
- Align the Group's planning, compliance and risk management systems, and their integration into all areas of the Group's operations; and
- Ensure robust operational and corporate governance practices to effectively manage risk while allowing innovation and sustainable growth.

The Company is committed to excellence and continual improvement, and will continue to encourage innovation while maintaining a low-risk profile. Employees are encouraged to adopt a positive approach to risk management, which further strengthens the risk-aware culture (as opposed to risk-adverse culture) of the Group.

Risk management is incorporated into the strategic and operational processes at all levels within the Group in order to minimize the impact of risk.

Opportunities and risks are identified and are proactively assessed and monitored by employees on an on-going basis.

The Group's approach to risk management, is aligned with COSO Enterprise Risk Management Framework-Aligning Risk with Strategy and Performance.

In order to formalize risk management across the Group and in order to set a common level of transparency and risk management performance, a number of requirements have been defined for the business units. Divisions, business units and group functions of the Group are obliged to address the following requirements with regard to risk management:

- Develop and review, at least annually, a statement on the risk tolerance of the Group;
- Conduct a formalized risk assessment at least annually either in the form of risk assessment questionnaire or risk assessment workshop, which is to include the identification, prioritization, measurement and categorization of all key risks that could potentially affect the Company's objectives;
- Report annually on the key risks as identified in the Group's risk reporting formats;
- Continuously monitor key risks and controls and implement appropriate risk responses where necessary;
- Formalize responsibilities for managing risk and for sustaining the Group's risk management framework;
- Monitor and review the application of the risk management framework.

The internal control system of the Group is built up on a clear organization structure and management duties, a set of standardized policies and procedures, a sound accounting system, continuing training to employees, and independent review and oversight of operation and financial results by internal audit department of the Company (the "**Internal Audit Department**"). The Company has formulated code of conduct for all employees which ensures their ethical value and competency. The Company attaches great importance to the prevention of fraud and has formulated its internal reporting system, which encourages anonymous reporting of situations where internal employees or external customers and suppliers have breached the rules. The Company has set up the policy regulating the handling and dissemination of inside information, which has clearly defined the scope of inside information, the roles and responsibilities, the reporting and disclosure requirements, the registration of insiders and confidentiality management. It has also clearly regulated the punishment if the policy is violated. The Company has adopted Written Guidelines and Employees' Written Guidelines for security transactions. The Company has also promulgated the Conflict of Interest Management Policy which sets guidelines in consultation, judgment, declaration and addressing conflict of interest.

The Internal Audit Department plays a vital role in supporting the Board and the management with the risk management and internal control systems. The functions of the Internal Audit Department are independent of the Company's business operations, and play an important role in the monitoring of the Group's internal management. The Internal Audit Department is responsible for internal controls assessment of the Group at least annually, and provides an objective assurance to the Audit Committee and the Board that the risk management and internal control systems are maintained and operated by the management in compliance with agreed processes and standards on a risk-based approach.

The Internal Audit Department regularly reports the internal audit results to the Audit Committee on a quarterly basis per year, which are then reported to the Board through the Audit Committee.

The Internal Audit Department is also responsible for performing independent review of the adequacy and effectiveness of the risk management and internal control systems. The Board has reviewed the effectiveness of the internal audit function and the review result is satisfactory.

The management has confirmed to the Board and the Audit Committee on the effectiveness of the risk management and internal control systems for the Reporting Period. The Board, as supported by the Audit Committee as well as the management report and the internal audit findings, reviewed the risk management and internal control systems of the Group, including the financial, operational and compliance controls, for the Reporting Period, and considered that such systems are effective and adequate. The annual review also covered the financial reporting and staff qualifications, experience and relevant resources.

Arrangements are in place to facilitate employees of the Group to raise, in confidence, concerns about possible improprieties in financial reporting, internal control or other matters of the Group.

The Company has developed its disclosure policy which provides a general guide to the Directors, officers, senior management and relevant employees in handling confidential information, monitoring information disclosure and responding to enquiries.

DIRECTORS' RESPONSIBILITY IN RESPECT OF THE FINANCIAL STATEMENTS

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

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

The statement of the independent auditors of the Company about their reporting responsibilities on the financial statements is set out in the Independent Auditor's Report on pages 158 to 160 of this annual report.

AUDITORS' REMUNERATION

An analysis of the remuneration paid/payable to the external auditors of the Company in respect of audit services and non-audit services for the year ended December 31, 2019 is set out below:

Service Category	Fees Paid/ Payable RMB'000
Audit Services	4,996
Non-audit Services	
— ESG Report Consulting Service	200
TOTAL	5,196

JOINT COMPANY SECRETARIES

Mr. Huang Yue and Ms. Sham Ying Man are the joint company secretaries of the Company.

During the Reporting Period, Ms. Cheng Pik Yuk resigned as a joint company secretary on June 5, 2019 due to retirement and Ms. Sham Ying Man was appointed as a joint company secretary on June 5, 2019.

Ms. Sham Ying Man is a manager of Corporate Services of Tricor Services Limited, a global professional services provider specializing in integrated Business, Corporate and Investor Services. The primary contact person at the Company is Ms. Christine Shaohua Lu-Wong, the chief financial officer and Mr. Huang Yue, joint company secretary of the Company and the Senior Director of the Secretary Office to the Board.

The joint company secretaries attended sufficient professional training as required under the Listing Rules for the year ended December 31, 2019 to update their skills and knowledge.

SHAREHOLDERS' RIGHTS

To safeguard shareholder interests and rights, separate resolution should be proposed for each substantially separate issue at general meetings, including the election of individual Director. All resolutions put forward at general meetings will be voted on by poll pursuant to the Listing Rules and poll results will be posted on the websites of the Company and HKEX after each general meeting.

Convening an Extraordinary General Meeting

Pursuant to article 12.3 of the Articles of Association of the Company, extraordinary general meetings shall also be convened on the written requisition of any two or more members, or by any one member which is a recognized clearing house (or its nominee), deposited at the principal office of the Company in Hong Kong specifying the objects of the meeting and signed by the requisitionist(s), provided that such requisitionist(s) held as at the date of deposit of the requisition not less than one-tenth of the paid up capital of the Company which carries the right of voting at general meetings of the Company.

Putting Forward Proposals at General Meetings

There are no provisions in the Company's Articles of Association or the Cayman Islands Companies Law for shareholders to move new resolutions at general meetings. Shareholders who wish to move a resolution may request the Company to convene a general meeting in accordance with the procedures set out in the preceding paragraph. As regards proposing a person for election as a director of the Company, please refer to the "Procedures for Shareholders to Propose a Person for Election as a Director" of the Company which is posted on the Company's website.

Putting Forward Enquiries to the Board

For putting forward any enquiries to the Board of the Company, shareholders may send written enquiries to the Company. The Company will not normally deal with verbal or anonymous enquiries.

Contact Details

Shareholders may send their enquiries or requests as mentioned above to the following:

Address: 46#, 299 Fute Zhong Road, Waigaoqiao
China (Shanghai) Pilot Free Trade Zone Shanghai 200131, China
(For the attention of the board secretary office)
Fax: 86 (21) 50461000

For the avoidance of doubt, shareholder(s) must deposit and send the original duly signed written requisition, notice or statement, or enquiry (as the case may be) to the above address and provide their full name, contact details and identification in order to give effect thereto. Shareholders' information may be disclosed as required by law.

COMMUNICATION WITH SHAREHOLDERS AND INVESTORS

The Company considers that effective communication with shareholders is essential for enhancing investor relations and investor understanding of the Group's business performance and strategies. The Company endeavours to maintain an on-going dialogue with shareholders and in particular, through annual general meetings and other general meetings. At the annual general meeting, directors (or their delegates as appropriate) are available to meet shareholders and answer their enquiries.

The attendance records of Directors at the annual general meeting held during the Reporting Period are as follows:

Name of Directors	Attendance
Dr. Ge Li	1/1
Dr. Zhisheng Chen	1/1
Dr. Weichang Zhou	1/1
Mr. Edward Hu	0/1
Mr. Yibing Wu	0/1
Mr. Yanling Cao	0/1
Mr. William Robert Keller	1/1
Mr. Teh-Ming Walter Kwauk	1/1
Mr. Wo Felix Fong	1/1

The Company maintains a website at www.wuxibiologics.com.cn as a communication platform with shareholders of the Company and investors, where the financial information and other relevant information of the Company are available for public access.

Constitutional Documents

During the Reporting Period, the Company has not made any changes to its Memorandum and Articles of Association. An up-to-date version of the Company's Memorandum and Articles of Association is also available on the websites of the Company and HKEX.

Policies relating to Shareholders

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

The Company has adopted a policy on payment of dividends which aims to set out the principles and guidelines that the Company intends to apply in relation to the declaration and payment of dividends pursuant to code provision E.1.5 of the CG Code that has become effective from January 1, 2019.

The Board has adopted a dividend policy in which the Company may declare dividends in any currency in general meeting but no dividends shall exceed the amount recommended by the Board, subject to the Companies Law of the Cayman Islands and the Memorandum and Articles of Association of the Company. Based on the financial results for the Reporting Period and the current cash flow and working capital projections, the Board believes that it will not be advisable to make a distribution for the Reporting Period and the following one year, given considerable requirements of capital expenditure for business expansion. The Board will continue to review its financial position from time to time, and decide whether it would be in the interest of the Company and its shareholders to make any distribution.

Environmental, Social and Governance Report

CONTENTS

Environmental, Social and Governance Report

ABOUT THIS REPORT

- Reporting period:

  The ESG Report (the "Report") covers the period from January 1, 2019 to December 31, 2019.

- In-scope entities

  Based on the significance of the operational impact, the entity scope of this report is all the operating sites of Wuxi Biologics (Cayman) Inc., namely Shanghai site, Wuxi site and Suzhou site.

- Reporting standards

  The Report is compiled based on Appendix 27 Environmental, Social and Governance Reporting Guide of the Rules Governing the Listing of Securities on the Stock Exchange of Hong Kong Limited and its major revision summaries.

- Indicators selection

  The indicators in the Report are selected and elaborated following the principles of "quantification, materiality, balance, and consistency" to disclose the performances in the material issues. We will make continuous adjustments and optimization to the disclosure indicators in the subsequent reports.

  Quantification: WuXi Biologics embodies the quantitative principle by disclosing the measurable key performance indicators.

  Materiality: WuXi Biologics uses the stakeholder right-interest model, stakeholder engagement mechanism and materiality assessment matrix to identify corporate and social responsibility issues that are material or relevant to the Company and stakeholders.

  Balance: WuXi Biologics presents its work in the environmental, social and governance aspects in a fair and objective manner in this Report.

  Consistency: WuXi Biologics has adopted a consistent approach to data disclosure, and has compared the data in the Report, and noted the changes in statistical methods and key performance indicators.

- Source of information

  The qualitative and quantitative information used in the Report is sourced from WuXi Biologics (Cayman) Inc.'s public information, internal documents and relevant statistics.

- Company name in short

  For ease of presentation and reading, "Wuxi Biologics (Cayman) Inc." is also referred to as "WuXi Biologics", "the Company" or "We" in this report.

- Form of release

  The online version of the Report is available for download on the websites of the Stock Exchange of Hong Kong Limited (www.hkex.com.hk) and WuXi Biologics (www.wuxibiologics.com).

Company Background

1. Business Introduction

Established in 2010 and after 8 years of active and steady business expansion, WuXi Biologics was listed on the Hong Kong Stock Exchange in June 2017. WuXi Biologics makes available a full range of end-to-end R&D services targeting global biopharmaceutical companies and global pharmaceutical companies, which empower any individual or corporation to discover, develop and manufacture biologics and realize commercial manufacturing from concept. Such services not only speed up R&D progress of biologics world-wide and reduce involved costs, but will benefit mass patients. As of Dec 31, 2019, there were a total of 250 integrated projects, including 121 projects in pre-clinical development stage, 112 projects in early-phase (phase I and II) clinical development, 16 projects in late-phase (phase III) development and one project in commercial manufacturing. With total estimated capacity for biopharmaceutical production planned in China, Ireland, Singapore, Germany and the U.S. Singapore exceeding 280,000 liters by 2022, we will provide our biomanufacturing partners with a robust and premier-quality global supply chain network.

Our Mission

To accelerate and transform the discovery, development and manufacturing of biologics through a comprehensive open-access platform, enabling our global healthcare partners and benefiting patients worldwide

Business Strategy

Follow-the-Molecule

Manufacturing Paradigm

Global Dual Sourcing within WuXi Bio

2. Milestones of WuXi Biologics in 2019

March 2019

WuXi Biologics became the first biopharmaceutical company in China to obtain the dual certification of Good Manufacturing Practice ("GMP") from the U.S. Food and Drug Administration ("FDA") and the European Medicines Agency ("EMA");

May 2019

WuXi Biologics signed Letter of Intent for long-term vaccine manufacturing contract with a global vaccine leader. The value of the 20-year manufacturing contract is estimated be more than $3 billion USD.

July 2019

WuXi Biologics' DP4, the first robotic sterile filling facility has achieved GMP release.

November 2019

WuXi Vaccines Co., Ltd. ("WuXi Vaccines"), a subsidiary of WuXi Biologics, announced to invest 240 million USD and build a new vaccine manufacturing facility in Ireland.

April 2019

WuXi Biologics successfully completed the first FDA routine GMP inspection;

July 2019

WuXi Biologics' MFG4, the first facility in China using the disposable bioreactor of 4,000L has achieved GMP release.;

October 2019

WuXi Biologics officially launched GMP production of its antibody drug conjugate (ADC) facility for DS and DP manufacturing and entered into strategic partnership for innovative ADC commercial production.

3. Business Philosophy

Our vision is to build an open-access platform with the most comprehensive capabilities and technologies in the global biologics industry, to fulfill the dream that "every drug can be made and every disease can be treated". At the same time, we are committed to accelerate and transform the discovery, development and manufacturing of biologics through a comprehensive open-access platform, enabling our global healthcare partners and benefiting patients worldwide, taking it as our mission. In the course of operation, we adhere to the core values of "Integrity & Dedication", "Working Together & Sharing Success" and "Do the Right Thing and Do it Right". We hold the spirit of changes and innovation, maintain the attitude of striving for excellence and always put customers first. We pursue collaboration and teamwork and execute for results. In order to better implement our mission and reflect our core values, we have formulated a series of codes of conduct:

Put Customers First	Strive for Excellence	Demonstrate Integrity
Exceed customers' expectations, maximize the value for our customers, and win customers' loyalty with a 100% customer retention rate.	Pursue focus and expertise, and optimize processes in order to deliver excellent results. Relentlessly drive learning, accumulation, improvement and innovation.	Take the initiative to promote a positive work environment where doing the right thing is the standard. Be positive and enthusiastic, approach challenges with energy and optimism.
Execute for Results	**Pursue Collaboration and Teamwork**	**Embrace Change and Drive Innovation**
Drive effective execution of each project and objective, focusing on solutions and results.	Engage in collaboration and mutual development with an open and win-win mindset by sharing resources and leveraging the complementary advantages of each.	Demonstrate flexibility and ability to embrace change. Adapt quickly to transformational and innovative conditions with a strong commitment to breakthroughs and development.

Topic 1: Empowering Global Partners

As one of the world's largest biologics R&D and manufacturing teams, we focus on providing reliable solutions that can improve people's lives around the world for a better future. However, we are well aware of our limitation as an enterprise. In order to achieve this goal, we have been committed to helping our partners around the world to develop biologics that can promote human health. Leveraging our rich products pipeline, strong technology platform and global supply chain network, we empower our partners and benefit patients around the world.

Thanks to its well-established technology platforms and production capacity, WuXi Biologics has empowered the launch of Trogarzo, a new drug of its partner TaiMed Biologics, which is the first sterile biologics manufactured in China and approved by the U.S. FDA to enter clinical trials in the United States; In addition, we have been committed to empowering companies in the field of rare diseases and orphan drugs. In February 2019, we entered into an exclusive commercial manufacturing strategic collaboration with Amicus for ATB200, a next-generation treatment for Pompe disease, which has been granted Breakthrough Therapy designation by the FDA. We will cooperate with Amicus in the research and development in the area of rare diseases.

In addition, WuXi Biologics can empower its partners to submit 60 IND and 5 BLA every year, and any new project can start within four weeks after the contract is signed.

With our outstanding technology platforms and the concept of "Put Customers First", WuXi Biologics helped our partner Tychan progress from initiation to regulatory submission for TY014, a first-in-class monoclonal antibody candidate treatment for Yellow Fever (YF), with a record of less than seven months. Generally, the average time for industry from DNA screening to IND declaration in the development of monoclonal antibody is about 18 to 24 months, while the average time for WuXi Biologics to complete this for customers reduces from 15 to 12 months. " WuXi Biologics Speed" has repeatedly amazed our partners.

The development and production process of therapeutic vaccines is more complex than that of monoclonal antibodies, and there is no outsourcing service provider in this field yet. The establishment of WuXi Vaccines reflects the Company's excellent R&D capabilities and our leading position. WuXi Biologics has entered into a strategic partnership Letter of Intent (LOI) with a global vaccine leader in 2019, pursuant to which WuXi Vaccines will build a dedicated facility and supply a commercial product for the global market. The value of the 20-year manufacturing contract is estimated to be more than $3 billion USD. This is a historic moment for WuXi Biologics and WuXi Vaccines as well as for the global vaccine industry.

On the other hand, with the booming of biologics, many traditional pharmaceutical enterprises in China are eager to transform and innovate towards biologics. The services offered by WuXi Biologics has provided a shortcut for these traditional pharmaceutical enterprises to transform into biologics either in time and resources. As of December 31, 2019, we have empowered 23 of the top 50 new drugs enterprises in China, such as Chia Tai Tianqing Pharmaceutical Co., Ltd. (正大天晴藥業集團股份有限公司) and Guangzhou Baiyunshan Bai Di Bio-technology Co., Ltd. (廣州白雲山拜迪生物醫藥有限公司). Under the stringent quality standards, WuXi Biologics hopes to empower more local innovative drugs to enter the international market.

On April 16, 2019, WuXi Biologics and I-Mab jointly announced that both parties have reached long-term strategic partnership on process development and manufacturing for various clinical trials and commercialization projects in the innovative R&D pipeline of I-Mab. Pursuant to the cooperation agreement, I-Mab will leverage on WuXi Biologics' extensive experience and strong production capacity in the field of biologics to drive the development of production process of at least five projects in its product pipeline and the commercial production of at least one project. The cooperation projects include monoclonal antibodies, bispecific antibodies and fusion proteins, which marked a new chapter of close cooperation between both parties.

Within a short history of 10 years, WuXi Biologics has already made a lot of records of being "the No. 1":

NO.1

First biologics company in China obtaining the GMP certification from both the U.S. FDA and EMA

First sterile biologics from company in China approved by the U.S. FDA for entering the U.S. market

First facility in China to use the industry's largest 4,000L disposable bioreactor

First biologics company in China to use GMP robotic aseptic filling line for biologics

First biologics company in China to use the industry's largest disposable bioreactor

World's largest cGMP biologics manufacturing facility using only single-use bioreactors

One of China's **largest** cGMP biologics manufacturing facilities

First innovative biologics company in China to develop novel biologics for global market

First company in China to implement the fully human mAb discovery technology platform

First innovative ADC development and manufacturing partnership in China

First biosafety testing facility in Asia compliant with global regulatory standards

First company in China to produce GMP biologics for clinical trials in the U.S. and Europe

Topic 2: We Unite against the Epidemic

At the beginning of the new year of 2020, in the face of the large-scale outbreak of the new type of novel coronavirus (hereinafter referred to as "Novel Coronavirus") or "COVID-19" in China, the joy of the New Year holiday was also swept. In addition, this emergency also posed a huge challenge to the overall management of the enterprise. As a leading global open-access biologics technology platform company, WuXi Biologics has taken our social responsibility at the first time, which not only guarantees the health and personal safety of our employees, but also actively participates in the development of the antibody of the Novel Coronavirus, racing against time for the health of patients around the world.

— **Rapid development and application of Novel Coronavirus antibody**

Immediately after the outbreak, we mobilized more than 240 scientists to form a large-scale technical team and worked closely with domestic and foreign partners to empower the development of multiple Novel Coronavirus antibodies, making proper arrangement according to the current situation to ensure that the epidemic is contained. On February 25, 2020, WuXi Biologics and Vir Biotechnology ("Vir") have entered into a global R&D cooperation concerning the Novel Coronavirus antibody, which will accelerate the development and production of antibody therapy for the Novel Coronavirus. We and Vir agreed to promote the use of COVID-19 antibody into clinical application, which will benefit patients worldwide who urgently need such antibody. Vir has identified a number of monoclonal antibodies (mAbs) that bind to SARS-CoV-2. These antibodies were isolated from individuals who had survived a Severe Acute Respiratory Syndrome (SARS) infection. The company is conducting research to determine if its antibodies, or additional antibodies that it may be able to identify, can be effective as treatment and/or prophylaxis against SARS-CoV-2. WuXi Biologics will conduct cell-line development, process and formulation development and initial manufacturing for clinical development. If the antibodies receive regulatory approvals, WuXi Biologics has the rights to commercialize therapies in Greater China and Vir has the rights to commercialize therapies in all other markets worldwide.

Leveraging our well-established technology platform and robust global supply chain network, we will contribute in accelerating the development and manufacturing of COVID-19 antibody therapies with our unique abilities. This cooperation once again shows that WuXi Biologics is working with global biotechnology companies to speed up the development of biologics and fully live up to our mission of "empowering global partners and benefiting patients worldwide".

— **Immediate Implementation of our Contingency Plan for Significant Risk Events**

In order to minimize the impact of the incident, WuXi Biologics immediately initiated the contingency plan for significant risk events. The Company set up an crisis management team led by the CEO and constituted by the CEO office, the heads of the Business Units, EHS Department, Human Resources Department, Site Operation Department, Procurement Department, Supply Chain Department and Government Affairs Department. The team unified coordination and command of the epidemic prevention and control process, disease prevention and control of employees, emergency material supply, social joint prevention and joint control and other mechanisms.

— **We value the health and safety of our employees**

We have formulated the Disease Prevention Measures and Rules for the Novel Coronavirus of WuXi Biologics, which specifies the preventive and control measures for employees on and off work after work resumption, the preventive and control measures for offices and production sites, and the control measures for public areas, etc. In addition, we push popular scientific videos about coronavirus, personal preventive measures at home and epidemic preventive contingency measures to employees through emails and corporate Wechat accounts, and help employees to understand and respond to this crisis in a scientific manner.

WuXi Biologics has a number of production and R&D sites across the country, and we worked closely with employees and the local government to ensure full compliance with the local quarantine requirements. In order to collect the physical conditions of our employees as soon as possible, we developed and enabled an online tool at first time to report travel history, residential address and health conditions of employees in real-time, so as to keep abreast of employees' situation. In addition, we conduct daily screening of potential risk employees to ensure that work resumption procedures are strictly followed. In order to reduce the concealment or omission of travel information by employees and ensure a safe workplace for all employees, senior management has decided to pay employees full salary during the period of self-isolation due to epidemic prevention and control. In addition, we have taken various measures to protect the health and safety of employees after work resumption, such as providing temporary residents for employees who returned to the Company from afar, monitoring the body temperature of all employees entering the office area, distributing medical surgical masks to employees, disinfecting public places such as canteens, office buildings and shuttle buses on a regular basis, rearranging employees' dining seat to reduce staff gathering, arranging employees to commute by staggering office hours, conducting online meetings, eliminating all non-essential visits and strengthening the management of all contractors. As of the end of March 2020, over 98% of the workforce of WuXi Biologics has returned to work. With our sound business continuity program and detailed plan, WuXi Biologics has promptly resumed production.

WuXi Biologics has set up an epidemic containing passway
at the entrance and exit to measure the temperature of each employee

WuXi Biologics provides a safe and clean shuttle bus environment
for the employees, who take the shuttle bus according to the number of the seat
after passing the daily temperature test and granted with a green-labeled card

— **We value the product quality and safety of GMP productions**

We regard product quality and GMP production safety as our lifeline. During the epidemic, in order to strictly ensure product quality is not affected and ensure production safety in the GMP workshop, we have taken preventive measures at all stages of production to eliminate possible risks. Before manufacturing, each and every staff is checked according to WuXi Biologics' policy before entering the GMP workshop. Only authorized staff are allowed to enter GMP areas. During manufacturing, each and every staff strictly has temperature tested twice a day. After manufacturing, QA Department will review and verify whether there is any suspected and/or confirmed cases of personnel infected by COVID-19 involved in GMP manufacturing and conduct impact assessment for product quality if required. In order to promise our customers the quality and safety of our products, WuXi Biologics will provide quality statement for each batch to certify that all of the personnel involved in the manufacturing and shipping are healthy and there is no suspected or confirmed cases of personnel involved in manufacturing and shipping infected by COVID-19 virus.

In addition, relying on the robust global supply chain system, WuXi Biologics quickly took actions at the beginning of the epidemic outbreak, and purchased important epidemic preventive materials from all over the world, which not only ensured the work resumption of the company inside, but also actively donated preventive materials to the worst-affected areas outside.

— **Actively donate and support protective supplies**

The wide spread of the epidemic grips the heart of everyone in WuXi Biologics. As the epidemic spread and all types of medical supply became scarce, our global supply chain department and our procurement teams in the U.S. and Ireland actively procured medical supplies from various parts of the world in a timely manner and transported such supplies to WuXi Biologics as soon as possible. On top of ensuring the health of our employees, we immediately donated medical supplies amounted to over RMB1 million to 136 hospitals in various provinces and municipals through Yunqueyi Platform, including 711 boxes of sterile gloves, over 1,800 protective clothing, goggles and masks. Medical staff who received the materials have expressed their sincere gratitude to WuXi Biologics. In addition, we also organized our employees to make donations and immediately delivered such donations via reliable channels to the frontline of disease control in Wuhan.


平江县第一人民医院

感 谢 信

Letter of gratitude from the First People's Hospital of Pingjiang, Hunan concerning donation from WuXi Biologics

WuXi Biologics donates protective clothing to 20 community hospitals in Jiangsu.

Currently, the Novel Coronavirus outbreak is still ongoing. By virtue of its strong contingency management program and industry expertise, WuXi Biologics strives to mitigate the impact of the epidemic on the Company while actively fulfilling its social responsibilities and contributing its own efforts to win the war against the epidemic.

Corporate Governance

1. Corporate Governance

WuXi Biologics has established a modern organizational structure in compliance with the requirements of the Companies Ordinance, the Securities Law, the Listing Rules of the Hong Kong Stock Exchange, the Code of Corporate Governance for Listed Companies and other laws, regulations and regulatory documents. As of December 31, 2019, The Board consisted of nine Directors, including three independent Directors. The Board has established the Nomination Committee, Remuneration Committee, the Audit Committee, the Strategy Committee and the corresponding terms of reference, which are in compliance with the requirements of the Code of Corporate Governance for Listed Companies and meet the development needs of the Company.

WuXi Biologics has adopted the CG Code set out in Appendix 14 to the Listing Rules as its own code of corporate governance. We take into full account the background of global governance and the international community's expectation on the green development of the industry, establish the governance requirements for sustainable development within the Company, and take the sustainable development strategy as one of the core competitive advantages of the Company. The Board of WuXi Biologics is responsible for formulating the sustainable development strategy and supervising its implementation. We are committed to improving the utilization of resources, accelerating the construction of a green production system, and adhering to the development model of green operation, so as to fulfill WuXi Biologics' responsibilities to Shareholders and the society.

WuXi Biologics has set up an ESG working group, which aims to support the Company's sustainable development management. The working group includes key functional departments such as Internal Audit Department, CEO Office, Environmental, Health and Safety Department, Human Resources Department, Quality Assurance Department, Global Supply Chain Department, Legal Department, Policy and Compliance Department, Finance Department, Public Relations Department, Logistics Department and Operation Department, taking the lead in designing sustainable development initiatives and action plans based on the vision set by the management, guiding and practicing WuXi Biologics' social responsibility affairs, and ensuring the further implementation of sustainable development work. The working group holds meetings at least twice a year to discuss issues encountered during the implementation of sustainable development work, and reports to the management on a regular basis. The management will report major issues to the Board as appropriate.

In the pursuit of efficient operation, WuXi Biologics pays special attention to enterprise risk management constantly. The Board is responsible for continuously supervising and reviewing the effectiveness of the risk management and internal control system related to the sustainable development of the Company by checking the relevant work completed during the reporting period and reviewing the annual risk management report to ensure that an effective risk management and internal control system is in place. The Company has established "WuXi Biologics Risk Management Provisions" to define the risk governance standards, assessed both internal and external business risks faced when implementing our strategies regularly, paid continuous attention to and traced the major risks, and delegated relevant departments to conduct internal discussions in order to identify and assess the importance of relevant matters to our stakeholders. The management of WuXi Biologics is involved in the preparation of the Company's ESG report, focusing on risk management and control in the process of sustainable development. WuXi Biologics is committed to keeping track of the Company's operations based on the risk management points, and continuously optimizes the Company's risk management system to gradually become a leader in the sustainable development among the industry and the world.

— ***Communication with Shareholders and other stakeholders***

WuXi Biologics is committed to protecting the interests of its Shareholders and considers that effective communication with Shareholders and other stakeholders is essential for enhancing investor relations and investors' understanding of the Company's business performance and business strategies. In this regard, WuXi Biologics has established the "Investor Relationship Management Policy", which sets out various formal communication channels with shareholders and other stakeholders to ensure fair, comprehensive and transparent disclosure and reporting of the Company's performance and activities.

In 2019, WuXi Biologics participated in more than 50 sessions of brokerage strategy seminars and investment bank summits, and organized Investor Day and other activities to actively build communication channels for investors. At the same time, the Company is also looking forward to understand investors' expectations in order to make better preparation, so the Company will continue to communicate with different parties and response accordingly.

Inaugural Investor Day

The Inaugural Investor Day, themed "Insights, Innovation & Acceleration", was held in Wuxi city, successfully attracting more than 200 international and domestic investors. For the first time, senior management at WuXi Biologics collectively presented on the occasion, where they elaborated to the investors on the overall strategic and future planning, financial position of the Company over the recent years, biologics development and production services, R&D of new biologics drugs and quality management system. Investors are also invited to make an on-site tour at Wuxi R&D Laboratory and production workshop, whereby investors familiarized themselves with the production process of biologics. Serving as an open and transparent communications channel, the event received great attention and active participation from the global investment community, proving to be another vital platform for investor communications in addition to the company's biannual results announcement conferences.

2. Compliance and Anti-Corruption Management

— ***Compliant operation***

The relevant administrative authorities of the PRC are currently paying more and more attention to the reform of the pharmaceutical industry, and the regulatory compliance trend of the pharmaceutical industry is becoming more stringent. In July 2019, the Ministry of Finance conducted a "penetrative" financial inspection on 77 pharmaceutical enterprises across the country, while the new version of the Drug Administration Law was passed in August 2019 and implemented in December 2019. In order to prevent and mitigate compliance risks and promote the stable operation and sustainable development of the Company, WuXi Biologics has established a comprehensive compliance management system to improve and strengthen the effectiveness of the Company's compliance management, effectively prevent compliance risks and achieve objectives for compliant operation.

The Policy and Compliance Department of WuXi Biologics has formulated the "WuXi Biologics Compliance Management System", which specifies the compliance management department and its corresponding responsibilities, and forms a set of mature processes including compliance consultation and guidance, compliance supervision and inspection, risk identification and management, compliance reporting and investigation, compliance self-examination, accountability and appraisal process. In 2019, the Policy and Compliance Department carried out various forms of compliance management activities. In addition to the monthly special inspections, the Department also carried out compliance innovation contest and other activities, which not only enhanced the enthusiasm of employees in compliance management, but also improved the quality and efficiency of compliance management. Meanwhile, the Policy and Compliance Department assessed the compliance of scientific research activities and internal management through annual audit and special inspection, proposed potential compliance risks, provided reasonable rectification suggestions and supervised the remediation. In 2019, the Policy and Compliance Department held several compliance closing meetings among BUs, during which it summarized and analysed the compliance special audit and annual audit issues, and discussed the prevention and rectification measures to continuously refine the compliance management system of the Company.

Information security is also an important basis for compliant operation of an enterprise. In order to enhance information security management, WuXi Biologics takes risk management as the priority strategy, continuously strengthens network security construction on the management and hardware perspectives, and builds a data security protection system based on the full life cycle of data assets, so as to provide information security for the business continuity of the Company. Our Information Technology Department regularly disseminates information related to information technology compliance to employees and popularizes important information related to information security, such as password security, removable media security and virus and Trojan to enhance employees' awareness of information security compliance and promote the healthy development of the Company.

In order to raise the compliance awareness of all employees, WuXi Biologics organized two full-scope compliance trainings for all employees in July and November 2019, mainly covering compliance management and regular meetings, business secret protection, information security, etc. The completion rate of the compliance trainings in November reached 100%. At the same time, in order to provide more convenient compliance consulting services to WuXi Biologics' employees, a domestic Shared Service Centre has been set up with a compliance hotline, through which employees can make timely inquiries via phone or email in case of any compliance issues.

— ***Anti-corruption***

WuXi Biologics firmly opposes and resists all forms of commercial bribery and corruption, and clarifies that the Internal Audit Department is the leading management department for anti-corruption. In order to prevent corruption and regulate the management of conflicts of interest, the Internal Audit Department has formulated the Anti-corruption Policy of WuXi Biologics on the basis of complying with the requirements of laws and regulations and benchmarking with industry standards and relevant code of conduct. It specifies the management requirements for gifts and presents, entertainment and business hospitality, and regularly reviews business ethics standards and anti-corruption measures to continuously improve the management practices. Whether engaging in system formulation or daily business activities, the management always adheres to the "zero tolerance" standard for bribery and corruption, while actively promotes and sets an example of honest and trustworthy business conduct.

In addition, we continue to improve the anti-corruption supervision and monitoring functions by setting up a reporting mailbox and holding anti-corruption training and other activities to create an honest corporate culture.

Setting up Whistle-blow mailbox

We set up a whistle-blow email-box to further improve our internal supervision and management ablity. Dedicated staff is assigned to follow up reported matters. Identity of the reporter and reported matters will be kept confidential.

Anti-corruption training

In 2019, the Internal Audit Department held a comprehensive anti-corruption training program. Participants received such training either through on-line access or on-site participation. The participation rate reached 94%. Anti-corruption training enhanced the awareness of integrity among all employees.

At the same time, we pay attention to the anti-corruption management of the supply chain, and require all suppliers we cooperate with to sign the "Anti-corruption Acknowledgment", and agree that both parties shall be honest, self-disciplined, faithful and trustworthy during the performance of the contract. The Internal Audit Department of the Company supervises the contract execution process and reports any findings to the Audit Committee.

Analysis of Material Issues

1. Identification and Evaluation of Stakeholders

The preparation of the Report focuses on the material issues of concern to the stakeholders. In order to better understand the demands and concerns of the stakeholders, WuXi Biologics has conducted analysis on stakeholders, identified important stakeholders, and used the stakeholders right-interest model to evaluate from the influence and dependence aspects.

According to the assessment result, **clients**, **employees** and **Shareholders** are the most important stakeholders of WuXi Biologics, and these three stakeholders have achieved a high rating in terms of influence and dependence on us, as shown in the chart. Therefore, while disclosing the key indicators required by the ESG Guide, the Report will focus on the disclosure of the material issues concerned by these three parties.

Stakeholders Right-Interest Model

2. Selection of Material Issues

WuXi Biologics has established different communication mechanisms for various stakeholders, and disclosed relevant information in strict compliance with regulatory requirements and policy requirements, in order to communicate with and response to stakeholders on the material issues of concern. Based on the stakeholders' expectations and feedback on WuXi Biologics, and with reference to the international sustainable development trends and standards, as well as the topics of concern for the pharmaceutical industry for the year, we ultimately determined 19 relatively important material issues in 2019.

Stakeholders	Material Issues of Concern	Corporate Communication Mechanism or Response	Corresponding Chapter in the Report
Clients	Product quality assurance	Quality management system	Quality is the Foundation
	Innovation and R&D	Increase R&D investment	Innovation is Key
	Efficient delivery	Customer satisfaction survey	Quality is the Foundation
	Customers first	Customer complaint handling mechanism	Customers First
	Intellectual property protection	Compliance inspection	Management and Protection of Intellectual Property
	Global strategic layout	Accelerate our globalization	R&D and manufacturing sites
Employees	Employee remuneration and benefits	Improve the remuneration system	Remuneration and Benefits
	Employee equality and diversity	Employee activities	Equality and Diversity
	Employee training and development	Employees' opinions	Training and Development
Shareholders	Corporate governance	General meetings	Communication with Shareholders and Other Stakeholders
	Compliant operation	Formulation and implementation of compliance system	Compliant Operation
	Innovation and R&D	Increase R&D investment	Innovation is Key
Suppliers	Procurement and supplier management	Supplier assessment and communication	Supplier Management
Partners	Innovation and R&D	Inter-industry communication	Innovation is Key
Government authorities	Production safety	Safety inspection	Health and Safety
	Compliant operation	Information disclosure	Compliant Operation
Environmental organizations	Energy conservation and emission reduction	Policy formulation and implementation	Taking Pride in Green
	Emission management	Strict management of emissions	Emission Management
	Extreme weather response	Contingency measures	Climate Response and Ecological Environment
	Promoting health and well-being	Participate in charity activities	Giving Back to Society
Community	Promoting local employment	Provide employment opportunities	Giving Back to Society
	Engaging in public services and charity activities	Participate in charity activities	Giving Back to Society

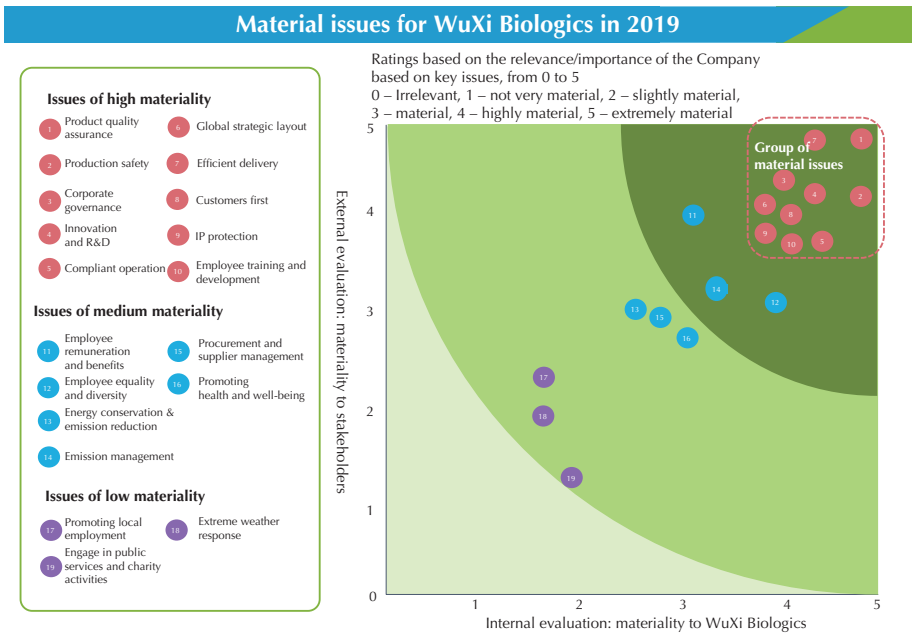
3. Evaluation of Material Issues

Based on the selected material issues, in order to maximize the effectiveness of WuXi Biologics' management resources, we conducted a materiality assessment on the material issues and identified the issues of high, medium and low materiality.

Assessment: WuXi Biologics communicated with stakeholders through interviews, meetings, industry exchanges, surveys, etc., and formed the preliminary assessment results of material issues using the materiality matrix by summarizing the demands and expectations of stakeholders collected during daily operation.

Identification: Based on the preliminary assessment, an expert team consisted of the heads of relevant departments of WuXi Biologics conducted a comprehensive assessment, and ultimately identified the material issues that had a relatively significant impact on the stakeholders and WuXi Biologics, which act as an important basis for the sustainable development, operation management and information disclosure of WuXi Biologics.

By using the materiality matrix, we identified the issues of high, medium and low materiality of WuXi Biologics in 2019. Compared with 2018, there were material issues on equality and diversity of employees as well as extreme weather response newly added in 2019. The importance of corporate governance and innovation and R&D was adjusted from medium to high, while energy conservation and emission reduction was adjusted from low to medium.



The below sections of the Report will focus on the material issues of the stakeholders' concern, and are organized into sections of Innovation is Key, Quality is Foundation, Staff First, Cooperation for Win, and Taking Pride in Green for in-depth explanation according to their inter-relevance of the Company's responses.

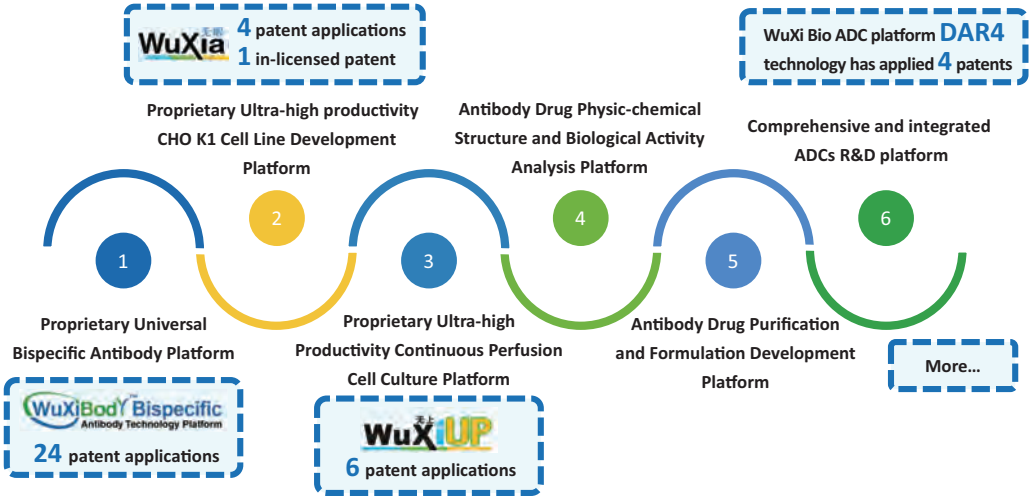
Innovation is Key

WuXi Biologics has always regarded innovation as an inexhaustible driving force for sustainable development, and we continue to increase our investment in research and development to continuously improve our innovative R&D capabilities. In 2019, WuXi Biologics' R&D expenses amounted to approximately RMB259 million, representing an increase of RMB90 million or 53% as compared with 2018. On the other hand, we respect everyone's intellectual property rights and R&D achievements. Intellectual property protection is within the scope of our red-line management. We have established a sound management system to protect ours and our clients' intellectual property rights from infringement.

1. Innovative Technology Platforms

As an open-access and technology-empowering platform with integrated biopharmaceutical capabilities, we provide services covering the entire biologics industry chain to meet the needs of biologics discovery, development, testing and manufacturing outsourcing. In particular, compared with other companies in the industry, WuXi Biologics involves in the drug discovery field at an early stage, actively commits in human resources and other resources and thus has accumulated sufficient experiences to offer the cutting-edge technology platforms. We have developed multiple mAb drugs for different clients through the hybridoma system platform, phage display platform and OMT technology platform. Following the trend of new drug R&D, we have also made early deployment and have technological advantages in areas such as bispecific antibody, ADC and fusion protein.

Six Well-Established Platforms for Biologics with International Standards



As a global leading biologics CDMO service provider, WuXi Biologics gained considerable experience in working with numerous different antibodies or other biological molecules, linkers and payload chemistries and combinations thereof, which uniquely qualified us to provide our partners with tailor-made options and solutions on ADC development strategies. Through our world-class R&D efforts, WuXi Biologics has also developed a novel linker for lysine-based conjugation that demonstrates higher reactivity, better solubility and a more flexible range of conjugation temperatures. A unique payload chemistry to provide more homogenous drug loading for cysteine-based conjugation was also successfully developed.

Knowledge Corner:

Antibody Drug Conjugate ("ADC") is a new class of highly potent biologics composed of an antibody linked, via a chemical linker, to a biologically active drug or cytotoxic compound. Such extremely complex "guided missiles" carrying, for example, a powerful anti-cancer drug by an antibody are often the last-attempted treatments. Compared to traditional chemotherapies and monoclonal antibodies ("mAbs"), ADCs show superior efficacy, lower off-target toxicity and a larger therapeutic window, and relevant studies show they helped patients whose survival outlooks were discouraging. In 2019, three of the 14 new biologics approved by the U.S. FDA were ADCs, the most ever approved in a single year for ADCs. With the growing number of ADC candidates at unprecedented levels, the industry is optimistic that an ADC era may have arrived.

— ***R&D and manufacturing sites***

WuXi Biologics continues to strategically locate its global R&D and manufacturing sites in China, Ireland, Singapore, Germany and the United States, spanning across five countries in three continents, among which four R&D and manufacturing sites in Wuxi (two), Shanghai and Suzhou have come into operation. In 2019, we established a manufacturing site in Chengdu in China and a vaccine manufacturing site in Ireland. In particular, we commenced the construction of 48,000L integrated R&D and production center for innovative biologics at our Chengdu facility, expanded our integrated R&D and production center for ADC in Wuxi which is also capable for GMP commercial manufacturing, and completed our first overseas biologics production facility in Ireland. The total production capacity of WuXi Biologics is expected to exceed 280,000L by 2022. Clients can choose any two of WuXi Biologics' manufacturing facilities in China, Europe and the United States for commercial manufacturing to reduce the risk of technology transfer between two suppliers.

Distribution of WuXi Biologics' R&D and Manufacturing Sites

WuXi Biologics' Speed — Completed Weather-tight Seal of its Biologics Manufacturing Facility in Ireland

Representing one of the world's largest facilities using single-use bioreactors, this state-of-the-art "Facility of the Future" commenced construction in February 2019 and completed the weather-tight seal of its main facility in December 2019. We are proud of achieving this great milestone 10 months after initiating the facility construction of our first global site in Europe, which is another testament of 'WuXi Bio Speed' implemented outside of China for the first time.

Latest construction progress of our Ireland Site

The Construction of Chengdu Site Benefiting Southwest China and Accelerating the Build-up of a Biologics Ecosystem with International Competitiveness

On May 16, 2019, WuXi Biologics officially commenced the construction of an integrated manufacturing center for innovative biologics in Chengdu, which will house the 12th facility of WuXi Biologics. The initial planned bioreactor capacity is up to 48,000 liters, providing services such as biologics R&D and commercial manufacturing. WuXi Biologics will contribute to the high-quality and international development of the biologics industry in Chengdu. The new site will further attract more local talents and accelerate the construction of a biologic ecosystem with international competitiveness in Southwest China.

Layout Design of Chengdu Site

2. Management and Protection of Intellectual Property ("IP")

Our purpose in business is to enable innovation for our global partners, who keep us at the top of their confidence. IP is our shared lifeline. We guard it at WuXi Biologics with founding principles of integrity, world-class security, zero tolerance policies, and relentless pursuit of justice against any criminal act. This is our highest priority, and we must hold ourselves accountable. We have established stringent policies and procedures for IP protection and prosecution of IP violations to ensure our partners' success and win their trust.

— ***Intellectual property management***

In compliance with the Patent Law of the People's Republic of China, the Trademark Law of the People's Republic of China, the Copyright Law of the People's Republic of China, the Paris Convention, the Patent Cooperation Treaty and other local and foreign laws and regulations relating to intellectual property rights, as well as the standards of GB/T29490-2013, we pay close attention to the changes in the legal provisions relating to intellectual property rights, and have established the WuXi Biologics IP Manual, the Regulations on Project Related IP Management of WuXi Biologics, the Regulations on the Risk Management and Disputes Settling with Relation to IP and other management measures to specify the management requirements in respect of patents, trademarks, copyrights, domain names, trade secrets and etc.

In 2019, the Legal Department of WuXi Biologics, together with external professional institutions, held a total of 11 IP training sessions for relevant employees of WuXi Biologics. For the patent segment, the Company held training activities with the theme of application strategy of patents for business development and basic knowledge on patent policy. The intellectual property training activities not only promoted the invention, application and protection of IP of WuXi Biologics, but also facilitated the transformation of IP of WuXi Biologics and helped the Company to deeply explore more so as to maximize the value.

In 2019, the Legal Department of WuXi Biologics applied for 51 international patents (PCT), 53 CN patents and 7 TW patents, and obtained 2 new software copyrights and 2 new registered trademarks. At the same time, the intellectual property certification agency conducted a certification audit on the IP management system of WuXi Biologics, in which the audit in patent segment covered application, maintenance, transfer, alteration, abandonment, IP search, and etc., and no non-conformity was found during the audit.

IP Management System (GB/T29490-2013) Certificates of WuXi Biologics

— ***Business secret protection***

We attach great importance to the protection of clients and our own business secrets. In order to prevent the occurrence of illegal intrusion, hacking and leakage of business secrets, WuXi Biologics has strengthened the construction of information security technology and safe operation system, and formulated the Business Secret Compliance Management Policy, which specifies the management requirements for business secret information, personnel, media carriers, physical areas, etc. An emergency mechanism for business secret leakage is established and a whistleblowing hotline is set up to encourage reporting. At the same time, we also regularly carry out relevant training and inspection in the course of daily operation to further enhance the awareness of business secret protection of employees and improve our management system.

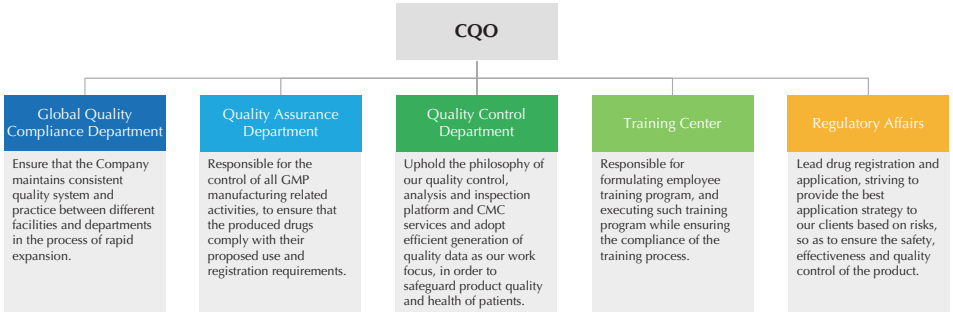
In 2019, the Policy and Compliance Department of WuXi Biologics conducted two full-scope compliance trainings, covering business secret protection and information security. All employees actively participated in the trainings through online access and on-site participation. Meanwhile, in 2019, we also carried out four special reviews on business secret protection and six special reviews on data compliance to ensure that business secrets are properly protected.

Quality is Foundation

1. Quality Team

As a leading global open-access biologics technology platform company, WuXi Biologics is committed to building a world-class quality system.

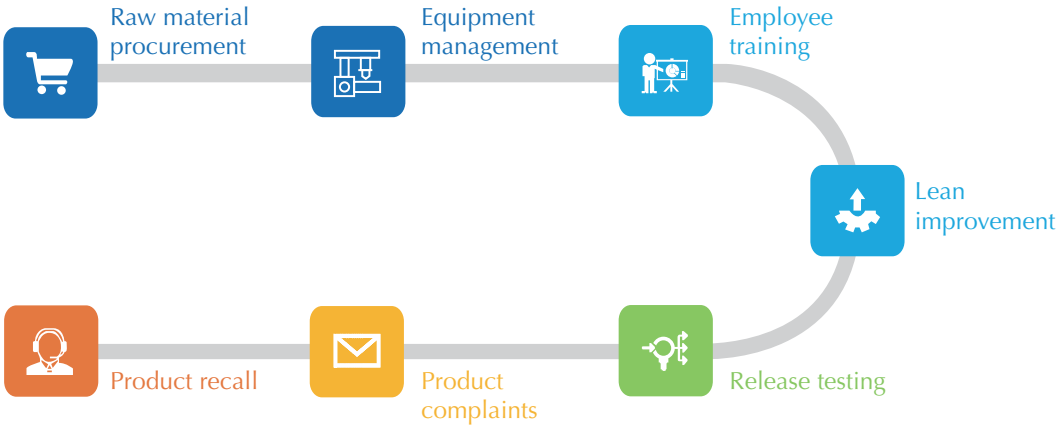
Our quality team is directly led by our Chief Quality Officer ("CQO")/ Senior Vice President, and consists of five departments, namely Global Quality and Compliance Department (GQC), Quality Assurance Department (QA), Quality Control Department (QC), Training Center (TC) and Regulatory Affairs Department (RA).



Approximately half of our quality team members have master's degrees or above, and our 20 management team members have extensive local and foreign industry experiences. Through the collaborative efforts of our quality team, we assisted our clients to complete **100 +** global IND applications with our excellent quality control system and production process, with a success rate of **100%**. We also completed various tasks in a shorter period of time and of higher quality that exceeded our clients' expectations, which ensured the quality of our clients' R&D work and the smooth progress of their applications. We were awarded more than 50 client awards, including but not limited to the "Best Partner" awards, medals and letters of gratitude, and continued to secure renewal from our clients. In the face of the accelerated globalization of the Company, the quality team has always been committed to improving the quality and compliance level of the Company, laying the foundation for the Company's commercial manufacturing business.

2. Quality Control and Audit

In the course of our daily operations, WuXi Biologics has implemented the GMP requirements of China, the United States and the European Union in accordance with the relevant national regulations on raw materials, personnel, facilities and equipment, production process, packaging and transportation, quality control, etc., and has formulated a quality manual based on our own characteristics. On this basis, we have developed a set of detailed operating rules to guide our employees in their work. Meanwhile, we have also established a seven-step process of quality control to strictly control every aspect from raw material procurement to product recall. In 2019, we received 2 complaints, both of which have been settled and no product recall has occurred.



Quality Control 7-step Process

- Raw material procurement: to conduct risk assessment on raw material procurement, obtain quality inspection report and conduct self-inspection.
- Equipment management: the production equipment is selected and regularly tested, maintained and upgraded.
- Employee training: we provide all-round training to our employees, the content of which is not limited to the introduction of standard operating procedures and safe production training.
- Lean improvement: we encourage everyone to participate in the continuous improvement of the operation, and execute, review and reimplement good suggestions.
- Release testing: we establish product testing standards and strictly carry out and regularly review.
- Product complaints: the QA Department will judge the complaints received. If it is related to quality, the QA Department will conduct complaint investigation, analyse its root cause, track the progress, formulate corrective and preventive measures if necessary, and report the results to clients in a timely manner.
- Product recall: if the conditions for product recall are met, WuXi Biologics will set up a special recall team to track and implement product recall.

Suzhou Testing was awarded the China Inspection Body and Laboratory Mandatory Approval ("CMA") and the China National Accreditation Service for Conformity Assessment ("CNAS") accreditation certificate

Suzhou Testing, a wholly owned subsidiary of WuXi Biologics, is the only third-party biosafety testing provider that meets international standards (USP, EP, JP) and Chinese standards (CN). In early 2019, CMA and CNAS qualification inspectors carried out inspections on the compliance and effectiveness of the quality system and the consistency of technical capabilities of Suzhou Testing respectively. The inspection experts highly recognized the quality management, the technical capabilities of virus and mycoplasma testing in Suzhou. On January 7, 2019, Suzhou Testing was awarded the CMA and CNAS certificates, demonstrating the achievement of a higher level of the quality system and testing capabilities and also our commitment to higher quality standards for our global clients.

In 2019, WuXi Biologics has successfully passed its first U.S. FDA GMP routine inspection. WuXi Biologics is the first Chinese biologics company which passed the U.S. FDA Pre-License Inspection (PLI) and is also the first Chinese biologics company obtaining the dual certification of GMP from both the U.S. FDA and EMA.

On April 17, 2019, the Company's DS and DP facilities in Wuxi Site successfully completed a seven-day FDA surveillance inspection by three inspectors for the production of Trogarzo™ of Taimed for AIDS treatment , the first routine GMP inspection since product approval. The outcome of this inspection reinforces that the quality system at WuXi Biologics strictly adheres to the U.S. FDA's GMP regulations, will promote the Company to continue to improve its quality system and also demonstrates strong expertise in addressing the global regulatory requirements.

At the same time, we have also received quality audit from our global customers, all of which have been successfully passed.

Type of quality audit	Region	Number of audits in 2019
Governmental Drug Control	China	0
	United States	1
	Europe	3
Client quality review	Asia	48
	United States	42
	EU	10

Here are some of the top industry honors we received in 2019:

WuXi Biologics was awarded "Asia's Best CMO of 2018" by IMAPAC

The Asia-Pacific Bioprocessing Excellence Awards aims to honour the industrial bellwethers, trendsetters and innovators leading future science and technology, who energetically experiment and practice to accelerate biologics R&D progress, cut costs, enhance quality and advocate advanced technology in the aspects of biologics techniques and production stages.

WuXi Biologics was awarded 2019 "CMO Leadership Awards" in all six core categories

WuXi Biologics has received the 2019 CMO Leadership Awards in all six core categories including Quality, Reliability, Service, Expertise, Capabilities and Compatibility across the group of Big Pharma, representing a significant leap from 2018 with one category in Reliability, becoming the only Chinese enterprise in the field of biologics winning this honor. These awards recognize the unwavering commitment to quality, dedication to customer service, strong operational execution, and increasing global influence achieved by WuXi Biologics.

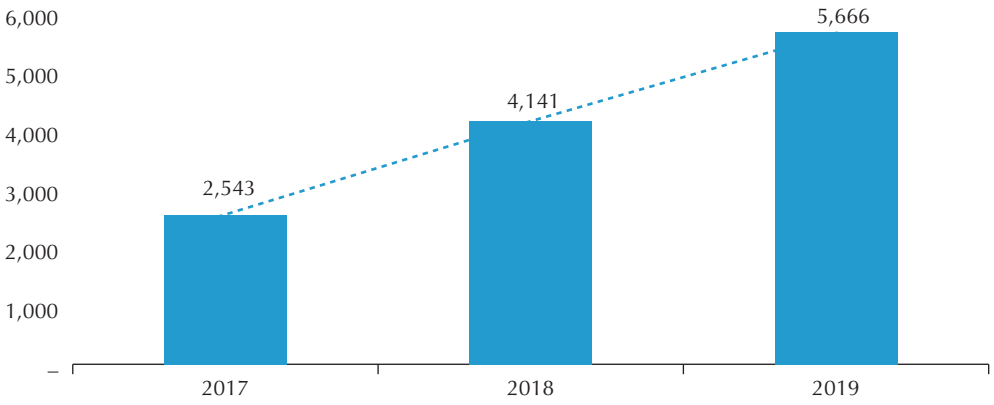
Staff First

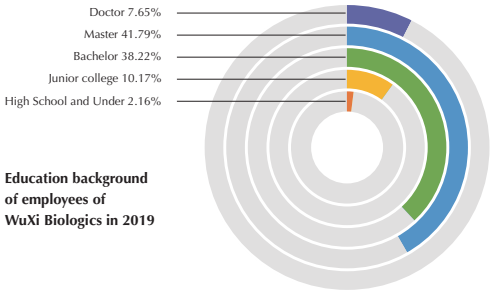
As a global R & D and innovation company, talents have always been our valuable asset. We always see our employees as our first priority. We pay attention to the health and safety of our employees and prevent personal safety and occupational hazards. We attach great importance to the cultivation and development of talents, provide multi-channel training opportunities and build a clear career development path for employees. We provide competitive remuneration and benefits to enhance employees' sense of belonging and happiness. We treat all employees equally and pay attention to employee diversity and create an inclusive and open working environment.

In 2019, in response to the needs of business development and overseas expansion strategy, WuXi Biologics had a total of 5,666 domestic and overseas employees, representing an increase of 36.83% as compared with last year, more than doubled of 2017. In addition, we have established a team of high-quality and highly-educated talents, with half of them having master's degrees or above, and nearly 88% of them having bachelor's degrees or above. At the same time, we are a young and energetic team of high-quality talents, and the proportion of young employees has been increasing. The proportion of employees under 30 years old increased from 61.41% in 2018 to 66.52% in 2019, which increased the vitality of the Company.

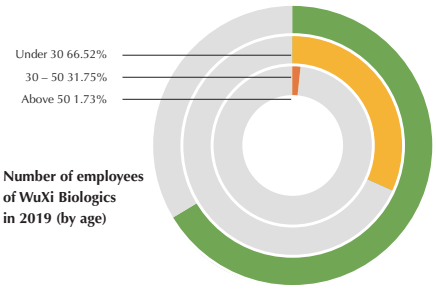
We attach great importance to the development and retention of talents, and continuously improve employee satisfaction by providing a healthy and safe working environment and improving the training and development system.

Total number of employees of WuXi Biologics





Education background of employees of WuXi Biologics in 2019



Number of employees of WuXi Biologics in 2019 (by age)

* Figures may not add up to 100% due to rounding.

WuXi Biologics strictly abides by national laws and regulations, and prohibits child labour and forced labour. "WuXi Biologics Employee Recruitment Policy" clearly states that all employees of WuXi Biologics must be at least 18 years old, and strictly forbids illegally employing or exploiting children (i.e. children under 16 years old) in the workplace. In 2019, WuXi Biologics did not have any case of child labour or forced labour.

1. Health and Safety

The Company adheres to the people-oriented business value and cares about the health and safety of employees. We build a healthy and safe working environment and protect the occupational safety and health of our employees by organizing physical examination for employees, carrying out publicity campaign on prevention and control of occupational diseases, building a safety culture, establishing emergency response mechanism, enhancing laboratory protection measures, opening potential risk reporting channels, organizing safety training and carrying out safety inspection. In 2019, Mashan Base Phase I of the Wuxi Site obtained ISO45001 Occupational Health and Safety Management System Certification.

We care the physical and mental health of our colleagues, allowing them to flexibly balance work and life, flourish on career and achieve good outcomes in both work and family life. The Company newly organized hobby associations including dancing, soccer, basketball, badminton, tennis and others in 2019, providing diverse activities for our colleagues. Such activities help to facilitate interaction between departments and promote the philosophy of healthy lifestyle and hard-working spirit as well as encourage employees to value the well-being of themselves and their families.

— ***Occupational health***

The Company has formulated the "Industrial Hygiene (Occupational Health) Management Policy" and adhered to the principle of "prevention first and comprehensive treatment" to standardize the management requirements for employees' health and hygiene, raw materials/reagents, occupational health risks, equipment, personal protective equipment, accident and emergency plans, emergency facilities, first aid, etc., while at the same time remove or reduce various occupational hazards by adopting removement, replacement, project control, management control, personal protection and other measures. We undergo routine inspection conducted by qualified third party inspection institutions in respect of positions with occupational hazards to stay up to standard with the occupational hazard and protection. In addition, the Company conducts occupational health examinations for employees in positions exposed to occupational hazards, including pre-employment, on-the-job and off-the-job medical examinations, in accordance with the "Technical Specifications for Occupational Health Surveillance". We provide all employees with medical examination benefits, including general examination, liver and kidney function examination, full digital X-ray and HD color Doppler B ultrasound examination, etc. Such medical examination package has been upgraded as compared with last year. At the same time, we also organized quarterly and annual occupational disease prevention and control publicity and training, with a total of 2,431 participants, to effectively protect the occupational health of employees through promoting awareness of occupational disease hazards, occupational health requirements and protective measures.

— ***Safe production***

In addition to protecting the health of employees, we also take safe production as the priority of work to establish a sound health and safety management system. We have formulated the WuXi Biologics Safety Risk Assessment Policy, WuXi Biologics Safety and Prevention Policy and other documents to prevent personal safety and occupational hazards. In addition, the Environment, Health and Safety Department ("EHS") has established a safety culture through various means, such as the establishment of EHS committee, issuance of EHS guidelines and standards, organising EHS training and the activity of Safe Production Month, on-site EHS verification and inspection, embedding EHS concept and design throughout project stage, inviting professional lecturers to conduct special emergency response training, organizing personal protective equipment (PPE) road show, setting up EHS bulletin board, and participating in the BU morning briefing, etc. Through multi-dimensional approaches, WuXi Biologics continues to cultivate employees' safety values and safety behaviour and habits, and gradually realize the safety culture of "self-control, autonomous management and team management", so as to reduce the occurrence of various accidents and gradually improve employees' safety awareness.

In 2019, the Company did not report any work-related fatality, and the number of working days lost due to work-related injury of employees was 46 days. The results of the annual on-site occupational hazard inspections were all satisfactory and in compliance with relevant national regulations.

Organizing regular safety training

In 2019, WuXi Biologics held the annual, quarterly and monthly EHS trainings and induction training sessions of **95** times in total with the theme of occupational health, emergency response, hazardous chemical, EHS standard, accident investigation, contractor safety, operation permit, special operation personnel, pest control and employee travel safety. A total of **44,850** people have participated in the above-mentioned training sessions.

Invited external professional organization to conduct special emergency response training

EHS invited trainers with professional training qualification from the American Heart Association to conduct AHA first aid training, which enhanced the emergency awareness and safety of our employees and strengthened our accident prevention and response capability.

Expanding potential hazard reporting channels and carrying out safety inspections

We always believe that ensuring the safety of our employees begins with identifying potential safety hazards. Therefore, we identify potential safety hazards in the Company's operation through bottom-up employee reporting and top-down safety inspection, and supervise the relevant department to actively carry out rectification.

All employees of the Company can report potential safety risk via the mobile application DingTalk. Relevant employees check the reported safety risks weekly and adopt timely rectification measures. Rectification rate in 2019 reached 78%, which effectively reduced the occurrence of various incidents. Apart from bottom-up reporting of potential risks, we also implement a strict top-down safety inspection regime, where we conduct safety inspection weekly, bi-weekly and before holidays, document inspection records, provide rectification opinions on problems discovered and monitor the rectification process.

Emergency response mechanism for safety incidents

In 2019, in order to improve WuXi Biologics' emergency response capability and capacity and minimize losses caused by emergencies, the Company established an emergency response mechanism, where the EHS department would set up an emergency response team to assume the responsibility of emergency response. Six special emergency response plans have been prepared, covering fire and explosion, chemical leakage, environmental incidents, special equipment, biological hazard incidents and natural disaster incidents. In addition, the Company has also set up a 24-hour emergency alarm hotline through which employees can report any emergencies.

Laboratory Safety Protection

In addition to the safety protection measures for all employees of the Company, we also effectively manage the safety hazards in laboratory operations and the use of chemical reagents based on the characteristics of the pharmaceutical research and development industry. In order to protect the health and safety of our laboratory staff, the Company has formulated the Laboratory Environmental, Health and Safety Policy, and adopted different control measures at different levels to control risks, mainly with engineering control measures and supplemented by personal protective equipment to effectively respond to and protect the safety of employees.

Use of hard isolator to protect employees' health and safety

In 2019, WuXi Biologics Conjugation used a hard isolator to effectively protect employees' health and safety during the process of weighing and dispensing of chemical small molecule active drugs based on the occupational exposure limits of active drugs.

Optimization and Integration of Personal Protective Equipment

In 2019, WuXi Biologics carried out the optimization and integration project of personal protective equipment (PPE). EHS department established a list of PPE usage to guide users to choose PPE, ensure the compliance of PPE usage and the safety of operators.

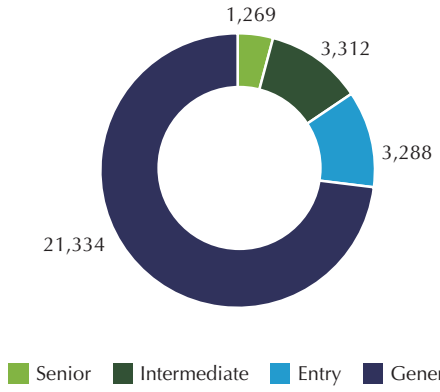
2. Training and Development

The Company attaches great importance to the training and improvement of employees' ability, knowledge and skills, and has established a sound training system and promotion and development mechanism, aiming to improve employees' professional knowledge, technical skills and professional quality, and has created promising career development opportunities for employees.

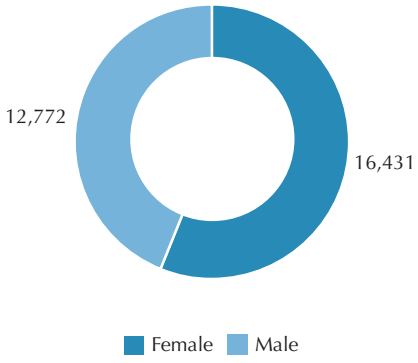
— ***Employee training***

We have formulated the WuXi Biologics Training Policy to standardize the training personnel, training types and training requirements, and conduct training activities in strict accordance with the requirements. Training remains of high quality and coverage despite a 37% year-on-year increase in the number of employees in 2019. As of December 31, 2019, we conducted 160 training sessions in total, representing an increase of 53 sessions as compared to 2018; The total training hours were 29,202.50 hours and the average training hours were 5.27 hours per capita, representing an increase of 25.26% as compared to 2018. The percentage of employees trained was approximately 44.53%. Among all employees trained, the training hours for ordinary employees reached 21,334 hours, and the training hours for female employees exceeded that of male employees, reaching 16,431 hours. In terms of the percentage of training for each rank, the percentage of senior management trained was 59.80%, and their average training hours reached 12.44 hours per capita.

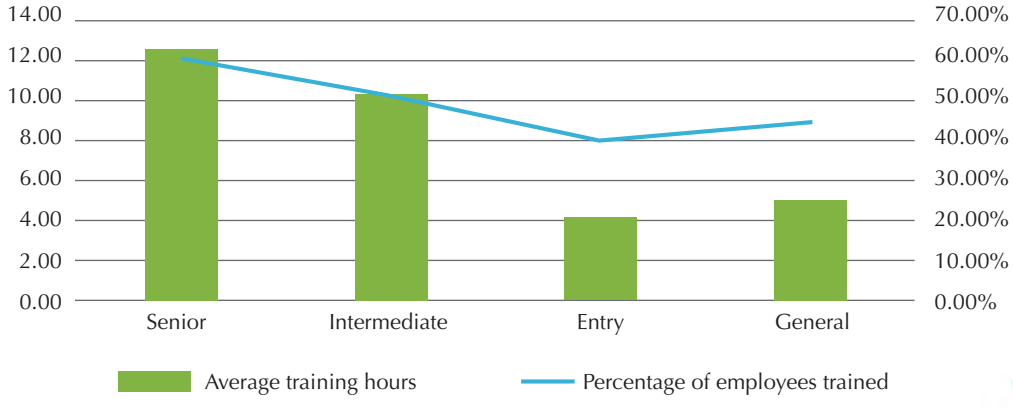
Length of training received by each level of employee of WuXi Biologics in 2019 (Unit: hour)



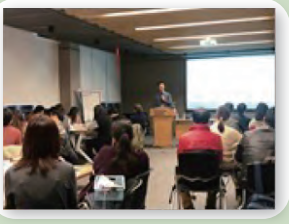
Length of training received of male and female employee of WuXi Biologics in 2019 (Unit: hour)



Average training received by each level of employee of WuXi Biologics in 2019



Our training is divided into three categories, namely new employee induction training, general skills training and leadership training, in the form of online platform, short-term courses and long-term talent training programs.



Pilot training scheme (New employee induction training)

Pilot training scheme is an employee development program for all new general and entry employees which usually takes a year, with an aim at facilitating new employees to adapt with the culture of the Company as soon as possible, understand the Company's strategy and development and clarify responsibility of each position via induction training, culture training, training on work records and coaching and management sharing sessions. This allows for smooth transition, ensuring that newcomers will become fine employees of WuXi Biologics expeditiously.

Public training program (General skill training)

To cultivate a learning culture, the Company organizes public training programs targeting general and entry level employees. Training contents include communication skills, time management, financial basics and cross generation leadership, which could assist our employees in effectively enhancing their general skills and basic leadership.

Intermediate and senior leadership training program (Leadership training)

To train more professional management members, the Company organises intermediate and senior leadership training program targetting intermediate and senior level management. Training contents include performance management, team cohesion and non-authority influence, which could help our employees in building up leadership and methodology in a scientific and effective manner.

Intermediate and senior leadership training program is held by our Human Resources Department and is geared towards intermediate and senior management team who are at position for over a year, with an aim to facilitate our intermediate and senior management building up leadership in a comprehensive and systematic way, improve their team communication skills and performance management through extensive lectures and after-class action plans, and make better use of such skills on actual business scenarios, team management and talent cultivation of the Company. We intend to cultivate a team of strong leaders to facilitate WuXi Biologics in achieving its strategy and vision.

Each phase of training lasts for 3 months, including core lectures on two aspects and the before-school reading, after-school action plans and graduation reports revolved around each aspect. Such trainings aim at helping management in handling our unique and fast-growing business mode, nurturing their leadership and cooperation when facing different challenges, while at the same time systematically clarify their active role and necessary management philosophy and help to link their previous fragmented management experience into an organized roadmap.

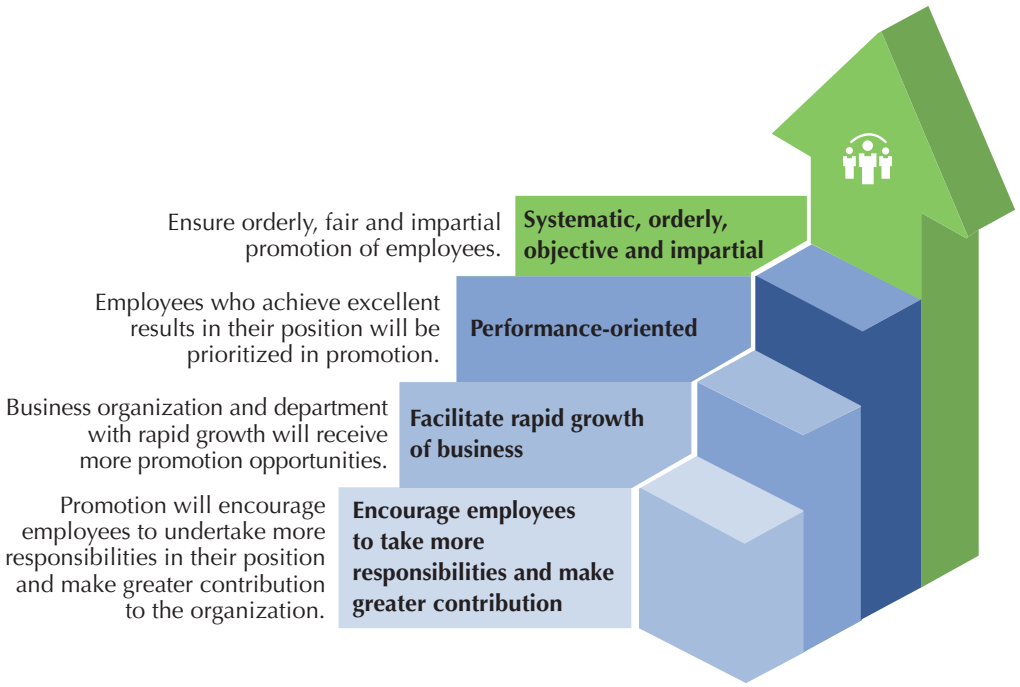
To better support on-the-job education for our employees, our Human Resources Department continued to introduce the "WuXi Biologics On-the-job Graduate" Program in 2019. The Company bears 50% of the tuition fee for employees of WuXi Biologics, encouraging them to apply for part-time master degree in bio-engineering in Fudan University, Jiao Tong University and Jiangnan University, with an aim to provide more outstanding staff specialized in biopharmaceutics for the Company and the industry.

In addition, we have established a team of internal trainers. Currently, 34 internal trainers have obtained the Company's authorization certifications. In 2019, the Company conducted 89 training activities led by internal trainers, with a total of 2,938 participants. Satisfaction rate is as high as 97%. The internal trainers are all from the most outstanding employees of the business departments.

— ***Career development***

In terms of career development, employee promotion and performance appraisal, the Company has formulated the WuXi Biologics Employee Promotion Policy to specify the promotion criteria, promotion rate, promotion appraisals and other aspects, stipulated the employee promotion principles, effectively strengthened the team building of the organization, standardized the orderly promotion of employees, promoted the identification, selection, appointment and development of talents, and provided employees with clear career development paths, namely promotion within the technical expert system, promotion within managerial system and promotion from technical expert to management team.

Four principles of employee promotion management



We have also formulated the WuXi Biologics Employee Performance Management Policy, which requires managers at all levels and employees to participate in a series of management activities for the formulation of performance targets, performance coaching and communication, performance review and evaluation, application of performance review results, and performance improvement, so as to continuously improve and enhance employees' work performance and professional ability, and facilitate employees in achieving their goals and excellent performance.

Employee overseas secondment program

With the further development of globalization of the Company, we give our employees the opportunity to work at our foreign sites in order to improve their capability and obtain a global vision. The Company thus launched the overseas secondment program in a systematic manner. In 2019, as our foreign plant project progressed, we made use of such program to help our foreign team rapidly establish relevant process and system, secure the smooth communication between our foreign team and the local teams at our Chinese headquarters and ensure the smooth progress of our foreign plant project and its subsequent commencement of operation. This could also provide more development opportunities for our employees, in particular the opportunity of working abroad.

3. Compensation and Benefits

In order to effectively improve employee loyalty and reduce employee turnover rate, we have formulated the WuXi Biologics Salary and Welfare Policy and WuXi Biologics Salary Review and Adjustment Policy to establish a well-rounded salary system. We effectively use the salary adjustment ratio matrix to determine the annual salary adjustment rate of employees based on two aspects, namely the individual performance of employees and the salary level of employees, and determine the level of salary adjustment according to the operating results, changes in local consumption index and market salary, peers comparison in the same industry and the performance and results of employees, combined with changes in positions and job nature.

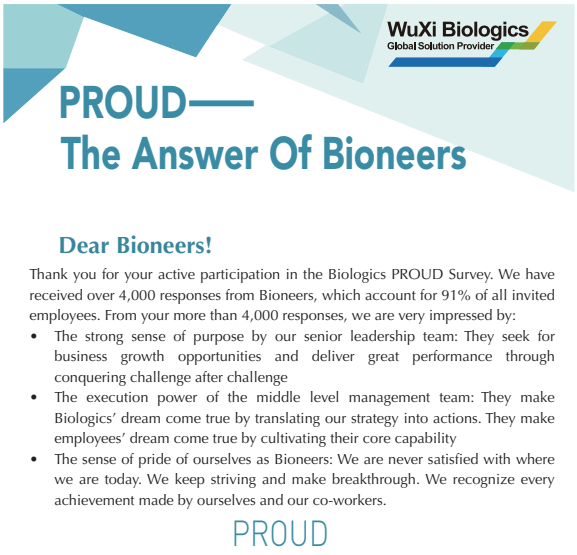
We strictly comply with the Social Insurance Law of the People's Republic of China, the Regulations on the Administration of Housing Provident Fund and other regulations, and make contributions to social insurance for employees, including pension, medical insurance, maternity insurance, work-related injury insurance and unemployment insurance. In addition, we have formulated the Employees Subsidies and Allowances Policy and the Remuneration and Welfare Policy to provide all employees with shuttle bus/transportation subsidies, free transitional housing, employee canteens, high temperature paid leave, distinguished employee award and other subsidies, so as to effectively assure the staff benefit and welfare. In 2019, the turnover rate of domestic employees and overseas employees were 9.88% and 0.21%, respectively.

We care about employees' difficulties in work and life, and provide assistance to employees through the WuXi Biologics Help Fund, so that all employees can feel the warmth of care at all times. In addition, we also hold monthly staff birthday parties and activities featured female employees on the International Women's Day, and we offer gifts to children of employees on the International Children's Day on June 1 each year.

In 2019, we held the First Family Day at our Wuxi site, with more than 100 employees and more than 200 employees' family members participating. The event helped employees' family members better understand the working environment and duties of our employees, and enhanced their sense of belonging and sense of pride.

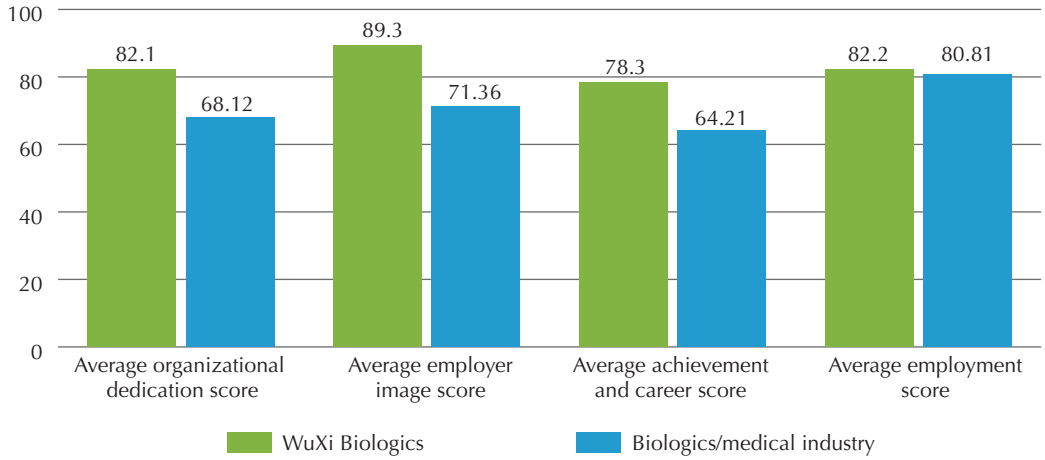
In addition, we always maintain communication with employees and listen to their opinions. In 2019, we launched the HR hotline and received approximately 4,500 questions on remuneration, benefits, leave and training from our employees, all of which have been fully and effectively addressed. At the same time, we also carried out employee survey to find out and enhance employees' sense of belonging and happiness.

— Conducting employee engagement survey



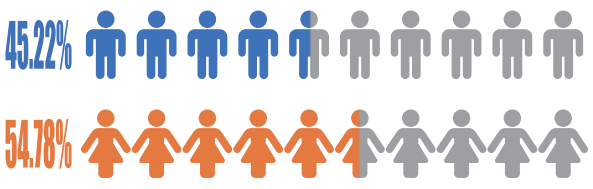
In 2019, the Company launched the Engagement Survey and Proud Survey for employees, aiming to find out employees' engagement and corporate satisfaction. The survey received more than 4,000 questionnaires with 92.3% participation rate. According to the 2018-2019 China Enterprises Engagement Report issued by Beisen, WuXi Biologics achieved higher scores in four aspects, namely organizational dedication, employer image, achievement and career development, and employment, than the average score of the companies in the biologics/medical industry. In terms of employer image, WuXi Biologics achieved an average score of 89.3, which was 25% higher than the industry average. In addition, we also analyze the questionnaire feedback of each department and come out the summary report, provide detailed interpretative analysis to each department and solicit action plans accordingly.

Comparison of the engagement score of employees of WuXi Biologics and its peers in 2019



4. Equality and Diversity

We strictly comply with international conventions on human rights and labour, the Labour Law and the Labour Contract Law of the People's Republic of China, and sign labour contract with each employee. We adhere to equal employment and diversity to create an equal and inclusive corporate culture, and encourage employees to put forward different ideas and suggestions. We respect the freedom of association and collective bargaining enjoyed by employees according to the law, and do not oppose employees voluntarily participating in legitimate activities of local legally registered trade unions, and will not harass, discriminate, coerce or retaliate against employees for their participation in such activities. In addition, the article 3 of anti-discrimination policy in the WuXi Biologics Employee Handbook clearly stipulates that the Company provides fair, just and reasonable work opportunities, and shall not engage in or support any discrimination based on race, social class, religious belief, disability, gender, sexual orientation, age, marital status, pregnancy, union membership or political relations, etc., and the management and the security of the Company shall not conduct forcing, threatening, humiliating or exploitive insulting acts to employees. Meanwhile, the Company safeguards the equal rights and interests of employees in respect of recruitment, performance review and promotion, training and other aspects. In order to ensure that internal employees have equal opportunities for job competition, the Company will inform all employees of vacancies by email every month. In order to ensure that employees are treated equally in terms of performance review and promotion, the Company has established a comprehensive remuneration assessment system to evaluate the work performance of employees from two aspects, namely, job qualification that focuses on the matching of position remuneration with market pay level, and individual performance that focuses on the daily performance of employees, so as to achieve the fairness and objectivity in employee performance appraisal. To ensure that employees have equal opportunities to receive training, our training scope covers all employees. In addition, the Company has formulated the WuXi Biologics Foreign Talent Management Procedures in accordance with the Regulations on the Employment of Foreigners in China and the Measures for the Administration of Employment of Foreign Residents in Shanghai" and other laws and regulations to effectively manage foreign employees, which ensures that foreign employees, employees of PR identity and employees of Hong Kong, Macau and Taiwan can enjoy health insurance during their tenure with the Company.



In 2019, our female employees accounted for approximately 55% of our total workforce, achieving a balanced gender company-wide. Female employees are equally paid for equal work. Equal pay for equal work. We attach great importance to the development of female leadership, and women account for about 45% of the employees in the management ranks and about 31% of senior management. In addition to Chinese people, we also have foreign employees from the United States, Malaysia, Germany and Russia, accounting for over 2% of our employees.

Cooperation for Win

We always put customers' demands in the first place, actively maintain the relationship with them and continuously improve our service quality. To this end, we strictly manage our suppliers, constantly improve our quality team and quality system. At the same time, we also actively participate in social welfare projects and pay close attention to the ecological environment to seek win-win cooperation with clients, suppliers and social organizations.

1. Customers First

WuXi Biologics is a global leading open-access biologics technology platform offering end-to-end solutions to global biologics companies and other pharmaceutical companies. The Customer Service Department organizes client satisfaction survey once or twice a year. The customer satisfaction survey mainly targets the top 20 clients in terms of annual sales revenue. The survey covers topics including the timeliness in quotation feedback, communication smoothness, products and services, project cycle, logistics and other improvement suggestions. Usually the questions are designed to collect feedback from front-end sales, duration of project and post completion. By conducting the survey, we hope to understand what its clients' comments towards its services and products, as well as any problems encountered such as ineffective communication during project duration, so that we can optimize the products and working process, and develop improvement plans accordingly. In this way, we seek to greater business perfection, higher customer satisfaction and loyalty, as well as sustainable business growth. Owing to the efforts made in 2019, the client satisfaction rate was up to 89%.

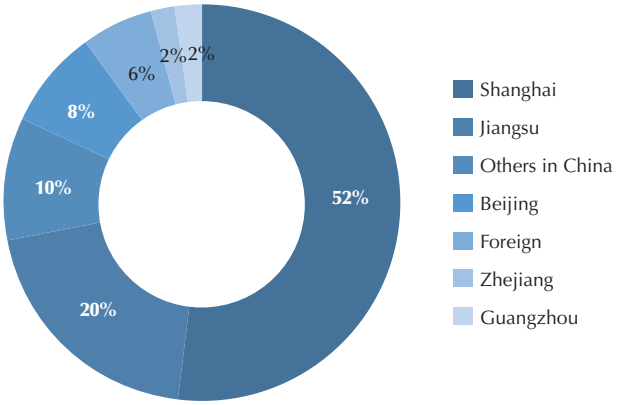
2. Supplier Management

WuXi Biologics attaches great importance to the management of supply chain. We make efforts to eliminate any violation of business ethics and market rules by strictly abiding by relevant laws and regulations, including the Enforcement Regulations on the Bidding Law of the People's Republic of China. On such basis we have formulated the Supplier Management Policy which specifies the classification of suppliers and the management responsibilities of each department, providing comprehensive guidances on supplier introduction, performance review, supplier audit and other key activities within supplier management lifecycle. In particular we have taken the performance of suppliers in terms of social responsibility into consideration.

- Exploration and introduction of suppliers: WuXi Biologics communicates with the suppliers via telephone, correspondence, and etc. to understand their willingness to cooperate, production capacity, company size, operation and compliance status, so as to assess and select qualified suppliers into supplier database according to their capacity, quality standards, reputation and etc.

- Supplier performance evaluation: WuXi Biologics has established a list of qualified suppliers and conducts performance review at least once a year for suppliers on the list.

- Supplier audit: The annual audit of some key suppliers mainly covers credibility, quality management, internal operation and production reliability.



Distribution of suppliers

WuXi Biologics actively establishes long-term and mutually beneficial cooperation with suppliers, prioritizes cooperation with local suppliers and contributes to the development of local industrial chain. In 2019, WuXi Biologics has nearly 800 active suppliers, with 94% being domestic ones, among which the suppliers from the Yangtze River Delta Region are of the greatest number and accounting for 74%.

3. Giving Back to the Society

WuXi Biologics has always maintained a high level of enthusiasm in promoting local development, knowledge-sharing of diseases, protecting ecological environment, carrying out government and enterprise cooperation, supporting education and participating in public welfare activities. The Company believes that public welfare activities can internally enhance the cohesion and sense of belonging of employees, and externally spread its corporate spirit of devotion to the public.

— ***Community***

As an international biologics technology platform, WuXi Biologics actively undertakes the corporate social responsibilities at home and abroad. In respect of the community, we actively promote domestic and foreign regional development to drive local economic growth, facilitate employment of local talents, empower regional partners and achieve coordinated development of the industry.

In the course of our overseas expansion, we continuously promote local economic growth, create local employment opportunities and promote local scientific research and industry development. In 2019, we invested US$240 million to establish a vaccine manufacturing site in Dundalk, Ireland, which will provide 600 jobs to the region, accounting for 2% of the total population there. We also worked with a bunch of local partners to support the development of the biologics industry.

With the outstanding investment and contribution to the local development of Ireland, we were awarded the "Special Award to Investors in Ireland" at the 2019 Global Business Summit held by Asia Matters, Ireland's only dedicated Asia think tank.

— ***Public welfare***

We not only pay attention to community development, but also actively participate in public welfare undertakings. As a member of the biologics industry, we take the health and well-being of the public as our long-term goal. In order to popularize and spread medical knowledge to the society, we carry out disease publicity activities to provide the public a more comprehensive understanding and knowledge on rare diseases, and encourage employees to participate in voluntary blood donation to pass positive energy.

Hold rare disease exhibits to popularize relevant knowledge

To further popularise knowledge on rare disease and orphan drug, WuXi Biologics held an innovative exhibition on rare diseases, which introduced the causes, development and treatment of rare diseases.

Encourage employees to participate in blood donation

We have organized blood donation for several consecutive years, demonstrating our determination to undertake social responsibility in the simplest and most direct way. In 2019, in order to actively respond to the call of regional blood management offices and to enhance the employees' sense of serving and giving back to the society, the Administration Department of both Shanghai and Wuxi organized annual blood donation activities within the Company. A total of 120 employees actively participated and donated 32,300 ml of blood.

— ***Ecological environment***

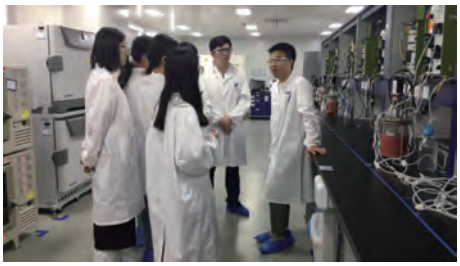
Health and public welfare are closely related to everybody, while the ecological environment is an inseparable element deciding the survival of the whole world. Therefore, in order to better protect the planet and nature and undertake our due responsibilities, we strictly follow animal research and testing standards in daily operation, and actively cooperate with non-governmental organizations to protect the ecological environment.

In our daily work, any facility that conducts animal research must comply with all standards set forth by the Association for Assessment and Accreditation of Laboratory Animal Care (AAALAC), while adhering to the 3R (replacement, reduction, refinement) principle, i.e. replacing the use of animals with alternative technologies, minimizing the number of animals used and improving our experiments to minimize harm. We also maintain an Institutional Animal Care and Use Committee (IACUC), which rigorously reviews and supervises experimental animal projects.

In 2019, we participated in the charity project of "Protecing Endangered Wild Animals" led by World Animal Protection and signed the undertaking of "Wild Animal Friendly" as a pharmaceutical enterprise, where the Company undertakes to not include substances from endangered wild animals in the course of biologics discovery, development and manufacturing, and to encourage consumers not to purchase or use drugs and health products with substances from endangered wild animals. WuXi Biologics is one of the first batch of companies to sign the undertaking of "Wild Animal Friendly" in the biologics industry, showing our social responsibility and foresight.

— *Education*

Education, as another important aspect that is closely related to the development of the society, WuXi Biologics actively participates in this regard by seeking benefits for students, providing internship opportunities and organizing visits for students. We firmly believe that we should strive to work with universities to develop talents that can meet the enterprise's needs while presenting academic excellence of the universities as well. This win-win situation can only be achieved jointly with the close cooperation between enterprise and universities.



WuXi Biologics held a summer open week to provide training and better understanding of the industry

In 2019, WuXi Biologics held a summer open week for master and doctorate students in biology, Chemistry and pharmacy around the world, providing the opportunity for them to visit WuXi Biologics in summer with transportation subsidies and free accommodation. 48 master students and 48 doctorate students participated in this activity. During the 5-day visit, the students had a deep understanding of our Shanghai site and Wuxi site.

Taking Pride in Green

We adhere to sustainable development and the concept of green environmental protection by establishing EHS management system, using resources rationally, actively promoting energy conservation and emission reduction, optimizing emission management, effectively responding to climate change, and striving to reduce the impact of the Company's operation on the surrounding environment. In 2019, Mashan Base Phase I of the Wuxi Site obtained ISO14001 Environmental Management System.

1. Establishment of EHS Management System

In order to strengthen the EHS management system of WuXi Biologics and effectively control EHS related risks, in 2019, the Company's EHS management team took the initiative to benchmark with the EHS standards of multinational pharmaceutical companies and thus rebuilt its own EHS management system from the following cornerstones, namely EHS guidelines, compliance with EHS standards and regulations, EHS policies and procedures, EHS related records and EHS audit tools, collectively referred to as four tiers and one tool. Consequently the EHS management system of WuXi Biologics has taken shape and is of great significance to the business operation, EHS design for new sites and EHS audit by clients.

Compliance with EHS Standards and Regulations

In June 2019, we published the Chinese and English version of WuXi Biologics' EHS standards for the first time, in order to improve the EHS management system of WuXi Biologics and effectively control EHS-related risks, and to meet the EHS standards or guidelines for multinational companies. The EHS standard consists of 20 chapters, including EHS management system, environment, safety, industrial hygiene and occupational health management, covering the whole process from EHS design for new sites to EHS daily operation management.

EHS-related Records

In 2019, we have a total of 4,715 EHS-related records, including safety operation permits, physical inspection records and training records, which effectively enhance the traceability for our EHS management.

EHS Guidelines

We published the updated EHS Policy of WuXi Biologics in Chinese and English, reflecting WuXi Biologics' undertaking to its employees, external partners, stakeholders and the public in terms of EHS management.

EHS Policies and Procedures

We consolidate, update and optimize the EHS management Policy in Shanghai, Wuxi and Suzhou. In 2019, we issued 14 policies, which exceeds the internal target set by the Company.

EHS Audit Tools

In 2019, we finished formulating our EHS audit tools which will be applied in the EHS audit of each of our operation sites in 2020, in order to effectively evaluate the smoothness of operation of the system and guide the internal EHS audit of the Company.

2. Use of Resources

The resources we consume mainly include natural gas, electricity, water and packaging materials. The Company adheres to the principle of recycling resources and advocates the better use of energy, by seizing every opportunity in daily operation to conserve resources, reduce the impact on the environment, and effectively use resources.

— ***Energy consumption***

The energy consumed by us is mainly natural gas and electricity. Due to the expansion of production scale and the increase in production volume, natural gas consumption in 2019 was 5,389,428 m^3 with an intensity of 13.53 m^3/RMB0'000 calculated by unit of revenue of RMB10,000, representing a slight increase as compared to 2018. The total electricity consumption was 73,641,241 kWh with an intensity of 184.86 kWh/RMB0'000 calculated by unit of revenue of RMB10,000, representing a decrease of 13.17% as compared to 2018.

Indicators	2019 Statistics	2018 Statistics
Total electricity consumption (kWh)	73,641,241	53,954,373
Intensity of electricity consumption (kWh/RMB0'000)	184.86	212.88
Total gas consumption (m^3)	5,389,428	3,381,315
Intensity of gas consumption (m^3/RMB0'000)	13.53	13.34

In daily production, the Company adopts more energy-saving technologies and equipment such as disposable bioreactors to effectively reduce energy consumption and pollution. In addition, in order to better manage energy conservation for specific facilities, the Company engaged an external professional institution to assess the energy consumption of new facilities and evaluate the energy conservative measures we adopted, such as variable frequency for air compressors/pumps/fan and green lighting. In 2019, the new facilities at Mashan Base and Shanghai Site have been both accredited on energy conservation by a third-party institution. In the process of plant construction, we give due consideration to the design of operating equipment and identify effective energy saving measures to reduce the energy consumption.

Knowledge Corner:

Single Use Technology (SUT), also known as Disposable Technology, is a bioprocess equipment designed for single-use or single-product manufacturing and is now widely used in the field of biologics, especially in the process involving animal cell culture to produce therapeutic antibodies, hormones, enzymes and vaccines.

Advantages: SUT has lower requirement on clean room in operation than traditional stainless steel process due to the use of closed system. The corresponding energy consumption in construction and maintenance can be greatly reduced, thus increasing the flexibility and controllability of environmental safety for the production enterprises. SUT can be used immediately and disposed of after use. It does not require to clean and sterilize equipment and components after the end of each production cycle, thus reducing the possibility of cross-contamination and saving the investment and maintenance costs in disinfection and cleaning equipment. The consumption of water and electricity can be reduced too, which in turn avoiding the generation of sewage from the origin.

Of course, the application of SUT will also impact the environment during its production, transportation and waste treatment processes. Due to the characteristics of disposable materials, it is difficult to degrade and contains some hazardous substances. Its treatment process will bring upon a negative impact on the environment. The existing treatment methods are landfilling after sterilization, landfilling after pulverization and sterilization, incineration, incineration for power generation and recycling[1]. The study[2] shows that the production and disposal of disposable materials itself accounts for around 10% of the environmental impact, most of which is generated from the transportation and construction system (mainly heating, ventilation and air-conditioning HVAC) and production processes.

[1]Source: D. Estape, "Sustainable Facilities: Global Environment Impact of a Biopharmaceutical Facility," presentation at 2017 ISPE Annual Meeting & Expo (San Diego, Oct. 30, 2017). J. Paben. Recycling biopharma plastics into lumber products. Plastics Recycling Update (2019)

[2]Source: Single-use technology and sustainability – quantifying the environmental impact. GE Healthcare, 29275073 AB (2017)

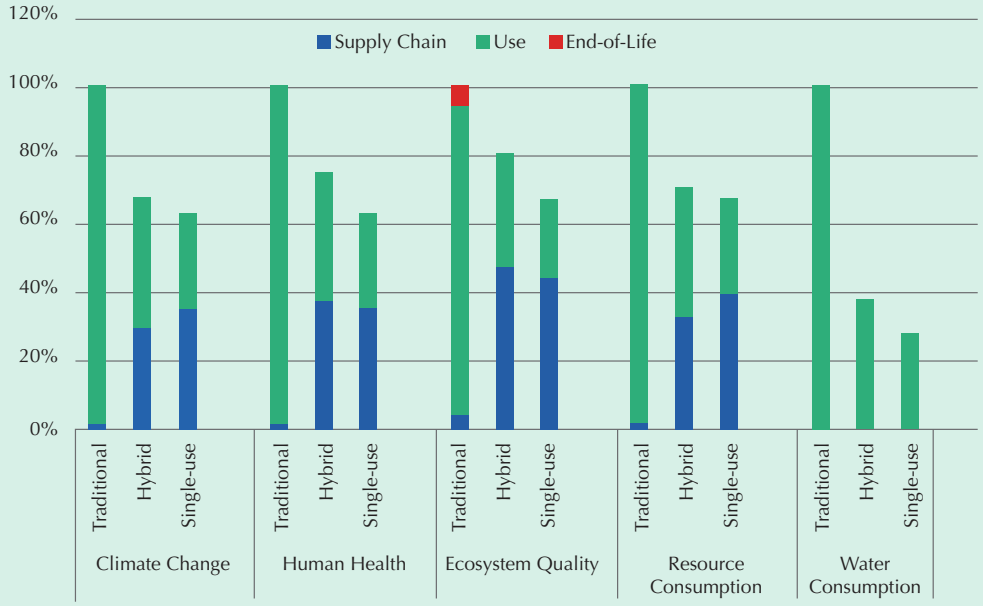


Diagram shows the comparison of relative impact on the environment (Y-axis) in terms of climate change, human health, ecosystem quality, resource consumption and water consumption, SUT is 40%-70% lower than traditional stainless steel.

A number of foreign enterprises have conducted systematic surveys and studies by comparing the direct environmental impact (including carbon emissions, energy and water consumption) and overall impact (climate change, resources consumption, ecosystem quality, and human health) of SUT and traditional stainless steel process throughout the entire life cycle. SUT generally reduces the impact on the environment no matter in different countries, of different products or with different production scales. Such decrease is mainly achieved by simplifying the maintenance system for the production process, but offset in part by the transportation of disposable materials and the equipment of producing them. This is why the degree of reduction is more sensitive to the choice of production sites. Generally speaking SUT is 40%-70% lower than traditional stainless steel in the overall impact on the environment.

— ***Water consumption***

The Company attaches great importance to water resource management. According to the needs of production and daily operation of the Company, the Company protects and effectively uses water resources according to local conditions. We encourage reasonable use of process water, cleaning water and condensate water from operation and production. We encourage reasonable use of domestic water. By multiple use of water and recycling, we are able to improve the overall utilization rate of water and avoid waste. The EHS department of the Company has taken a series of activities including regular maintenance of water-consuming facilities, real-time monitoring of water consumption, analysis and tracking of abnormal data, active promotion of relevant national laws and regulations, and popularization of scientific knowledge on water conservation so as to improve the awareness of water conservation among all employees. In 2019, due to the increase in production capacity, the Company's total water consumption was 719,168 m^3, among which the production water consumption accounted for 78.40%. The water consumption intensity was 1.81 tonnes/RMB0'000 calculated by unit of revenue of RMB10,000, representing a decrease of 11.98% as compared to 2018.

Indicators	2019 Statistics	2018 Statistics
Total water consumption (tonne)	719,168	519,787
Intensity of water consumption (tonnes/RMB0'000)	1.81	2.05

— ***Packaging materials consumption***

The main packaging materials we used are penicillin bottles, rubber plugs, aluminum caps and carton boxes. In 2019, due to the increase in production capacity, we consumed packaging materials of 15,600 kg with an intensity of 0.039 kg/RMB0'000 calculated by unit of revenue of RMB10,000, representing a slight decrease as compared to 2018. We actively encourage our customers to use renewable materials or recycle packaging materials to reduce consumption.

Indicators	2019 Statistics	2018 Statistics
Total packaging materials consumption (kg)	15,600	10,287
Intensity of packaging materials consumption (kg/RMB0'000)	0.039	0.041

3. Emission Management

WuXi Biologics employs professional environmental management personnel to conduct effective emissions management and monitoring. The Company has formulated the Environmental Protection Policy of WuXi Biologics to regulate the emission management of greenhouse gas, exhaust gas, sewage, waste and noise. In addition, WuXi Biologics regularly engages qualified testing institutions to conduct corresponding environmental inspections of the three sites of the Company in Shanghai, Wuxi and Suzhou, and issue environmental monitoring reports to check the emissions of exhaust gas, sewage and environmental noise. In 2019, there was no excessive emission from WuXi Biologics.

— ***Greenhouse gas***

In 2019, due to the increase in production capacity and the use of additional boilers in Shanghai Site, the greenhouse gas emissions increased as a result of more consumption of natural gas. The total greenhouse gas emissions were 78,923.45 tonnes, among which approximately 86.59% residing in Scope 2 emissions. The total emission intensity was 0.20 tonnes/RMB0'000 calculated by unit of revenue of RMB10,000, representing a slight decrease as compared to 2018.

Indicators	2019 Statistics	2018 Statistics
Scope 1 emissions (tonnes)	10,584.38	4,182
Scope 2 emissions (tonnes)	68,339.07	50,069.66*
Total emissions (tonnes)	78,923.45	54,251.66*
Emission intensity (tonnes/RMB0'000)	0.20	0.21

* The data of Scope 2 greenhouse gas emissions in 2018 has been restated.

— ***Exhaust gas***

The waste gas generated by us is mainly industrial exhaust gas, such as boiler exhaust, nitrogen oxide, smoke and dust. We strictly abide by the Law of the People's Republic of China on the Prevention and Control of Atmospheric Pollution and the Emission Standard of Air Pollutants of the People's Republic of China to control exhaust gas emissions. In 2019, due to the increase in production capacity and the use of additional boilers in Shanghai site, the total amount of exhaust gas emitted increased quite much but the intensity remained stable as compared to 2018. The exhaust gas emission was in compliance with the national requirements and there was no incident of excessive emission.

Indicators	2019 Statistics	2018 Statistics
Boiler exhaust emissions (ten thousand Nm^3)	5,389	3,139
Nitrogen oxide emissions (tonnes)	3.28	2.35
Smoke and dust (tonnes)	0.07	0.07

Low nitrogen boiler

In 2019, in order to reduce exhaust gas emission, the Company launched a low nitrogen boiler transformation project, covering three 8 tonnes/hour boilers and one 4 tonnes/hour boiler in Block A of Mashan Base Phase III of Wuxi Site and two 10 tonnes/hour boilers in our Shanghai Site. Through low temperature burning and flue gas recirculation (FGR), the low nitrogen transformation can lower the NOx emission concentration from below 150mg/m^3 to below 50mg/m^3.

— ***Waste***

Hazardous Waste

We strictly abide by the Law of the People's Republic of China on the Prevention and Control of Environmental Pollution by Solid Waste, the Law of the People's Republic of China on the Prevention and Control of Radioactive Pollution, the Management Measures for Urban Radioactive Waste and the Regulations on the Administration of Medical Waste. We have formulated the WuXi Biologics Waste Management Policy to supervise and manage the collection, storage, transfer and disposal of hazardous waste generated in production and operation activities.

We first classify and identify hazardous wastes in accordance with the National Hazardous Waste List and the Medical Waste Classification Catalogue, and then classify and treat wastes in different categories accordingly. We require our employees in the departments generating hazardous waste to have a clear understanding on the classification of hazardous waste and the corresponding treatment methods. In the process of disposal, all hazardous wastes are handled in accordance with the required procedures. Employees are offered necessary protection in the course, and different wastes are placed in different temporary storage points to ensure that all various solid wasters are 100% properly disposed without affecting the surrounding environment.

In addition, in order to effectively cope with the three major bottlenecks of waste disposal, namely, high volume, improperly classified and difficult to be disposed, the Company launched the new hazardous waste disposal optimization project in 2019, including adding new disposal service provider in Suzhou. Through evaluating existing disposal service providers, we identified opportunities to introduce new disposal service provider and lowered the cost for hazardous waste disposal. In addition, we also carried out management optimization projects such as Waigaoqiao hazardous waste classification optimization project, Waigaoqiao hazardous waste packaging and compression project and Wuxi hazardous waste treatment process conversion project, which reasonably classified different types of hazardous waste and improved the process of treatment according to their characteristics, thereby effectively reducing the amount of hazardous waste and the adverse impact on the environment. These projects have positive and important significance in ensuring the smooth operation of the Company and the compliance of hazardous waste treatment. The EHS waste management optimization project won the second prize in the Innovative Projects Award competition organized by the Company. In 2019, due to the increase in production capacity, the amount of hazardous waste discharged by WuXi Biologics was 1,152 tonnes and the unit discharge was 0.0029 tonnes/RMB0'000 calculated by unit of revenue of RMB10,000, representing a decrease of 14.49% as compared to 2018.

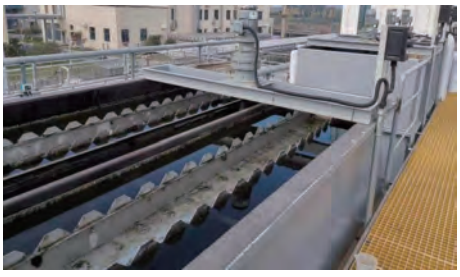
Non-hazardous waste

Non-hazardous waste produced by us is mainly office solid waste. In 2019, due to the increase in operation sites in line with expanded capacity in Wuxi, WuXi Biologics generated a total of 1,231.09 tonnes of non-hazardous waste. In Wuxi site, we engage qualified suppliers to recycle office solid waste, where valuable waste such as carton boxes and iron is recycled and recovered monthly. In Shanghai site, we declare office solid waste disposal fee to Shanghai Waste Management Center, and the government will carry out the removal and disposal work.

Indicators	2019 Statistics	2018 Statistics
Total hazardous waste (tonnes)	1,152	857.11
Total non-hazardous waste (tonnes)	1,231.09	367.50
Total waste discharge (tonnes)	2,383.09	1,224.61
Intensity of waste discharge (tonnes/RMB0'000)	0.006	0.005

— ***Sewage***

We strictly abide by the Water Pollution Prevention and Control Law of the People's Republic of China, the Regulations on Urban Drainage and Sewage Treatment and other regulations. The three types of sewage discharged in production are all transported with pipelines, and ultimately discharged after being treated by the sewage treatment plant in compliance with the standards and without entering the surrounding surface water system. The sewage discharge has no direct impact on the surrounding surface water environment. In 2019, the Company discharged a total of 368,871 tonnes of industrial sewage.



Sewage treatment plant of Wuxi Site

In 2019, to reduce our sewage discharge, the Company established a sewage treatment plant in Wuxi Site, treating sewage and waste liquid in the approach of AO+HBF. The designed capacity of the sewage treatment plant is 720 tonnes/day. Since the sewage treatment plant came into use in 2019, the concentration of pollutants within the discharge is estimated to be reduced to less than half of the standard.

4. Climate Response and Ecological Environment

The excessive use of energy and the excessive emission of greenhouse gases have resulted in a severe change in global climate. WuXi Biologics has formulated the WuXi Biologics Emergency Response Plan to effectively respond to catastrophic weather. Based on the principle of "Who is in Charge, Who is Responsible", WuXi Biologics adheres to the policy of "Prevention First, Control and Elimination Combined", and establishes an emergency response team, which is responsible for mobilising internal and external resources and leading rescue work in emergent situations. The emergency response team will keep abreast of weather information during catastrophic weather and weather changes and maintain communication with relevant government departments. In addition, each department strengthens its daily inspection during operation, conducts full inspection in areas that may be affected, and takes timely measures to eliminate hidden dangers. The Engineering Department strengthens the inspection of outdoor suspended equipment, facilities and potential falling objects, and enhances the inspection and protection of outdoor electrical appliances and meters. The Logistics Department and Administration Department pay close attention to the inventory of raw material yards, raw material warehouses and finished goods warehouses, inspect the drainage system, prepare emergency drainage facilities in case of necessary transfers.

In addition to the impact on climate change, we are also concerned of the impact on the ecological environment. During the construction of our production sites, we maintain the habitats of local animals such as birds and insects to ensure there is no adverse impact on the local ecosystem.

Appendix

Appendix I ESG GUIDE CONTENT INDEX

Area	Aspects and INDEXs	Chapter
A Environmental	**A1 Emissions** Information on: (a) the policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to air and greenhouse gas emissions, discharges into water and land, and generation of hazardous and non-hazardous waste.	Emission Management
	A1.1 Types of emissions and respective emissions data.	Comparative statistics
	A1.2 Total GHG emissions (in tonnes) and, where appropriate, intensity (e.g. per unit of production volume, per facility).	Comparative statistics
	A1.3 Total hazardous waste produced (in tonnes) and, where appropriate, intensity (e.g. per unit of production volume, per facility).	Comparative statistics
	A1.4 Total non-hazardous waste produced (in tonnes) and, where appropriate, intensity (e.g. per unit of production volume, per facility).	Comparative statistics
	A1.5 Description of emission targets devised and steps taken to achieve the targets.	Emission Management
	A1.6 Description of how hazardous and non-hazardous wastes are handled, targets devised for wastes reduction and steps taken to achieve the targets.	Emission Management
	A2 Use of Resources Policies on efficient use of resources including energy, water and other raw materials.	Use of Resources

Area	Aspects and INDEXs	Chapter
	A2.1 Direct and/or indirect energy consumption (e.g. electricity, gas and oil) by type in total and intensity (kWh in '000s) and intensity (e.g. per unit of production volume, per facility).	Comparative statistics
	A2.2 Total water consumption and intensity (e.g. per unit of production volume, per facility).	Comparative statistics
	A2.3 Description of targets devised for energy use efficiency initiatives and steps taken to achieve the targets.	Use of Resources
	A2.4 Description of whether there is any issue in sourcing water, targets devised for water use efficiency initiatives and steps taken to achieve the targets.	Use of Resources
	A2.5 Total packaging material used for finished products (in tonnes) and, where appropriate, with reference to per unit produced.	Comparative statistics
	A3 Environment and Natural Resources Policies on minimising the issuer's significant impact on the environment and natural resources.	Establishment of EHS Management System
	A3.1 Description of the significant impacts of activities on the environment and natural resources and the actions taken to manage them.	Taking Pride in Green
	A4 Policies on identification and mitigation of significant climate-related issues which have impacted, and those which may impact, the issuer.	Climate Response and Ecological Environment
	A4.1 Description of the significant climate-related issues which have impacted, and those which may impact, the issuer, and the actions taken to manage them.	Climate Response and Ecological Environment

Area	Aspects and INDEXs	Chapter
B Social	**B1 Employment** Information relating to compensation and dismissal, recruitment and promotion, working hours, rest periods, equal opportunity, diversity, antidiscrimination, and other benefits and welfare on: (a) the policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer.	Staff First
	B1.1 Total workforce by gender, employment type, age group and geographical region.	Comparative statistics
	B1.2 Employee turnover rate by gender, age group and geographical region.	Comparative statistics
	B2 Health and Safety Information on: (a) the policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to providing a safe working environment and protecting employees from occupational hazards.	Health and Safety
	B2.1 Number and rate of work-related fatalities.	Comparative statistics
	B2.2 Lost days due to work injury.	Comparative statistics
	B2.3 Description of occupational health and safety measures adopted, and how they are implemented and monitored.	Health and Safety
	B3 Training and development Policies on improving employee's knowledge and skills for discharging duties at work. Description of training activities.	Training and Development
	B3.1 The percentage of employees trained by gender and employee category (e.g. senior and intermediate management).	Comparative statistics
	B3.2 The average training hours completed per employee by gender and employee category.	Comparative statistics

Area	Aspects and INDEXs	Chapter
	B4 Labour Standards Information on: (a) the policies ; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to preventing child and forced labour.	Equality and Diversity
	B4.1 Description of measures to review employment practices to avoid child and forced labour.	Equality and Diversity
	B4.2 Description of steps taken to eliminate the situation when discovered.	Staff First
	B5 Supply Chain Management Policies on managing environmental and social risks of the supply chain.	Supplier Management
	B5.1 Number of suppliers by geographical region.	Supplier Management
	B5.2 Description of practices relating to engaging suppliers, number of suppliers where the practices are being implemented, how they are implemented and monitored.	Supplier Management
	B5.3 Description of practices used to identify environmental and social risks along the supply chain, and how they are implemented and monitored.	Supplier Management
	B5.4 Description of practices used to promote environmental preferable products and services when selecting suppliers, and how they are implemented and monitored.	Supplier Management
	B6 Social Responsibility Information on: (a) the policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to health and safety, advertising, labelling and privacy matters relating to products and services provided and methods of redress.	Quality is Foundation

Area	Aspects and INDEXs	Chapter
	B6.1 Percentage of total products sold or shipped subject to recalls for safety and health reasons.	Quality is Foundation
	B6.2 Number of products and service related complaints received and how they are dealt with.	Quality is Foundation
	B6.3 Description of practices relating to observing and protecting intellectual property rights.	Management and Protection of Intellectual Property
	B6.4 Description of quality assurance process and recall procedures.	Quality is Foundation
	B6.5 Description of consumer data protection and privacy policies, how they are implemented and monitored.	Customers First
	B7 Anti-corruption Information on: (a) the policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to bribery, extortion, fraud and money laundering.	Compliance and Anti-Corruption Management
	B7.1 Number of concluded legal cases regarding corrupt practices brought against the issuer or its employees during the reporting period and the outcomes of the cases.	Compliance and Anti-Corruption Management
	B7.2 Description of preventive measures and whistleblowing procedures, how they are implemented and monitored.	Compliance and Anti-Corruption Management
	B7.3 Description of anti-corruption training provided to directors and staff.	Compliance and Anti-Corruption Management
	B8 Community Policies on community engagement to understand the needs of the communities where the issuer operates and to ensure its activities takes into consideration communities' interests.	Giving Back to the Society
	B8.1 Focus areas of contribution (e.g. education, environment, labour needs, health, culture and sports).	Giving Back to the Society
	B8.2 Resources contributed (e.g. money or time) to the focus area.	Giving Back to the Society

Appendix II Comparative statistics

Environment			
Category	Unit	2019	2018
Energy Consumption			
Electricity	kWh	73,641,241.00	53,954,373.00
Intensity of electricity consumption	kWh/RMB0'000	184.86	212.88
Gas	m^3	5,389,428.00	3,381,315.00
Intensity of gas consumption	m^3/RMB0'000	13.53	13.34
Waste			
Hazardous waste	tonnes	1,152.00	857.11
Intensity of hazardous waste	tonnes/RMB0'000	0.0029	0.0034
Non-hazardous waste	tonnes	1,231.09	367.50
Intensity of non-hazardous waste	tonnes/RMB0'000	0.0031	0.0015
Total waste discharge	tonnes	2,383.09	1,224.61
Intensity of waste discharge	tonnes/RMB0'000	0.006	0.005
Water			
Production and office consumption	tonnes	719,168.00	519,787.00
Intensity of production and office consumption	tonnes/RMB0'000	1.81	2.05
Packaging Materials			
Packaging materials consumption	kg	15,600.00	10,287.00
Intensity of packaging materials consumption	kg/RMB0'000	0.039	0.041

Category	Unit	2019	2018
Greenhouse Gas[1]			
Scope I emissions	tonnes	10,584.38	4,182.00
Intensity of scope I emissions	tonnes/RMB0'000	0.03	0.02
Scope II emissions	tonnes	68,339.07	50,069.66[2]
Intensity of scope II emissions	tonnes/RMB0'000	0.17	0.20
Total emissions		78,923.45	54,251.66[3]
Total emission intensity	tonnes/RMB0'000	0.20	0.21
Exhaust Gas[4]			
Boiler exhaust emissions	Ten thousand Nm^3	5,389.00	3,139.00
Intensity of boiler exhaust emissions	Ten thousand Nm^3/ RMB0'000	0.01	0.01
Nitrogen oxide emissions	tonnes	3.28	2.35
Smoke and dust	tonnes	0.07	0.07

1 Scope 1 greenhouse gas: The carbon dioxide emission from the combustion of natural gas in the boiler is Scope I greenhouse gas. $CH_4+2O_2=CO_2+2H_2O$, so 1 cubic of natural gas produces 1 cubic of CO_2. CO_2's molar volume is 22.4L/mol while its material volume is 44g/mol. The mass of 1 cubic of CO_2 is 1L/22. 4L/mol *44g/mol=1.964g
Scope 2 greenhouse gas: The electricity used by our plants is generated by thermal power. The carbon dioxide generated is Scope 2 greenhouse gas. 0.928 kg CO_2 is produced when generating 1 kWh of electricity. The coefficient is derived from the provincial greenhouse gas guide No. [2011] 1041 issued by the Ministry of Development and Reform.

2 Restated the figures based on actual situation.

3 Restated the figures based on actual situation.

4 Boiler exhaust gas: Adopts 1. Pollution discharge coefficient method: Based on the gross calorific value of 36MJ/m^3 for natural gas under private use category 1 of the natural gas national standard, the low calorific value is calculated as 90%*36=32.4. According to Table 5-Standard Amount of Fume and Smoke under the Technical Specifications for Application and Issuance of Pollutant Permit-Boiler (《排污許可證申請與核發技術規範—鍋爐》), Vgy of natural gas boiler=0.285Qnet+0.343=0.285*32.4+0.343=9.577. The aforesaid gross calorific value is the minimum value, thus the result calculated is also the minimum and could be adjusted to the nearest 10 as appropriate; or 2. Material balance method: since $CH_4+2O_2=CO_2+2H_2O$, 2m^3 of oxygen is needed to burn 1m^3 of natural gas, while oxygen accounted for 21% of air, 9.52m^3 of air is needed for combustion. Since 1m^3 of carbon dioxide and 2m^3 of $vapor_2$ will be produced, the total amount of exhaust gas will be 10.52m^3. Considering that some N_2 in air participates the combustion, and that 1m^3 of nitrogen+2m^3 of oxygen produces 2m^3 of NO_2, the volumes of gas will reduce, thus the volume of the fume and smoke will be slightly lower than 10.52, and will be rounded to the nearest 10.
Nitrogen oxides: Total amount of boiler exhaust gas*emission concentration of nitrogen oxides. The emission concentration of nitrogen oxides is measured by third parties.
Smoke and dust: Total amount of boiler exhaust gas*emission concentration of smoke and dust. The emission concentration is measured by third parties.

Social Responsibility			
Category	Unit	2019	2018
Employee Structure			
Employee[5]	Total	5,666	4,141
Gender*	Female	3,037	2,271
	Male	2,507	1,870
Age*	Below age 30	3,688	2,543
	Age 30 to 50	1,760	1,507
	Above age 50	96	91
Degree distribution*	Doctor	424	364
	Master	2,317	1,723
	Bachelor	2,119	1,509
	Junior college	564	432
	High school and under	120	113
Employee type*	Full-time	5,544	4,141
	Part-time	—	—
Staffing level*	Senior	102	86
	Intermediate	322	237
	Entry	806	546
	General	4,314	3,272
Regional distribution	Overseas	122	33
	China	5,544	4,108
Employee Turnover			
Total amount	Total	572	358
Rate	Rate	10%	9%
Gender (rate)*	Female	5%	4%
	Male	5%	4%
Age (rate)*	Below age 30	6%	5%
	Age 30 to 50	4%	3%
	Above age 50	0%	0%
Region area (rate)	Overseas	0%	0%
	China	10%	9%

[5] Since the specific information of overseas employees cannot be obtained, the data range with asterisk is provided for domestic employees only.

Category	Unit	2019	2018
Number and Rate of Work-related Fatalities			
Amount	Total	0	0
Rate	Rate	0%	0%
Lost Days Due to Work Injury			
Amount	Total	46	17
The Percentage of Employee Trained[6]			
Percentage	Percentage	45%	48%
Gender*	Female	46%	47%
	Male	43%	49%
Staffing level*	Senior	60%	62%
	Intermediate	51%	52%
	Entry	40%	38%
	General	45%	49%
Average Hours of Employee Trained[7]			
Average hours per person	Hours	5	4
Gender*	Female	5	4
	Male	5	4
Staffing level*	Senior	12	8
	Intermediate	10	5
	Entry	4	3
	General	5	4
Supplier Distribution			
China	Percentage	94%	96%
Overseas	Percentage	6%	4%
Products Liabilities			
Products and services complaints	Pieces	2	0
Safety and health-led recalls	Pieces	0	0
Anti-corruption			
Number of corruption cases	Pieces	0	0

[6] Restated the 2018 figures based on actual situation
[7] Restated the 2018 figures based on actual situation

Deloitte. 德勤

TO THE BOARD OF DIRECTORS OF WUXI BIOLOGICS (CAYMAN) INC.
(incorporated in Cayman Islands with limited liability)

Opinion

We have audited the consolidated financial statements of WuXi Biologics (Cayman) Inc. (the "Company") and its subsidiaries (collectively referred to as "the Group") set out on pages 161 to 291, which comprise the consolidated statement of financial position as at December 31, 2019, and the consolidated statement of profit or loss and other comprehensive income, consolidated statement of changes in equity and consolidated statement of cash flows for the year then ended, and notes to the consolidated financial statements, including a summary of significant accounting policies.

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

Basis for Opinion

We conducted our audit in accordance with Hong Kong Standards on Auditing ("HKSAs") issued by the Hong Kong Institute of Certified Public Accountants ("HKICPA"). Our responsibilities under those standards are further described in the Auditor's Responsibilities for the Audit of the Consolidated Financial Statements section of our report. We are independent of the Group in accordance with the HKICPA's Code of Ethics for Professional Accountants ("the Code"), and we have fulfilled our other ethical responsibilities in accordance with the Code. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Key Audit Matters

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

Key audit matter	How our audit addressed the key audit matter

Impairment assessment of trade receivables and contract assets under ECL model

We identified impairment assessment of trade receivables and contract assets as a key audit matter due to significance of the Group's trade receivables and contract assets in the context of the Group's consolidated financial statements, combined with the management estimates involved.

As disclosed in Notes 25 and 26 to the consolidated financial statements, as at December 31, 2019, the carrying amount of trade receivables amounted to approximately RMB1,335 million (net of allowance for credit losses of RMB64 million) and contract assets amounted to approximately RMB40 million (net of allowance for credit losses of RMB8 million) which in total represented approximately 14.2% of the Group's total current assets. As disclosed in Note 4 to the consolidated financial statements, the estimates of impairment assessment of trade receivables and contract assets require the use of management estimates.

Our procedures in relation to the impairment assessment of trade receivables and contract assets included:

- Understanding key controls on how the management estimates the loss allowance for trade receivables and contract assets;
- Testing the integrity of information used by management to develop the provision matrix, including trade receivables and contract assets historical collection records, on a sample basis, by comparing individual items in the analysis with the supporting documents;
- Challenging management's basis and judgement in determining credit loss allowance on trade receivables and contract assets as at December 31, 2019, including their identification of credit impaired trade receivables and contract assets, the reasonableness of management's grouping based on internal credit ratings of the remaining trade debtors in the provision matrix, and the basis of estimated loss rates applied in each category in the provision matrix (with reference to historical default rates and forward-looking information); and
- Evaluating the disclosures regarding the impairment assessment of trade receivables and contract assets in Note 37(b) to the consolidated financial statements.

Key audit matter	How our audit addressed the key audit matter

Recognition of intangible assets and goodwill arising from acquisition of business

As disclosed in Notes 15 and 34 to the consolidated financial statements, in September 2019, the Group acquired 50.1% equity interest in Pinghu U-Pure Biosciences Co., Ltd. and BestChrom (Shanghai) Biosciences Co., Ltd. for a consideration of RMB301 million. As a result of the acquisition, principally intangible assets of RMB105 million (being technology of RMB58 million and customer relationship of RMB47 million) and goodwill of RMB185 million were recognized.

We identified the recognition of intangible assets and goodwill arising from the acquisition as a key audit matter due to the amounts involved are significant and estimating the fair value of identifiable intangible assets and goodwill arising from the acquisition is highly subjective as significant judgement and estimation is required to be exercised.

Our procedures in relation to the intangible assets and goodwill arising from acquisition of business included:

- Inspecting the acquisition agreements and other relevant documents to identify the key transaction terms, including the closing date, which are relevant in considering the accounting treatment for the acquisition;
- Enquiring for an understanding of the method used to evaluate the fair value of identifiable assets on the acquisition date with the external valuers appointed by the Group and evaluating their independence and competency;
- Involving our internal valuation specialists to assist us in evaluating the valuation methodologies and the key assumptions adopted in the valuation models, with reference to the requirements of the prevailing accounting standards;
- Challenging the key assumption and critical judgements adopted in the valuation models, which included projected future revenue growth and long-term growth rate based on our knowledge of the business and historical performance;
- Reviewing the mathematical calculation of intangible assets and goodwill prepared by management and the external valuers, and evaluation whether intangible assets and goodwill arising from the acquisition were recognized with reference to the requirements of the prevailing accounting standards; and
- Evaluating the disclosures regarding the acquisition of business in Notes 15 and 34 to the consolidated financial statements.

Other Information

The directors of the Company are responsible for the other information. The other information comprises the information included in the annual report, but does not include the consolidated financial statements and our auditor's report thereon.

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

In connection with our audit of the consolidated financial statements, our responsibility is to read the other information and, in doing so, consider whether the other information is materially inconsistent with the consolidated financial statements or our knowledge obtained in the audit or otherwise appears to be materially misstated. If, based on the work we have performed, we conclude that there is a material misstatement of this other information, we are required to report that fact. We have nothing to report in this regard.

Responsibilities of Directors and Those Charged with Governance for the Consolidated Financial Statements

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

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

Those charged with governance are responsible for overseeing the Group's financial reporting process.

Auditor's Responsibilities for the Audit of the Consolidated Financial Statements

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

Auditor's Responsibilities for the Audit of the Consolidated Financial Statements (Continued)

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

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

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

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

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

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

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

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

Auditor's Responsibilities for the Audit of the Consolidated Financial Statements (Continued)

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

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

The engagement partner on the audit resulting in the independent auditor's report is Joseph Wing Ming Chan.

Deloitte Touche Tohmatsu
Certified Public Accountants
Hong Kong

March 26, 2020

Consolidated Statement of Profit or Loss and Other Comprehensive Income

For the year ended December 31, 2019

	NOTES	2019 RMB'000	2018 RMB'000
Revenue	5	**3,983,687**	2,534,453
Cost of services		**(2,324,858)**	(1,516,698)
Gross profit		**1,658,829**	1,017,755
Other income	6	**179,869**	194,217
Impairment losses, net of reversal	9	**(6,842)**	(55,940)
Other gains and losses	7	**21,520**	21,128
Selling and marketing expenses		**(77,080)**	(42,430)
Administrative expenses		**(367,288)**	(227,721)
Research and development expenses		**(259,651)**	(169,287)
Share of loss of an associate	16	**(3,119)**	—
Finance costs	8	**(19,605)**	—
Profit before tax	9	**1,126,633**	737,722
Income tax expense	10	**(116,296)**	(107,257)
Profit for the year		**1,010,337**	630,465
Other comprehensive income			
Items that may be reclassified subsequently to profit or loss:			
Exchange differences arising on translation of foreign operations		**(2,628)**	102
Fair value gain on hedging instruments designated in cash flow hedges		**3,419**	11,701
Other comprehensive income for the year		**791**	11,803
Total comprehensive income for the year		**1,011,128**	642,268

Consolidated Statement of Profit or Loss and Other Comprehensive Income

For the year ended December 31, 2019

	NOTES	2019 RMB'000	2018 RMB'000
Profit for the year attributable to:			
Owners of the Company		**1,013,805**	630,592
Non-controlling interests		**(3,468)**	(127)
		1,010,337	630,465
Total comprehensive income for the year attributable to:			
Owners of the Company		**1,014,596**	642,395
Non-controlling interests		**(3,468)**	(127)
		1,011,128	642,268
		RMB	RMB
Earnings per share — Basic	12	**0.82**	0.52
— Diluted	12	**0.76**	0.48

Consolidated Statement of Financial Position

At December 31, 2019

	NOTES	2019 RMB'000	2018 RMB'000
Non-current Assets			
Property, plant and equipment	13	**6,338,457**	2,903,900
Right-of-use assets	14	**457,930**	—
Prepaid lease payments	19	**—**	168,623
Goodwill	15	**185,408**	—
Intangible assets	18	**415,845**	331,813
Investment in an associate	16	**30,857**	—
Equity instruments at fair value through other comprehensive income ("FVTOCI")	20	**138,826**	136,578
Financial assets at fair value through profit or loss ("FVTPL")	21A	**282,479**	55,699
Derivative financial assets	30	**—**	9,847
Deferred tax assets	17	**36,043**	22,481
Other long-term deposits and prepayments	22	**44,568**	19,021
		7,930,413	3,647,962
Current Assets			
Inventories	23	**399,389**	227,189
Trade and other receivables	25	**1,736,659**	1,067,235
Contract assets	26	**39,981**	36,026
Contract costs	24	**284,235**	294,569
Prepaid lease payments	19	**—**	2,910
Tax recoverable		**10**	793
Derivative financial assets	30	**31,446**	6,874
Financial assets at FVTPL	21A	**85,000**	—
Other financial assets	21B	**458,000**	—
Pledged bank deposits	27	**431,640**	25,197
Bank balances and cash	27	**6,205,496**	4,084,395
		9,671,856	5,745,188
Current Liabilities			
Trade and other payables	28	**1,843,652**	711,779
Borrowings	31	**506,107**	—
Contract liabilities	29	**336,395**	499,743
Income tax payable		**142,149**	88,244
Lease liabilities	32	**26,489**	—
Derivative financial liabilities	30	**16,406**	18,991
		2,871,198	1,318,757
Net Current Assets		**6,800,658**	4,426,431
Total Assets Less Current Liabilities		**14,731,071**	8,074,393

Consolidated Statement of Financial Position

At December 31, 2019

	NOTES	2019 RMB'000	2018 RMB'000
Non-current Liabilities			
Deferred tax liabilities	17	**24,734**	2,680
Borrowings	31	**1,395,240**	—
Lease liabilities	32	**266,112**	—
Derivative financial liabilities	30	**—**	77
Deferred income	33	**148,885**	77,408
		1,834,971	80,165
Net Assets		**12,896,100**	7,994,228
Capital and Reserves			
Share capital	35	**214**	202
Reserves		**12,784,149**	7,993,553
Equity attributable to owners of the Company		**12,784,363**	7,993,755
Non-controlling interests		**111,737**	473
Total Equity		**12,896,100**	7,994,228

The consolidated financial statements on pages 161 to 291 were approved and authorized for issue by the Board of Directors on March 26, 2020 and are signed on its behalf by:

Zhisheng Chen
DIRECTOR

Weichang Zhou
DIRECTOR

Consolidated Statement of Change in Equity

For the year ended December 31, 2019

	Attributable to owners of the Company										
	Share capital RMB'000	Share premium RMB'000	Statutory reserve RMB'000 (Note i)	Equity-settled share-based compensation reserve RMB'000 (Note ii)	Cash flow hedging reserve RMB'000	Group reorganization reserve RMB'000 (Note iii)	Foreign currency translation reserve RMB'000	Retained earnings RMB'000	Sub-total RMB'000	Non-controlling interests RMB'000	Total RMB'000
At January 1, 2018	192	3,436,155	51,939	146,472	–	(4,636)	–	386,640	4,016,762	–	4,016,762
Profit for the year	–	–	–	–	–	–	–	630,592	630,592	(127)	630,465
Other comprehensive income for the year											
– Fair value adjustments on foreign currency forward contracts designated as cash flow hedges	–	–	–	–	11,701	–	–	–	11,701	–	11,701
– Exchange difference arising from translation of foreign operations	–	–	–	–	–	–	102	–	102	–	102
Total comprehensive income for the year	–	–	–	–	11,701	–	102	630,592	642,395	(127)	642,268
Transfer to statutory reserve	–	–	55,006	–	–	–	–	(55,006)	–	–	–
Recognition of equity-settled share-based compensation	–	–	–	128,374	–	–	–	–	128,374	–	128,374
Exercise of pre-IPO share options	1	27,375	–	(7,842)	–	–	–	–	19,534	–	19,534
Issue of new shares (Note 35)	9	3,205,917	–	–	–	–	–	–	3,205,926	–	3,205,926
Transaction costs attributable to issue of new shares	–	(19,236)	–	–	–	–	–	–	(19,236)	–	(19,236)
Contribution from non-controlling shareholders	–	–	–	–	–	–	–	–	–	600	600
At December 31, 2018	202	6,650,211	106,945	267,004	11,701	(4,636)	102	962,226	7,993,755	473	7,994,228
Adjustments (Note 2)	–	–	–	–	–	–	–	(2,899)	(2,899)	–	(2,899)
At January 1, 2019 (restated)	**202**	**6,650,211**	**106,945**	**267,004**	**11,701**	**(4,636)**	**102**	**959,327**	**7,990,856**	**473**	**7,991,329**
Profit for the year	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**1,013,805**	**1,013,805**	**(3,468)**	**1,010,337**
Other comprehensive income for the year											
– Fair value adjustments on foreign currency forward contracts designated as cash flow hedges	**–**	**–**	**–**	**–**	**(13,477)**	**–**	**–**	**–**	**(13,477)**	**–**	**(13,477)**
– Recycling from cash flow hedging reserve to profits or loss arising from foreign currency forward contracts	**–**	**–**	**–**	**–**	**16,896**	**–**	**–**	**–**	**16,896**	**–**	**16,896**
– Exchange difference arising from translation of foreign operations	**–**	**–**	**–**	**–**	**–**	**–**	**(2,628)**	**–**	**(2,628)**	**–**	**(2,628)**
Total comprehensive income for the year	**–**	**–**	**–**	**–**	**3,419**	**–**	**(2,628)**	**1,013,805**	**1,014,596**	**(3,468)**	**1,011,128**
Transfer to statutory reserve	**–**	**–**	**94,237**	**–**	**–**	**–**	**–**	**(94,237)**	**–**	**–**	**–**
Recognition of equity-settled share-based compensation	**–**	**–**	**–**	**203,938**	**–**	**–**	**–**	**–**	**203,938**	**–**	**203,938**
Exercise of pre-IPO share options	**2**	**97,785**	**–**	**(35,035)**	**–**	**–**	**–**	**–**	**62,752**	**–**	**62,752**
Issue of new shares (Note 35)	**10**	**3,533,604**	**–**	**–**	**–**	**–**	**–**	**–**	**3,533,614**	**–**	**3,533,614**
Transaction costs attributable to issue of new shares	**–**	**(21,393)**	**–**	**–**	**–**	**–**	**–**	**–**	**(21,393)**	**–**	**(21,393)**
Acquisition of subsidiaries (Note 34)	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**114,732**	**114,732**
At December 31, 2019	**214**	**10,260,207**	**201,182**	**435,907**	**15,120**	**(4,636)**	**(2,526)**	**1,878,895**	**12,784,363**	**111,737**	**12,896,100**

Notes:

(i) In accordance with the Articles of Association of all subsidiaries of WuXi Biologics (Cayman) Inc. (the "Company") established in the People's Republic of China (the "PRC"), they are required to transfer 10% of the profit after tax to the statutory reserve until the reserve reaches 50% of the registered capital. Transfer to this reserve must be made before distributing dividends to equity holders. The statutory reserve can be used to make up for previous years' losses, expand the existing operations or convert into additional capital of the subsidiaries.

(ii) The amount represents the equity-settled share-based compensation in respect of share options for shares of WuXi PharmaTech (Cayman) Inc. ("WuXi PharmaTech"), the then ultimate holding company of the Company before the completion of the group reorganization of the Company (see Note iii below), for the equity instruments granted by WuXi PharmaTech to certain directors of the Company and employees of the Company and its subsidiaries (collectively referred to as the "Group") for their service rendered to the Group and the equity-settled share-based compensation under the Company's pre-IPO share option scheme (the "Pre-IPO Share Option Scheme") and the Company's restricted share award scheme (the "Restricted Share Award Scheme") as disclosed in Note 43.

(iii) Group reorganization reserve represents the combined capital contribution of the entities comprising the Group, net of the settlement of the payables to their then shareholders; and the administration service cost borne or on behalf of the fellow subsidiaries by the Company prior to the completion of a group reorganization to rationalize the current group structure as at December 31, 2015.

Consolidated Statement of Cash Flows

For the year ended December 31, 2019

	2019 RMB'000	2018 RMB'000
OPERATING ACTIVITIES		
Profit before tax	**1,126,633**	737,722
Adjustments for:		
Finance costs	**19,605**	—
Interest income	**(55,129)**	(78,394)
Share of loss of an associate	**3,119**	—
Depreciation for property, plant and equipment	**172,547**	131,563
Amortization of intangible assets	**20,814**	9,969
Depreciation of right-of-use assets	**28,004**	—
Amortization of prepaid lease payments	**—**	2,238
Amortization of retention bonus	**3,012**	2,113
Impairment loss (reversal)		
— trade and other receivables	**5,128**	60,271
— contract assets	**1,714**	(4,331)
Write down of inventories	**3,561**	4,041
Write down of contract costs	**6,897**	2,475
Net foreign exchange loss (gain)	**9,187**	(17,736)
Share-based compensation expense	**203,938**	128,374
Income from government grants and subsidies	**(10,137)**	(2,845)
Interest income from other financial assets	**(8,727)**	—
Investment income from financial assets at FVTPL	**(11,896)**	(10,374)
Gain on changes in fair value of financial assets at FVTPL	**(3,515)**	(796)
(Gain) loss on derivative financial liabilities	**(14,047)**	93,942
Loss on disposal of property, plant and equipment	**1,437**	1,215
Operating cash flows before movements in working capital	**1,502,145**	1,059,447
Increase in inventories	**(94,005)**	(95,683)
Decrease (increase) in contract costs	**111,563**	(14,075)
Increase in trade and other receivables	**(643,856)**	(452,521)
Increase in contract assets	**(5,669)**	(11,064)
Increase in other long-term deposits	**(1,218)**	(9,756)
(Decrease) increase in contract liabilities	**(164,862)**	153,853
Increase in trade and other payables	**579,621**	183,509
Increase in deferred income	**2,361**	—
Cash generated from operations	**1,286,080**	813,710
Income tax paid	**(78,001)**	(52,103)
NET CASH PROVIDED BY OPERATING ACTIVITIES	**1,208,079**	761,607

Consolidated Statement of Cash Flows

For the year ended December 31, 2019

	2019 RMB'000	2018 RMB'000
INVESTING ACTIVITIES		
Proceeds on disposal of property, plant and equipment	**47,645**	530
Purchase of property, plant and equipment	**(3,210,583)**	(1,340,586)
Purchase of prepaid lease payments	**—**	(156,643)
Purchase of equity instruments at FVTOCI	**—**	(130,993)
Net cash outflow on acquisition of subsidiaries (Note 34)	**(267,023)**	—
Purchase of intangible assets	**(1,191)**	(333,254)
Payments for right-of-use assets	**(22,881)**	—
Payments for rental deposits	**(4,531)**	—
Acquisition of an associate	**(33,798)**	—
Government grants and subsidies received	**79,253**	60,542
Withdrawal of pledged bank deposits	**33,164**	71,512
Placement of pledged bank deposits	**(439,607)**	(75,520)
Withdrawal of other financial assets	**1,041,891**	—
Placement of other financial assets	**(1,496,099)**	—
Withdrawal of financial assets at FVTPL	**2,706,722**	1,444,708
Placement of financial assets at FVTPL	**(2,961,364)**	(846,325)
Receipt of interest from bank	**53,618**	79,755
Withdrawal of time deposits	**164,993**	890,087
Placement of time deposits	**(164,993)**	—
Settlement of derivative financial instruments	**(19,146)**	(79,887)
NET CASH USED IN INVESTING ACTIVITIES	**(4,493,930)**	(416,074)
FINANCING ACTIVITIES		
Proceeds from bank borrowings	**2,049,825**	—
Repayment of bank borrowings	**(140,000)**	—
Interest paid	**(49,801)**	—
Repayments of lease liabilities	**(22,174)**	—
Proceeds from issue of ordinary shares	**3,533,614**	3,205,926
Payment of issue cost	**(21,393)**	(19,236)
Proceeds from exercise of pre-IPO share options	**62,752**	19,534
Proceeds from contribution from non-controlling shareholders of a subsidiary	**—**	600
NET CASH PROVIDED BY FINANCING ACTIVITIES	**5,412,823**	3,206,824
Effects of exchange rate changes	**(5,871)**	28,157
NET INCREASE IN CASH AND CASH EQUIVALENTS	**2,121,101**	3,580,514
CASH AND CASH EQUIVALENTS AT BEGINNING OF YEAR	**4,084,395**	503,881
CASH AND CASH EQUIVALENTS AT END OF YEAR, REPRESENTED BY BANK BALANCES AND CASH	**6,205,496**	4,084,395

1. GENERAL INFORMATION

The Company was established in the Cayman Islands as an exempted company with limited liability on February 27, 2014, and its shares have been listed on the Main Board of The Stock Exchange of Hong Kong Limited since June 13, 2017. The addresses of the registered office and principal place of business of the Company are disclosed in the corporate information section to the annual report. The Company is an investment holding company. The Group is principally engaged in provision of discovery, development and manufacturing of biologics services.

As at the date of issuance of these consolidated financial statements, the immediate and ultimate holding company of the Company is WuXi Biologics Holdings Limited ("Biologics Holdings"), a company incorporated in the British Virgin Islands, which is ultimately controlled by Dr. Ge Li ("Dr. Li"); Dr. Ning Zhao, the spouse of Dr. Li; Mr. Xiaozhong Liu and Mr. Zhaohui Zhang who are all acting in concert (collectively known as "Controlling Shareholders").

The functional currency of the Company is Renminbi ("RMB"), which is the same as the presentation currency of the consolidated financial statements.

2. APPLICATION OF NEW AND AMENDMENTS TO INTERNATIONAL FINANCIAL REPORTING STANDARDS ("IFRSs")

New and Amendments to IFRSs that are mandatorily effective for the current year

The Group has applied the following new and amendments to IFRSs issued by the International Accounting Standards Board (the "IASB") for the first time in the current year:

IFRS 16	*Leases*
IFRIC 23	*Uncertainty over Income Tax Treatments*
Amendments to IFRS 9	*Prepayment Features with Negative Compensation*
Amendments to IAS 19	*Plan Amendment, Curtailment or Settlement*
Amendments to IAS 28	*Long-term Interests in Associates and Joint Ventures*
Amendments to IFRSs	*Annual Improvements to IFRSs 2015–2017 Cycle*

Except as described below, the application of the new and amendments to IFRSs in the current year has had no material impact on the Group's financial performance and positions for the current and prior years and/or on the disclosures set out in these consolidated financial statements.

2.1 IFRS 16 Leases

The Group has applied IFRS 16 for the first time in the current year. IFRS 16 superseded IAS 17 *Leases* ("IAS 17"), and the related interpretations.

2. APPLICATION OF NEW AND AMENDMENTS TO INTERNATIONAL FINANCIAL REPORTING STANDARDS ("IFRSs") (Continued)

2.1 IFRS 16 Leases (Continued)

Definition of a lease

The Group has elected the practical expedient to apply IFRS 16 to contracts that were previously identified as leases applying IAS 17 and IFRIC 4 *Determining whether an Arrangement contains a Lease* and not apply this standard to contracts that were not previously identified as containing a lease. Therefore, the Group has not reassessed contracts which already existed prior to the date of initial application.

For contracts entered into or modified on or after January 1, 2019, the Group applies the definition of a lease in accordance with the requirements set out in IFRS 16 in assessing whether a contract contains a lease.

As a lessee

The Group has applied IFRS 16 retrospectively with the cumulative effect recognized at the date of initial application, January 1, 2019.

As at January 1, 2019, the Group recognized additional lease liabilities and measured right-of-use assets at the carrying amounts as if IFRS 16 had been applied since commencement dates, but discounted using the incremental borrowing rates of the relevant group entities at the date of initial application by applying IFRS 16.C8(b)(i) transition. Any difference at the date of initial application is recognized in the opening retained earnings and comparative information has not been restated.

When applying the modified retrospective approach under IFRS 16 at transition, the Group applied the following practical expedients to leases previously classified as operating leases under IAS 17, on lease-by-lease basis, to the extent relevant to the respective lease contracts:

i. relied on the assessment of whether leases are onerous by applying IAS 37 *Provisions, Contingent Liabilities and Contingent Assets* as an alternative of impairment review;

ii. excluded initial direct costs from measuring the right-of-use assets at the date of initial application; and

iii. used hindsight based on facts and circumstances as at date of initial application in determining the lease term for the Group's leases with extension and termination options.

2. APPLICATION OF NEW AND AMENDMENTS TO INTERNATIONAL FINANCIAL REPORTING STANDARDS ("IFRSs") (Continued)

2.1 IFRS 16 Leases (Continued)

As a lessee (Continued)

When recognizing the lease liabilities for leases previously classified as operating leases, the Group has applied incremental borrowing rates of the relevant group entities at the date of initial application. The incremental borrowing rates applied ranged from 4.75% to 4.90% per annum.

	NOTE	At January 1, 2019 RMB'000
Operating lease commitments disclosed as at December 31, 2018		**239,229**
Less: Value added tax included in operating lease commitments		**(20,935)**
		218,294
Lease liabilities discounted at relevant incremental borrowing rates		**188,153**
Add: Extension options reasonably certain to be exercised	#	**50,385**
Less: Recognition exemption — short-term leases		**(165)**
Early termination of a lease contract		**(9,283)**
Lease liabilities as at January 1, 2019		**229,090**
Analyzed as		
Current		**26,524**
Non-current		**202,566**
		229,090

The amount represents the lease liabilities arising from a lease contract with extension option that the Group is reasonably certain to exercise. The lease contract is a ten-year lease of a plant with an extension option which allows the Group to choose to extend the lease for an additional ten years at a rate pre-determined specified in the lease contract. The Group determines that it is reasonably certain to exercise the extension option based on facts and circumstances as at January 1, 2019. The rental of the lease contract shall remain unchanged for five years from the commencement date of the lease contract, and will increase every five years based on negotiation according to the market price while with a 10% increase cap. The rental for the extension period shall follow this arrangement.

2. APPLICATION OF NEW AND AMENDMENTS TO INTERNATIONAL FINANCIAL REPORTING STANDARDS ("IFRSs") (Continued)

2.1 IFRS 16 Leases (Continued)

As a lessee (Continued)

The carrying amount of right-of-use assets as at January 1, 2019 comprises the following:

	NOTE	Right-of-use assets RMB'000
Right-of-use assets relating to operating leases recognized upon application of IFRS 16	(a)	**212,821**
Reclassified from prepaid lease payments	(b)	**171,533**
		384,354
By class:		
Leasehold lands		**171,533**
Buildings		**212,821**
		384,354

(a) As at January 1, 2019, the Group measured right-of-use assets at the carrying amounts as if IFRS 16 had been applied since the commencement dates of the leases by applying IFRS 16.C8(b)(i) transition. Right-of-use assets are depreciated on a straight-line basis over the shorter of its estimated useful life and the lease term. As at January 1, 2019, the right-of-use assets measured under the application of IFRS 16.C8(b)(i) transition amounted to RMB212,821,000.

(b) Upfront payments for leasehold lands in the PRC and Ireland were classified as prepaid lease payments as at December 31, 2018. Upon application of IFRS 16, the current and non-current portion of prepaid lease payments amounting to RMB2,910,000 and RMB168,623,000 respectively were reclassified to right-of-use assets.

2. APPLICATION OF NEW AND AMENDMENTS TO INTERNATIONAL FINANCIAL REPORTING STANDARDS ("IFRSs") (Continued)

2.1 IFRS 16 Leases (Continued)

As a lessee (Continued)

The following table summarizes the impact of transition to IFRS 16 on retained earnings as at January 1, 2019.

	NOTE	Impact of adopting IFRS 16 as at January 1, 2019 RMB'000
Retained earnings		
Net additional expenses incurred when measuring right-of-use assets since lease commencement date under IFRS 16	*	**5,645**
Tax effects		**(2,746)**
Impact as at January 1, 2019		**2,899**

* As at January 1, 2019, the Group recognized right-of-use assets at the carrying amounts as if IFRS 16 had been applied since the commencement dates of the leases, but discounted using the incremental borrowing rates of relevant group entities at the date of initial application by applying IFRS 16.C8(b)(i) transition. Right-of-use assets are depreciated on a straight-line basis over the shorter of its estimated useful life and the lease term. Lease liabilities are measured at the present value of remaining lease payments that are unpaid at January 1, 2019. The difference between the carrying amounts of the right-of-use assets and lease liabilities at January 1, 2019 is charged to opening retained earnings as at January 1, 2019.

2. APPLICATION OF NEW AND AMENDMENTS TO INTERNATIONAL FINANCIAL REPORTING STANDARDS ("IFRSs") (Continued)

2.1 IFRS 16 Leases (Continued)

As a lessee (Continued)

The following adjustments were made to the amounts recognized in the consolidated statement of financial position as at January 1, 2019. Line items that were not affected by the changes have not been included.

	NOTE	Carrying amounts previously reported at December 31, 2018 RMB'000	Adjustments RMB'000	**Carrying amounts under IFRS 16 at January 1, 2019 RMB'000**
Non-current Assets				
Prepaid lease payments	(b)	168,623	(168,623)	**—**
Right-of-use assets		—	384,354	**384,354**
Other long-term deposits	(c)	19,021	(2,392)	**16,629**
Property, plant and equipment	(c)	2,903,900	267	**2,904,167**
Deferred tax assets		22,481	2,746	**25,227**
Current Assets				
Prepaid lease payments	(b)	2,910	(2,910)	**—**
Contract costs	(c)	294,569	(704)	**293,865**
Capital and Reserves				
Reserves		7,993,553	(2,899)	**7,990,654**
Current Liabilities				
Trade and other payables	(c)	711,779	(13,453)	**698,326**
Lease liabilities		—	26,524	**26,524**
Non-current Liabilities				
Lease liabilities		—	202,566	**202,566**

2. APPLICATION OF NEW AND AMENDMENTS TO INTERNATIONAL FINANCIAL REPORTING STANDARDS ("IFRSs") (Continued)

2.1 IFRS 16 Leases (Continued)

As a lessee (Continued)

(c) As at January 1, 2019, the Group recognized right-of-use assets at the carrying amounts as if IFRS 16 had been applied since the commencement dates of the leases, but discounted using the incremental borrowing rates of relevant group entities at the date of initial application by applying IFRS 16.C8(b)(i) transition. Right-of-use assets are depreciated on a straight-line basis over the shorter of its estimated useful life and the lease term. Lease liabilities are measured at the present value of remaining lease payments that are unpaid at January 1, 2019. The difference between the carrying amounts of the right-of-use assets and lease liabilities at January 1, 2019 is charged to opening retained earnings as at January 1, 2019. As at January 1, 2019, the application of IFRS 16.C8(b)(i) transition resulted in corresponding adjustments to refundable rental deposits (included in other long-term deposits), construction in progress (included in property, plant and equipment), contract costs and accrued lease liabilities (included in trade and other payables).

Note: For the purpose of reporting cash flows from operating activities under indirect method for the year ended December 31, 2019, movements in working capital have been computed based on opening consolidated statement of financial position as at January 1, 2019 as disclosed above.

New and amendments to IFRSs in issue but not yet effective

The Group has not early applied the following new and amendments to IFRSs that have been issued but are not yet effective:

IFRS 17	*Insurance Contracts*[1]
Amendments to IFRS 3	*Definition of a Business*[2]
Amendments to IFRS 10 and IAS 28	*Sale or Contribution of Assets between an Investor and its Associate or Joint Venture*[3]
Amendments to IAS 1	*Classification of Liabilities as Current or Non-current*[5]
Amendments to IAS 1 and IAS 8	*Definition of Material*[4]
Amendments to IFRS 9, IAS 39 and IFRS 7	*Interest Rate Benchmark Reform*[4]

1 Effective for annual periods beginning on or after January 1, 2021.
2 Effective for business combinations and asset acquisitions for which the acquisition date is on or after the beginning of the first annual period beginning on or after January 1, 2020.
3 Effective for annual periods beginning on or after a date to be determined.
4 Effective for annual periods beginning on or after January 1, 2020.
5 Effective for annual periods beginning on or after January 1, 2022.

2. APPLICATION OF NEW AND AMENDMENTS TO INTERNATIONAL FINANCIAL REPORTING STANDARDS ("IFRSs") (Continued)

New and amendments to IFRSs in issue but not yet effective (Continued)

In addition to the above new and amendments to IFRSs, a revised Conceptual Framework for Financial Reporting was issued in 2018. Its consequential amendments, *the Amendments to References to the Conceptual Framework in IFRS Standards*, will be effective for annual periods beginning on or after January 1, 2020.

Except for the new and amendments to IFRSs mentioned below, the directors of the Company anticipate that the application of all other new and amendments to IFRSs will have no material impact on the consolidated financial statements in the foreseeable future.

Conceptual Framework for Financial Reporting 2018 (the "New Framework") and the Amendments to References to the Conceptual Framework in IFRS Standards

The New Framework:

- reintroduces the terms stewardship and prudence;
- introduces a new asset definition that focuses on rights and a new liability definition that is likely to be broader than the definition it replaces, but does not change the distinction between a liability and an equity instrument;
- discusses historical cost and current value measures, and provides additional guidance on how to select a measurement basis for a particular asset or liability;
- states that the primary measure of financial performance is profit or loss, and that only in exceptional circumstances other comprehensive income will be used and only for income or expenses that arise from a change in the current value of an asset or liability; and
- discusses uncertainty, derecognition, unit of account, the reporting entity and combined financial statements.

Consequential amendments have been made so that references in certain IFRSs have been updated to the New Framework, whilst some IFRSs are still referred to the previous versions of the framework. These amendments are effective for annual periods beginning on or after January 1, 2020, with earlier application permitted. Other than specific standards which still refer to the previous versions of the framework, the Group will rely on the New Framework on its effective date in determining the accounting policies especially for transactions, events or conditions that are not otherwise dealt with under the accounting standards.

3. SIGNIFICANT ACCOUNTING POLICIES

The consolidated financial statements have been prepared in accordance with International Financial Reporting Standards issued by the International Accounting Standards Board. In addition, the consolidated financial statements include applicable disclosures required by the Rules Governing the Listing of Securities on The Stock Exchange of Hong Kong Limited ("Listing Rules") and by the Hong Kong Companies Ordinance.

The consolidated financial statements have been prepared on the historical cost basis except for certain financial instruments that are measured at fair values at the end of the reporting period, as explained in the accounting policies set out below.

Historical cost is generally based on the fair value of the consideration given in exchange for goods and services.

Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date, regardless of whether that price is directly observable or estimated using another valuation technique. In estimating the fair value of an asset or a liability, the Group takes into account the characteristics of the asset or liability if market participants would take those characteristics into account when pricing the asset or liability at the measurement date. Fair value for measurement and/or disclosure purposes in the consolidated financial statements is determined on such a basis, except for share-based payment transactions that are within the scope of IFRS 2 *Share-based Payment*, leasing transactions that are accounted for in accordance with IFRS 16 (since January 1, 2019) or IAS 17 (before application of IFRS 16) and measurements that have some similarities to fair value but are not fair value, such as net realizable value in IAS 2 *Inventories* or value in use in IAS 36 *Impairment of Assets*.

In addition, for financial reporting purposes, fair value measurements are categorized into Level 1, 2 or 3 based on the degree to which the inputs to the fair value measurements are observable and the significance of the inputs to the fair value measurement in its entirety, which are described as follows:

- Level 1 inputs are quoted prices (unadjusted) in active markets for identical assets or liabilities that the entity can access at the measurement date;

- Level 2 inputs are inputs, other than quoted prices included within Level 1, that are observable for the asset or liability, either directly or indirectly; and

- Level 3 inputs are unobservable inputs for the asset or liability.

3. SIGNIFICANT ACCOUNTING POLICIES (Continued)

The principal accounting policies are set out below.

Basis of consolidation

The consolidated financial statements incorporate the financial statements of the Company and entities controlled by the Company and its subsidiaries. Control is achieved when the Company:

- has power over the investee;
- is exposed, or has rights, to variable returns from its involvement with the investee; and
- has the ability to use its power to affect its returns.

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 listed above.

Consolidation of a subsidiary begins when the Company obtains control over the subsidiary and ceases when the Company loses control of the subsidiary. Specifically, income and expenses of a subsidiary acquired or disposed of during the year are included in the consolidated statement of profit or loss and other comprehensive income from the date the Group gains control until the date when the Group ceases to control the subsidiary.

Profit or loss and each item of other comprehensive income are attributed to the owners of the Company and to the non-controlling interests. Total comprehensive income of subsidiaries is attributed to the owners of the Company and to the non-controlling interests even if this results in the non-controlling interests having a deficit balance.

When necessary, adjustments are made to the financial statements of subsidiaries to bring their accounting policies in line with the Group's accounting policies.

All intragroup assets and liabilities, equity, income, expenses and cash flows relating to transactions between members of the Group are eliminated in full on consolidation.

Non-controlling interests in subsidiaries are presented separately from the Group's equity therein, which represent present ownership interests entitling their holders to a proportionate share of net assets of the relevant subsidiaries upon liquidation.

3. SIGNIFICANT ACCOUNTING POLICIES (Continued)

Business combinations

Acquisitions of businesses are accounted for using the acquisition method. The consideration transferred in a business combination is measured at fair value, which is calculated as the sum of the acquisition-date fair values of the assets transferred by the Group, liabilities incurred by the Group to the former owners of the acquiree and the equity interests issued by the Group in exchange for control of the acquiree. Acquisition-related costs are generally recognized in profit or loss as incurred.

At the acquisition date, the identifiable assets acquired and the liabilities assumed are recognized at their fair value, except that:

- deferred tax assets or liabilities, and assets or liabilities related to employee benefit arrangements are recognized and measured in accordance with IAS 12 *Income Taxes* and IAS 19 *Employee Benefits* respectively;

- liabilities or equity instruments related to share-based payment arrangements of the acquiree or share-based payment arrangements of the Group entered into to replace share-based payment arrangements of the acquiree are measured in accordance with IFRS 2 *Share-based Payment* at the acquisition date (see the accounting policy below);

- assets (or disposal groups) that are classified as held for sale in accordance with IFRS 5 *Non-current Assets Held for Sale and Discontinued Operations* are measured in accordance with that standard; and

- lease liabilities are recognized and measured at the present value of the remaining lease payments (as defined in IFRS 16) as if the acquired leases were new leases at the acquisition date, except for leases for which the lease term ends within 12 months of the acquisition date. Right-of-use assets are recognized and measured at the same amount as the relevant lease liabilities, adjusted to reflect favourable or unfavourable terms of the lease when compared with market terms.

Goodwill is measured as the excess of the sum of the consideration transferred, the amount of any non-controlling interests in the acquiree, and the fair value of the acquirer's previously held equity interest in the acquiree (if any) over the net amount of the identifiable assets acquired and the liabilities assumed as at acquisition date. If, after re-assessment, the net amount of the identifiable assets acquired and liabilities assumed exceeds the sum of the consideration transferred, the amount of any non-controlling interests in the acquiree and the fair value of the acquirer's previously held interest in the acquiree (if any), the excess is recognized immediately in profit or loss as a bargain purchase gain.

Non-controlling interests that are present ownership interests and entitle their holders to a proportionate share of the relevant subsidiary's net assets in the event of liquidation are initially measured at the non-controlling interests' proportionate share of the recognized amounts of the acquiree's identifiable net assets or at fair value. The choice of measurement basis is made on a transaction-by-transaction basis.

3. SIGNIFICANT ACCOUNTING POLICIES (Continued)

Goodwill

Goodwill arising on an acquisition of a business is carried at cost as established at the date of acquisition of the business (see the accounting policy above) less accumulated impairment losses, if any.

For the purposes of impairment testing, goodwill is allocated to each of the Group's cash-generating units (or group of cash-generating units) that is expected to benefit from the synergies of the combination, which represent the lowest level at which the goodwill is monitored for internal management purposes and not larger than an operating segment.

A cash-generating unit (or group of cash-generating units) to which goodwill has been allocated is tested for impairment annually or more frequently when there is indication that the unit may be impaired. For goodwill arising on an acquisition in a reporting period, the cash-generating unit (or group of cash-generating units) to which goodwill has been allocated is tested for impairment before the end of that reporting period. If the recoverable amount is less than its carrying amount, the impairment loss is allocated first to reduce the carrying amount of any goodwill and then to the other assets on a pro-rata basis based on the carrying amount of each asset in the unit (or group of cash-generating units).

On disposal of the relevant cash-generating unit or any of the cash-generating unit within the group of cash-generating units, the attributable amount of goodwill is included in the determination of the amount of profit or loss on disposal. When the Group disposes of an operation within the cash-generating unit (or a cash-generating unit within a group of cash-generating units), the amount of goodwill disposed of is measured on the basis of the relative values of the operation (or the cash-generating unit) disposed of and the portion of the cash-generating unit (or the group of cash-generating units) retained.

The Group's policy for goodwill arising on the acquisition of an associate is described below.

3. SIGNIFICANT ACCOUNTING POLICIES (Continued)

Investment in associates

An associate is an entity over which the Group has significant influence. Significant influence is the power to participate in the financial and operating policy decisions of the investee but is not control or joint control over those policies.

The results and assets and liabilities of associates are incorporated in these consolidated financial statements using the equity method of accounting. The financial statements of associates used for equity accounting purposes are prepared using uniform accounting policies as those of the Group for like transactions and events in similar circumstances. Under the equity method, an investment in an associate is initially recognized in the consolidated statement of financial position at cost and adjusted thereafter to recognize the Group's share of the profit or loss and other comprehensive income of the associate. Changes in net assets of the associate other than profit or loss and other comprehensive income are not accounted for unless such changes resulted in changes in ownership interest held by the Group. When the Group's share of losses of an associate exceeds the Group's interest in that associate (which includes any long-term interests that, in substance, form part of the Group's net investment in the associate), the Group discontinues recognizing its share of further losses. Additional losses are recognized only to the extent that the Group has incurred legal or constructive obligations or made payments on behalf of the associate.

An investment in an associate is accounted for using the equity method from the date on which the investee becomes an associate. On acquisition of the investment in an associate, any excess of the cost of the investment over the Group's share of the net fair value of the identifiable assets and liabilities of the investee is recognized as goodwill, which is included within the carrying amount of the investment. Any excess of the Group's share of the net fair value of the identifiable assets and liabilities over the cost of the investment, after reassessment, is recognized immediately in profit or loss in the period in which the investment is acquired.

The Group assesses whether there is an objective evidence that the interest in an associate may be impaired. When any objective evidence exists, the entire carrying amount of the investment (including goodwill) is tested for impairment in accordance with IAS 36 as a single asset by comparing its recoverable amount (higher of value in use and fair value less costs of disposal) with its carrying amount. Any impairment loss recognized is not allocated to any asset, including goodwill, forms part of the carrying amount of the investment. Any reversal of that impairment loss is recognized in accordance with IAS 36 to the extent that the recoverable amount of the investment subsequently increases.

3. SIGNIFICANT ACCOUNTING POLICIES (Continued)

Investment in associates (Continued)

When the Group ceases to have significant influence over an associate, it is accounted for as a disposal of the entire interest in the investee with a resulting gain or loss being recognized in profit or loss. When the Group retains an interest in the former associate and the retained interest is a financial asset within the scope of IFRS 9, the Group measures the retained interest at fair value at that date and the fair value is regarded as its fair value on initial recognition. The difference between the carrying amount of the associate and the fair value of any retained interest and any proceeds from disposing the relevant interest in the associate is included in the determination of the gain or loss on disposal of the associate. In addition, the Group accounts for all amounts previously recognized in other comprehensive income in relation to that associate on the same basis as would be required if that associate had directly disposed of the related assets or liabilities. Therefore, if a gain or loss previously recognized in other comprehensive income by that associate would be reclassified to profit or loss on the disposal of the related assets or liabilities, the Group reclassifies the gain or loss from equity to profit or loss (as a reclassification adjustment) upon disposal/partial disposal of the relevant associate.

When the Group reduces its ownership interest in an associate but the Group continues to use the equity method, the Group reclassifies to profit or loss the proportion of the gain or loss that had previously been recognized in other comprehensive income relating to that reduction in ownership interest if that gain or loss would be reclassified to profit or loss on the disposal of the related assets or liabilities.

When a group entity transacts with an associate of the Group, profits and losses resulting from the transactions with the associate are recognized in the Group's consolidated financial statements only to the extent of interests in the associate that are not related to the Group.

Revenue from contracts with customers

The Group recognizes revenue when (or as) a performance obligation is satisfied, i.e. when "control" of the goods or services underlying the particular performance obligation is transferred to the customer.

A performance obligation represents a good or service (or a bundle of goods or services) that is distinct or a series of distinct goods or services that are substantially the same.

3. SIGNIFICANT ACCOUNTING POLICIES (Continued)

Revenue from contracts with customers (Continued)

Control is transferred over time and revenue is recognized over time by reference to the progress towards complete satisfaction of the relevant performance obligation if one of the following criteria is met:

- the customer simultaneously receives and consumes the benefits provided by the Group's performance as the Group performs;
- the Group's performance creates or enhances an asset that the customer controls as the Group performs; or
- the Group's performance does not create an asset with an alternative use to the Group and the Group has an enforceable right to payment for performance completed to date.

Otherwise, revenue is recognized at a point in time when the customer obtains control of the distinct good or service.

The Group primarily earns revenues by providing research services to its customers through Fee-for-service ("FFS") contracts. Contract duration ranges from a few months to years. Under FFS method, the contracts usually have multiple deliverable units, which are generally in the form of technical laboratory reports and/or samples, each with individual selling price specified within the contract. The Group identifies each deliverable unit as a separate performance obligation, and recognizes FFS revenue of contractual elements at the point in time upon finalization, delivery and acceptance of the deliverable units or after the end of a confirmation period.

For the research services provided on a Full-time-equivalent ("FTE") basis, the Group provides its customer with a project team of employees dedicated to the customer's studies for a specific period of time and charges the customer at a fixed hourly/daily rate per employee. The Group recognizes FTE services revenue over the service period.

The Group also engages in commercial manufacturing contacts ("CMO") by manufacture and sale of drug substance and/or products under customers' specific order. The Group recognizes CMO revenue at a point in time upon acceptance of the deliverable drug substance and/or products under customers' specific order.

Besides, the Group engages in production and sale of biologics purification medium and chromatographic column ("other Biologics Products") under customers' specific order. The Group recognizes such revenue at a point in time upon acceptance of the Biologics Products.

3. SIGNIFICANT ACCOUNTING POLICIES (Continued)

Revenue from contracts with customers (Continued)

A contract asset represents the Group's right to consideration in exchange for goods or services that the Group has transferred to a customer that is not yet unconditional. It is assessed for impairment in accordance with IFRS 9. In contrast, a receivable represents the Group's unconditional right to consideration, i.e. only the passage of time is required before payment of that consideration is due.

A contract liability represents the Group's obligation to transfer goods or services to a customer for which the Group has received consideration (or an amount of consideration is due) from the customer.

A contract asset and a contract liability relating to the same contract are accounted for and presented on a net basis.

Contracts with multiple performance obligations (including allocation of transaction price)

For contracts that contain more than one performance obligations (i.e. FFS contracts usually have multiple deliverable units, which are generally in the form of technical laboratory reports and/or samples), the Group allocates the transaction price to each performance obligation on a relative stand-alone selling price basis, except for the allocation of discounts and variable consideration.

The stand-alone selling price of the distinct good or service underlying each performance obligation is determined at contract inception. It represents the price at which the Group would sell a promised good or service separately to a customer. If a stand-alone selling price is not directly observable, the Group estimates it using appropriate techniques such that the transaction price ultimately allocated to any performance obligation reflects the amount of consideration to which the Group expects to be entitled in exchange for transferring the promised goods or services to the customer.

The selection of the method to measure progress towards completion requires judgment and is based on the nature of the products or services to be provided. Depending on which better depicts the transfer of value to the customer, the Group generally measures its progress using units produced/services transferred to the customer to date (output method). The Group uses the known cost measure of progress when it best depicts the transfer of value to the customer which occurs as the Group incurs costs on its contract, generally related to fixed fee service contracts. The units produced/services transferred to the customer to date measure of progress is generally related to rate per unit contracts or contracts for the delivery of services, as the extent of progress towards completion is measured based on discrete service or time-based increments, such as samples tested or services transferred.

3. SIGNIFICANT ACCOUNTING POLICIES (Continued)

Revenue from contracts with customers (Continued)

Variable consideration

For contracts that contain variable consideration (usually in the form of a milestone bonus when the service provided to the customer has reached into a certain stage or delivered a certain result), the Group estimates the amount of consideration to which it will be entitled using either (a) the expected value method or (b) the most likely amount, depending on which method better predicts the amount of consideration to which the Group will be entitled.

The estimated amount of variable consideration is included in the transaction price only to the extent that it is highly probable that such an inclusion will not result in a significant revenue reversal in the future when the uncertainty associated with the variable consideration is subsequently resolved.

At the end of each reporting period, the Group updates the estimated transaction price (including updating its assessment of whether an estimate of variable consideration is constrained) to represent faithfully the circumstances present at the end of the reporting period and the changes in circumstances during the reporting period.

Principal versus agent

When another party is involved in providing goods or services to a customer, the Group determines whether the nature of its promise is a performance obligation to provide the specified goods or services itself (i.e. the Group is a principal) or to arrange for those goods or services to be provided by the other party (i.e. the Group is an agent).

The Group is a principal if it controls the specified good or service before that good or service is transferred to a customer.

The Group is an agent if its performance obligation is to arrange for the provision of the specified good or service by another party. In this case, the Group does not control the specified good or service provided by another party before that good or service is transferred to the customer. When the Group acts as an agent, it recognizes revenue in the amount of any fee or commission to which it expects to be entitled in exchange for arranging for the specified goods or services to be provided by the other party.

3. SIGNIFICANT ACCOUNTING POLICIES (Continued)

Revenue from contracts with customers (Continued)

Costs to fulfil a contract

The Group first assesses whether costs incurred to fulfil revenue generate contracts qualify for recognition as an asset in terms of other relevant Standards, failing which it recognizes an asset for these costs only if they meet all of the following criteria:

(a) the costs relate directly to a contract or to an anticipated contract that the Group can specifically identify;

(b) the costs generate or enhance resources of the Group that will be used in satisfying (or in continuing to satisfy) performance obligations in the future; and

(c) the costs are expected to be recovered.

The asset so recognized is subsequently amortized to profit or loss on a systematic basis that is consistent with the transfer to the customer of the goods or services to which the assets relate. The asset is also subject to impairment review.

Leases

Definition of a lease (upon application of IFRS 16 in accordance with transitions in Note 2)

A contract is, or contains, a lease if the contract conveys the right to control the use of an identified asset for a period of time in exchange for consideration.

For contracts entered into or modified or arising from business combinations on or after the date of initial application, the Group assesses whether a contract is or contains a lease based on the definition under IFRS 16 at inception, modification date or acquisition date, as appropriate. Such contract will not be reassessed unless the terms and conditions of the contract are subsequently changed.

The Group as a lessee (upon application of IFRS 16 in accordance with transitions in Note 2)

Allocation of consideration to components of a contract

For a contract that contains a lease component and one or more additional lease or non-lease components, the Group allocates the consideration in the contract to each lease component on the basis of the relative stand-alone price of the lease component and the aggregate stand-alone price of the non-lease components.

Non-lease components are separated from lease component on the basis of their relative stand-alone prices.

3. SIGNIFICANT ACCOUNTING POLICIES (Continued)

Leases (Continued)

The Group as a lessee (upon application of IFRS 16 in accordance with transitions in Note 2) (Continued)

Short-term leases

The Group applies the short-term lease recognition exemption to leases that have a lease term of 12 months or less from the commencement date and do not contain a purchase option. Lease payments on short-term leases are recognized as expense on a straight-line basis or another systematic basis over the lease term.

Right-of-use assets

The cost of right-of-use asset includes:

- the amount of the initial measurement of the lease liability;
- any lease payments made at or before the commencement date, less any lease incentives received;
- any initial direct costs incurred by the Group; and
- an estimate of costs to be incurred by the Group in dismantling and removing the underlying assets, restoring the site on which it is located or restoring the underlying asset to the condition required by the terms and conditions of the lease, unless those costs are incurred to produce inventories.

Right-of-use assets are measured at cost, less any accumulated depreciation and impairment losses, and adjusted for any remeasurement of lease liabilities.

Right-of-use assets in which the Group is reasonably certain to obtain ownership of the underlying leased assets at the end of the lease term are depreciated from commencement date to the end of the useful life. Otherwise, right-of-use assets are depreciated on a straight-line basis over the shorter of its estimated useful life and the lease term.

When the Group obtains ownership of the underlying leased assets at the end of the lease term, upon exercising purchase options, the cost of the relevant right-of-use assets and the related accumulated depreciation and impairment loss are transferred to property, plant and equipment.

The Group presents right-of-use assets as a separate line item on the consolidated statement of financial position.

3. SIGNIFICANT ACCOUNTING POLICIES (Continued)

Leases (Continued)

The Group as a lessee (upon application of IFRS 16 in accordance with transitions in Note 2) (Continued)

Refundable rental deposits

Refundable rental deposits paid are accounted under IFRS 9 *Financial Instruments* and initially measured at fair value. Adjustments to fair value at initial recognition are considered as additional lease payments and included in the cost of right-of-use assets.

Lease liabilities

At the commencement date of a lease, the Group recognizes and measures the lease liability at the present value of lease payments that are unpaid at that date. In calculating the present value of lease payments, the Group uses the incremental borrowing rate at the lease commencement date if the interest rate implicit in the lease is not readily determinable.

The lease payments include:

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

After the commencement date, lease liabilities are adjusted by interest accretion and lease payments.

3. SIGNIFICANT ACCOUNTING POLICIES (Continued)

Leases (Continued)

The Group as a lessee (upon application of IFRS 16 in accordance with transitions in Note 2) (Continued)

Lease liabilities (Continued)

The Group remeasures lease liabilities (and makes a corresponding adjustment to the related right-of-use assets) whenever:

- the lease term has changed or there is a change in the assessment of exercise of a purchase option, in which case the related lease liability is remeasured by discounting the revised lease payments using a revised discount rate at the date of reassessment.

- the lease payments change due to changes in market rental rates following a market rent review, in which cases the related lease liability is remeasured by discounting the revised lease payments using the initial discount rate.

The Group presents lease liabilities as a separate line item on the consolidated statement of financial position.

Lease modifications

The Group accounts for a lease modification as a separate lease if:

- the modification increases the scope of the lease by adding the right to use one or more underlying assets; and

- the consideration for the leases increases by an amount commensurate with the stand-alone price for the increase in scope and any appropriate adjustments to that stand-alone price to reflect the circumstances of the particular contract.

For a lease modification that is not accounted for as a separate lease, the Group remeasures the lease liability based on the lease term of the modified lease by discounting the revised lease payments using a revised discount rate at the effective date of the modification.

The Group accounts for the remeasurement of lease liabilities by making corresponding adjustments to the relevant right-of-use asset. When the modified contract contains a lease component and one or more additional lease or non-lease components, the Group allocates the consideration in the modified contract to each lease component on the basis of the relative stand-alone price of the lease component and the aggregate stand-alone price of the non-lease components.

3. SIGNIFICANT ACCOUNTING POLICIES (Continued)

Leases (Continued)

The Group as a lessee (prior to January 1, 2019)

Leases are classified as finance leases whenever the terms of the lease transfer substantially all the risks and rewards of ownership to the lessee. All other leases are classified as operating leases.

Operating lease payments, including the cost of acquiring land held under operating leases, are recognized as an expense on a straight-line basis over the lease term. Contingent rentals arising under operating leases are recognized as an expense in the period in which they are incurred.

Foreign currencies

In preparing the financial statements of each individual group entity, transactions in currencies other than functional currency of that entity (foreign currencies) are recognized at the rates of exchanges prevailing on the dates of the transactions. At the end of the reporting period, monetary items denominated in foreign currencies are retranslated at the rates prevailing at that date. Non-monetary items carried at fair value that are denominated in foreign currencies are retranslated at the rates prevailing on the date when the fair value was determined. Non-monetary items that are measured in terms of historical cost in a foreign currency are not retranslated.

Exchange differences arising on the settlement of monetary items, and on the retranslation of monetary items, are recognized in profit or loss in the period in which they arise.

For the purposes of presenting the consolidated financial statements, the assets and liabilities of the Group's foreign operations are translated into the presentation currency of the Group (i.e. Renminbi) using exchange rate prevailing at the end of each reporting period. Income and expense items are translated at the average exchange rates for the period. Exchange differences arising, if any, are recognized in other comprehensive income and accumulated in equity under the heading of foreign currency translation reserve.

3. SIGNIFICANT ACCOUNTING POLICIES (Continued)

Borrowing costs

Borrowing costs directly attributable to the acquisition, construction or production of qualifying assets, which are assets that necessarily take a substantial period of time to get ready for their intended use or sale, are added to the cost of those assets until such time as the assets are substantially ready for their intended use or sale.

Effective January 1, 2019, any specific borrowing that remains outstanding after the related asset is ready for its intended use or sale is included in the general borrowing pool for calculation of capitalization rate on general borrowings. Investment income earned on the temporary investment of specific borrowings pending their expenditure on qualifying assets is deducted from the borrowing costs eligible for capitalization.

All other borrowing costs are recognized in profit or loss in the period in which they are incurred.

Government grants

Government grants are not recognized until there is reasonable assurance that the Group will comply with the conditions attaching to them and that the grants will be received.

Government grants are recognized in profit or loss on a systematic basis over the periods in which the Group recognizes as expenses the related costs for which the grants are intended to compensate. Specifically, government grants whose primary condition is that the Group should purchase, construct or otherwise acquire non-current assets are recognized as deferred revenue in the consolidated statement of financial position and transferred to profit or loss on a systematic and rational basis over the useful lives of the related assets.

Government grants that are receivable as compensation for expenses or losses already incurred or for the purpose of giving immediate financial support to the Group with no future related costs are recognized in profit or loss in the period in which they become receivable.

Retirement benefit costs

Payments to defined contribution retirement benefit plans are recognized as an expense when employees have rendered service entitling them to the contributions.

Pension obligations

The Group participates in state-managed retirement benefit schemes, which are defined contribution schemes, pursuant to which the Group pays a fixed percentage of its qualifying staff's wages as contributions to the schemes. Payments to such retirement benefit schemes are charged as an expense when employees have rendered service entitling them to the contributions.

3. SIGNIFICANT ACCOUNTING POLICIES (Continued)

Retirement benefit costs (Continued)

Short-term employee benefits

Short-term employee benefits are recognized at the undiscounted amount of the benefits expected to be paid as and when employees rendered the services. All short-term employee benefits are recognized as an expense unless another IFRS requires or permits the inclusion of the benefit in the cost of an asset.

A liability is recognized for benefits accruing to employees (such as wages and salaries, annual leave and sick leave) after deducting any amount already paid.

Share-based payments

Equity-settled share-based payment transactions

Share options granted to employees

Equity-settled share-based payments to employees (including directors of the Company) are measured at the fair value of the equity instruments at the grant date.

The fair value of the equity-settled share-based payments determined at the grant date without taking into consideration all non-market vesting conditions is expensed on a straight-line basis over the vesting period, based on the Group's estimate of equity instruments that will eventually vest, with a corresponding increase in equity (equity-settled share-based compensation reserve). At the end of each reporting period, the Group revises its estimate of the number of equity instruments expected to vest based on assessment of all relevant non-market vesting conditions. The impact of the revision of the original estimates, if any, is recognized in profit or loss such that the cumulative expense reflects the revised estimate, with a corresponding adjustment to the equity-settled share-based compensation reserve.

When the share options are exercised, the amount previously recognized in equity-settled share-based compensation reserve will be transferred to share premium. When the share options are forfeited after the vesting date or are still not exercised at the expiry date, the amount previously recognized in equity-settled share-based compensation reserve will continue to be held in equity-settled share-based compensation reserve.

3. SIGNIFICANT ACCOUNTING POLICIES (Continued)

Share-based payments (Continued)

Equity-settled share-based payment transactions (Continued)

Equity instruments granted by the then ultimate holding company to employees of the Group

The grant by the then ultimate holding company of equity instruments under its employee stock incentive plan to the employees of the Group (including directors of the Company) is treated as equity-settled share-based payments in the consolidated financial statements. An expense for the grant date fair value of the equity instruments under the employee stock incentive plan is recognized over the vesting period of the instruments, with a corresponding increase in equity. The increase in equity is treated as a deemed capital contribution into the Group and is included in equity-settled share-based compensation reserve.

Restricted share award payment transactions

For shares of the Group granted under Restricted Share Award Scheme ("Restricted Shares"), the fair value of the employee services received is determined by reference to the fair value of the Restricted Shares granted at the grant date and is expensed on a straight-line basis over the vesting period, with a corresponding increase in equity (equity-settled share-based compensation reserve). At the end of each reporting period, the Group revises its estimates of the number of Restricted Shares that are expected to vest based on assessment of all relevant non-market vesting conditions. The impact of the revision of the estimates, if any, is recognized in the profit or loss such that the cumulative expense reflects the revised estimate, with a corresponding adjustment to equity-settled share-based compensation reserve.

When the Restricted Shares vested, the amount previously recognized in equity-settled share-based compensation reserve will be transferred to share premium.

Taxation

Income tax expense represents the sum of the tax currently payable and deferred tax.

The tax currently payable is based on taxable profit for the year. Taxable profit differs from profit before tax because of income or expense that are taxable or deductible in other years and items that are never taxable or deductible. The Group's liability for current tax is calculated using tax rates that have been enacted or substantively enacted by the end of the reporting period.

3. SIGNIFICANT ACCOUNTING POLICIES (Continued)

Taxation (Continued)

Deferred tax is recognized on temporary differences between the carrying amounts of assets and liabilities in the consolidated financial statements and the corresponding tax bases used in the computation of taxable profit. Deferred tax liabilities are generally recognized for all taxable temporary differences. Deferred tax assets are generally recognized for all deductible temporary differences to the extent that it is probable that taxable profits will be available against which those deductible temporary differences can be utilized. Such deferred tax assets and liabilities are not recognized if the temporary difference arises from the initial recognition (other than in a business combination) of assets and liabilities in a transaction that affects neither the taxable profit nor the accounting profit. In addition, deferred tax liabilities are not recognized if the temporary differences arises from the initial recognition of goodwill.

Deferred tax liabilities are recognized for taxable temporary differences associated with investments in subsidiaries and associates except where the Group is able to control the reversal of the temporary difference and it is probable that the temporary difference will not reverse in the foreseeable future. Deferred tax assets arising from deductible temporary differences associated with such investments are only recognized to the extent that it is probable that there will be sufficient taxable profits against which to utilize the benefits of the temporary differences and they are expected to reverse in the foreseeable future.

The carrying amount of deferred tax assets is reviewed at the end of each reporting period and reduced to the extent that it is no longer probable that sufficient taxable profits will be available to allow all or part of the asset to be recovered.

Deferred tax assets and liabilities are measured at the tax rates that are expected to apply in the period in which the liability is settled or the asset is realized, based on tax rate (and tax laws) that have been enacted or substantively enacted by the end of the reporting period.

The measurement of deferred tax liabilities and assets reflects the tax consequences that would follow from the manner in which the Group expects, at the end of the reporting period, to recover or settle the carrying amount of its assets and liabilities.

For the purposes of measuring deferred tax for leasing transactions in which the Group recognizes the right-of-use assets and the related lease liabilities, the Group first determines whether the tax deductions are attributable to the right-of-use assets or the lease liabilities.

For leasing transaction in which the tax deductions are attributable to the lease liabilities, the Group applies IAS 12 *Income Taxes* requirements to the leasing transaction as a whole. Temporary differences relating to right-of-use assets and lease liabilities are assessed on a net basis. Excess of depreciation on right-of-use assets over the lease payments for the principal portion of lease liabilities resulting in net deductible temporary differences.

3. SIGNIFICANT ACCOUNTING POLICIES (Continued)

Taxation (Continued)

Deferred tax assets and liabilities are offset when there is a legally enforceable right to set off current tax assets against current tax liabilities and when they relate to income taxes levied to the same taxable entity by the same taxation authority.

Current and deferred tax are recognized in profit or loss, except when they relate to items that are recognized in other comprehensive income or directly in equity, in which case, the current and deferred tax are also recognized in other comprehensive income or directly in equity respectively. Where current tax or deferred tax arises from the initial accounting for a business combination, the tax effect is included in the accounting for the business combination.

In assessing any uncertainty over income tax treatments, the Group considers whether it is probable that the relevant tax authority will accept the uncertain tax treatment used, or proposed to be use by individual group entities in their income tax filings. If it is probable, the current and deferred taxes are determined consistently with the tax treatment in the income tax filings. If it is not probable that the relevant taxation authority will accept an uncertain tax treatment, the effect of each uncertainty is reflected by using either the most likely amount or the expected value.

Property, plant and equipment

Property, plant and equipment other than assets under construction in progress are stated in the consolidated statement of financial position at cost less subsequent accumulated depreciation and accumulated impairment losses, if any.

Property, plant and equipment in the course of construction for production, supply or administrative purposes are carried at cost, less any recognized impairment loss. Costs include any costs directly attributable to bringing the asset to the location and condition necessary for it to be capable of operating in the manner intended by management and, for qualifying assets, borrowing costs capitalized in accordance with the Group's accounting policy. Depreciation of these assets, on the same basis as other assets, commences when the assets are ready for their intended use.

Depreciation is recognized so as to write off the cost of assets other than property, plant and equipment in the course of construction less their residual values over their estimated useful lives, using the straight-line method. The estimated useful lives, residual values and depreciation method are reviewed at the end of the reporting period, with the effect of any changes in estimate accounted for on a prospective basis.

An item of property, plant and equipment is derecognized upon disposal or when no future economic benefits are expected to arise from the continued use of the asset. Any gain or loss arising on the disposal or retirement of property, plant and equipment is determined as the difference between the sales proceeds and the carrying amount of the asset and is recognized in profit or loss.

3. SIGNIFICANT ACCOUNTING POLICIES (Continued)

Intangible assets

Intangible assets acquired separately

Intangible assets with finite useful lives that are acquired separately are carried at costs less accumulated amortization and any accumulated impairment losses. Amortization for intangible assets with finite useful lives is recognized on a straight-line basis over their estimated useful lives. The estimated useful life and amortization method are reviewed at the end of each reporting period, with the effect of any changes in estimate being accounted for on a prospective basis.

Internally-generated intangible asset — research and development expenditure

Expenditure on research activities is recognized as an expense in the period in which it is incurred.

An internally-generated intangible asset arising from development activities is recognized if, and only if, all of the following have been demonstrated:

- the technical feasibility of completing the intangible asset so that it will be available for use or sale;
- the intention to complete the intangible asset and use or sell it;
- the ability to use or sell the intangible asset;
- how the intangible asset will generate probable future economic benefits;
- the availability of adequate technical, financial and other resources to complete the development and to use or sell the intangible asset; and
- the ability to measure reliably the expenditure attributable to the intangible asset during its development.

The amount initially recognized for internally-generated intangible asset is the sum of the expenditure incurred from the date when the intangible asset first meets the recognition criteria listed above. Where no internally-generated intangible asset can be recognized, development expenditure is recognized in profit or loss in the period in which it is incurred.

Subsequent to initial recognition, internally-generated intangible assets are reported at cost less accumulated amortization and accumulated impairment losses (if any), on the same basis as intangible assets that are acquired separately.

3. SIGNIFICANT ACCOUNTING POLICIES (Continued)

Intangible assets (Continued)

Intangible assets acquired in a business combination

Intangible assets acquired in a business combination are recognized separately from goodwill and are initially recognized at their fair value at the acquisition date (which is regarded as their cost).

Subsequent to initial recognition, intangible assets acquired in a business combination with finite useful lives are reported at costs less accumulated amortization and any accumulated impairment losses on the same basis as intangible assets that are acquired separately.

An intangible asset is derecognized on disposal, or when no future economic benefits are expected from use or disposal. Gains and losses arising from derecognition of an intangible asset, measured as the difference between the net disposal proceeds and the carrying amount of the asset, are recognized in profit or loss when the asset is derecognized.

Impairment on property, plant and equipment, right-of-use assets, contract costs and intangible assets other than goodwill

At the end of the reporting period, the Group reviews the carrying amounts of its property, plant and equipment, right-of-use assets, intangible assets with finite useful lives and contract costs to determine whether there is any indication that these assets have suffered an impairment loss. If any such indication exists, the recoverable amount of the relevant asset is estimated in order to determine the extent of the impairment loss (if any).

The recoverable amount of property, plant and equipment, right-of-use assets, and intangible assets are estimated individually. When it is not possible to estimate the recoverable amount individually, the Group estimates the recoverable amount of the cash-generating unit to which the asset belongs.

In addition, the Group assesses whether there is indication that corporate assets may be impaired. If such indication exists, corporate assets are also allocated to individual cash-generating units, when a reasonable and consistent basis of allocation can be identified, or otherwise they are allocated to the smallest group of cash-generating units for which a reasonable and consistent allocation basis can be identified.

3. SIGNIFICANT ACCOUNTING POLICIES (Continued)

Impairment on property, plant and equipment, right-of-use assets, contract costs and intangible assets other than goodwill (Continued)

Before the Group recognizes an impairment loss for assets capitalized as contract costs under IFRS 15, the Group assesses and recognizes any impairment loss on other assets related to the relevant contracts in accordance with applicable standards. Then, impairment loss, if any, for assets capitalized as contract costs is recognized to the extent the carrying amounts exceeds the remaining amount of consideration that the Group expects to receive in exchange for related goods or services less the costs which relate directly to providing those goods or services that have not been recognized as expenses. The assets capitalized as contract costs are then included in the carrying amount of the cash-generating unit to which they belong for the purpose of evaluating impairment of that cash-generating unit.

Recoverable amount is the higher of fair value less costs of disposal and value in use. In assessing value in use, the estimated future cash flows are discounted to their present value using a pre-tax discount rate that reflects current market assessments of the time value of money and the risks specific to the asset (or a cash-generating unit) for which the estimates of future cash flows have not been adjusted.

If the recoverable amount of an asset (or a cash-generating unit) is estimated to be less than its carrying amount, the carrying amount of the asset (or a cash-generating unit) is reduced to its recoverable amount. For corporate assets or portion of corporate assets which cannot be allocated on a reasonable and consistent basis to a cash-generating unit, the Group compares the carrying amount of a group of cash-generating units, including the carrying amounts of the corporate assets or portion of corporate assets allocated to that group of cash-generating units, with the recoverable amount of the group of cash-generating units. In allocating the impairment loss, the impairment loss is allocated first to reduce the carrying amount of any goodwill (if applicable) and then to the other assets on a pro-rata basis based on the carrying amount of each asset in the unit or the group of cash-generating units. The carrying amount of an asset is not reduced below the highest of its fair value less costs of disposal (if measurable), its value in use (if determinable) and zero. The amount of the impairment loss that would otherwise have been allocated to the asset is allocated pro rata to the other assets of the unit or the group of cash-generating units. An impairment loss is recognized immediately in profit or loss.

Where an impairment loss subsequently reverses, the carrying amount of the asset (or cash-generating unit or a group of cash-generating units) is increased to the revised estimate of its recoverable amount, but so that the increased carrying amount does not exceed the carrying amount that would have been determined had no impairment loss been recognized for the asset (or a cash-generating unit or a group of cash-generating units) in prior years. A reversal of an impairment loss is recognized immediately in profit or loss.

3. SIGNIFICANT ACCOUNTING POLICIES (Continued)

Inventories

Inventories are stated at the lower of cost and net realizable value. Costs of inventories are determined on a weighted average method. Net realizable value represents the contracted selling price less all estimated costs of completion and costs necessary to make the sale.

Financial instruments

Financial assets and financial liabilities are recognized when a group entity becomes a party to the contractual provisions of the instrument. All regular way purchases or sales of financial assets are recognized and derecognized on a trade date basis. Regular way purchases or sales are purchases or sales of financial assets that require delivery of assets within the time frame established by regulation or convention in the market place.

Financial assets and financial liabilities are initially measured at fair value except for trade receivables arising from contracts with customers which are initially measured in accordance with IFRS 15. Transaction costs that are directly attributable to the acquisition or issue of financial assets and financial liabilities (other than financial assets at FVTPL) are added to or deducted from the fair value of the financial assets or financial liabilities, as appropriate, on initial recognition. Transaction costs directly attributable to the acquisition of financial assets at FVTPL are recognized immediately in profit or loss.

The effective interest method is a method of calculating the amortized cost of a financial asset or financial liability and of allocating interest income and interest expense over the relevant period. The effective interest rate is the rate that exactly discounts estimated future cash receipts and payments (including all fees and points paid or received that form an integral part of the effective interest rate, transaction costs and other premiums or discounts) through the expected life of the financial asset or financial liability, or, where appropriate, a shorter period, to the net carrying amount on initial recognition.

Financial assets

Classification and subsequent measurement of financial assets

Financial assets that meet the following conditions are subsequently measured at amortized cost:

- the financial asset is held within a business model whose objective is to collect contractual cash flows; and

- the contractual terms give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding.

3. SIGNIFICANT ACCOUNTING POLICIES (Continued)

Financial instruments (Continued)

Financial assets (Continued)

Classification and subsequent measurement of financial assets (Continued)

Financial assets that meet the following conditions are subsequently measured at FVTOCI:

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

- the contractual terms give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding.

All other financial assets are subsequently measured at FVTPL, except that at the date of initial application of IFRS 9/initial recognition of a financial asset, the Group may irrevocably elect to present subsequent changes in fair value of an equity investment in other comprehensive income ("OCI") if that equity investment is neither held for trading nor contingent consideration recognized by an acquirer in a business combination to which IFRS 3 *Business Combinations* applies.

A financial asset is held for trading if:

- it has been acquired principally for the purpose of selling in the near term; or

- on initial recognition it is a part of a portfolio of identified financial instruments that the Group manages together and has a recent actual pattern of short-term profit-taking; or

- it is a derivative that is not designated and effective as a hedging instrument.

In addition, the Group may irrevocably designate a financial asset that is required to be measured at the amortized cost or FVTOCI as measured at FVTPL if doing so eliminates or significantly reduces an accounting mismatch.

3. SIGNIFICANT ACCOUNTING POLICIES (Continued)

Financial instruments (Continued)

Financial assets (Continued)

Classification and subsequent measurement of financial assets (Continued)

(i) Amortized cost and interest income

Interest income is recognized using the effective interest method for financial assets measured subsequently at amortized cost. Interest income is calculated by applying the effective interest rate to the gross carrying amount of a financial asset, except for financial assets that have subsequently become credit-impaired. For financial assets that have subsequently become credit-impaired, interest income is recognized by applying the effective interest rate to the amortized cost of the financial asset from the next reporting period. If the credit risk on the credit-impaired financial instrument improves so that the financial asset is no longer credit-impaired, interest income is recognized by applying the effective interest rate to the gross carrying amount of the financial asset from the beginning of the reporting period following the determination that the asset is no longer credit impaired.

(ii) Equity instruments designated as at FVTOCI

Investments in equity instruments at FVTOCI are subsequently measured at fair value with gains and losses arising from changes in fair value recognized in OCI and accumulated in FVTOCI reserve; and are not subject to impairment assessment. The cumulative gain or loss will not be reclassified to profit or loss on disposal of the equity instruments, and will be transferred to retained earnings.

Dividends from these investments in equity instruments are recognized in profit or loss when the Group's right to receive the dividends is established, unless the dividends clearly represent a recovery of part of the cost of the investment. Dividends are included in the "other gains and losses" line item in profit or loss.

(iii) Financial assets at FVTPL

Financial assets that do not meet the criteria for being measured at amortized cost or FVTOCI or designated as FVTOCI are measured at FVTPL.

Financial assets as FVTPL are measured at fair value at the end of each reporting, with any fair value gains or losses recognized in profit or loss. The net gain or loss recognized in profit or loss includes any interest earned on the financial asset and is included in the "other gains and losses" line item.

3. SIGNIFICANT ACCOUNTING POLICIES (Continued)

Financial instruments (Continued)

Financial assets (Continued)

Impairment of financial assets and other items subject to impairment assessment under IFRS 9

The Group performs impairment assessment under expected credit loss ("ECL") model on financial assets (including trade receivables, receivables for purchase of raw materials on behalf of customers, other receivables, other financial assets, other long-term deposits, bill receivables, pledged bank deposits, bank balances and cash and contract assets) which are subject to impairment under IFRS 9. The amount of ECL is updated at each reporting date to reflect changes in credit risk since initial recognition.

Lifetime ECL represents the ECL that will result from all possible default events over the expected life of the relevant instrument. In contrast, 12-month ECL ("12m ECL") represents the portion of lifetime ECL that is expected to result from default events that are possible within 12 months after the reporting date. Assessment are done based on the Group's historical credit loss experience, adjusted for factors that are specific to the debtors, general economic conditions and an assessment of both the current conditions at the reporting date as well as the forecast of future conditions.

The Group always recognizes lifetime ECL for trade receivables and contract assets. The ECL on these assets are assessed collectively using a provision matrix with appropriate groupings, estimated based on the financial quality of debtors and historical credit loss experience based on the past due status of the debtors, adjusted as appropriate to reflect the current conditions at the reporting date as well as the forecast of future conditions.

For all other instruments, the Group measures the loss allowance equal to 12m ECL, unless when there has been a significant increase in credit risk since initial recognition, the Group recognizes lifetime ECL. The assessment of whether lifetime ECL should be recognized is based on significant increases in the likelihood or risk of a default occurring since initial recognition.

(i) Significant increase in credit risk

In assessing whether the credit risk has increased significantly since initial recognition, the Group compares the risk of a default occurring on the financial instrument as at the reporting date with the risk of a default occurring on the financial instrument as at the date of initial recognition. In making this assessment, the Group considers both quantitative and qualitative information that is reasonable and supportable, including historical experience and forward-looking information that is available without undue cost or effort.

3. SIGNIFICANT ACCOUNTING POLICIES (Continued)

Financial instruments (Continued)

Financial assets (Continued)

Impairment of financial assets and other items subject to impairment assessment under IFRS 9 (Continued)

(i) Significant increase in credit risk (Continued)

In particular, the following information is taken into account when assessing whether credit risk has increased significantly:

- an actual or expected significant deterioration in the financial instrument's external (if available) or internal credit rating;
- significant deterioration in external market indicators of credit risk, e.g. a significant increase in the credit spread, the credit default swap prices for the debtor;
- existing or forecast adverse changes in business, financial or economic conditions that are expected to cause a significant decrease in the debtor's ability to meet its debt obligations;
- an actual or expected significant deterioration in the operating results of the debtor;
- an actual or expected significant adverse change in the regulatory, economic, or technological environment of the debtor that results in a significant decrease in the debtor's ability to meet its debt obligations.

Irrespective of the outcome of the above assessment, the Group presumes that the credit risk has increased significantly since initial recognition when contractual payments are more than 60 days past due, unless the Group has reasonable and supportable information that demonstrates otherwise.

The Group regularly monitors the effectiveness of the criteria used to identify whether there has been a significant increase in credit risk and revises them as appropriate to ensure that the criteria are capable of identifying significant increase in credit risk before the amount becomes past due.

3. SIGNIFICANT ACCOUNTING POLICIES (Continued)

Financial instruments (Continued)

Financial assets (Continued)

Impairment of financial assets and other items subject to impairment assessment under IFRS 9 (Continued)

(ii) Definition of default

For internal credit risk management, the Group considers an event of default occurs when information developed internally or obtained from external sources indicates that the debtor is unlikely to pay its creditors, including the Group, in full (without taking into account any collaterals held by the Group).

Irrespective of the above analysis, the Group considers that default has occurred when a financial asset is more than 180 days past due unless the Group has reasonable and supportable information to demonstrate that a more lagging default criterion is more appropriate.

(iii) Credit-impaired financial assets

A financial asset is credit-impaired when one or more events of default that have a detrimental impact on the estimated future cash flows of that financial asset have occurred. Evidence that a financial asset is credit-impaired includes observable data about the following events:

a) significant financial difficulty of the issuer or the borrower;

b) a breach of contract, such as a default or past due event;

c) the lender(s) of the borrower, for economic or contractual reasons relating to the borrower's financial difficulty, having granted to the borrower a concession(s) that the lender(s) would not otherwise consider;

d) it is becoming probable that the borrower will enter bankruptcy or other financial reorganization; or

e) the disappearance of an active market for that financial asset because of financial difficulties.

3. SIGNIFICANT ACCOUNTING POLICIES (Continued)

Financial instruments (Continued)

Financial assets (Continued)

Impairment of financial assets and other items subject to impairment assessment under IFRS 9 (Continued)

(iv) Write-off policy

The Group writes off a financial asset when there is information indicating that the counterparty is in severe financial difficulty and there is no realistic prospect of recovery. Financial assets written off may still be subject to enforcement activities under the Group's recovery procedures, taking into account legal advice where appropriate. A write-off constitutes a derecognition event. Any subsequent recoveries are recognized in profit or loss.

(v) Measurement and recognition of ECL

The measurement of ECL is a function of the probability of default, loss given default (i.e. the magnitude of the loss if there is a default) and the exposure at default. The assessment of the probability of default and loss given default is based on historical data adjusted by forward-looking information. Estimation of ECL reflects an unbiased and probability-weighted amount that is determined with the respective risks of default occurring as the weights.

Generally, the ECL is the difference between all contractual cash flows that are due to the Group in accordance with the contract and the cash flows that the Group expects to receive, discounted at the effective interest rate determined at initial recognition.

Where ECL is measured on a collective basis or cater for cases where evidence at the individual instrument level may not yet be available, the financial instruments are grouped on the following basis:

- Nature of financial instruments (i.e. the Group's trade receivables, bill receivables, receivables for purchase of raw materials on behalf of customers, other receivables, other financial assets, pledged bank deposits and bank balances and cash are each assessed as a separate group);
- Past-due status;
- Nature, size and industry of debtors; and
- External credit ratings where available.

3. SIGNIFICANT ACCOUNTING POLICIES (Continued)

Financial instruments (Continued)

Financial assets (Continued)

Impairment of financial assets and other items subject to impairment assessment under IFRS 9 (Continued)

(v) Measurement and recognition of ECL (Continued)

The grouping is regularly reviewed by management to ensure the constituents of each group continue to share similar credit risk characteristics.

Interest income is calculated based on the gross carrying amount of the financial asset unless the financial asset is credit impaired, in which case interest income is calculated based on amortized cost of the financial asset.

The Group recognizes an impairment gain or loss in profit or loss for all financial instruments by adjusting their carrying amount, with the exception of trade receivables, receivables for purchase of raw materials on behalf of customers and contract assets where the corresponding adjustment is recognized through a loss allowance account.

Derecognition of financial assets

The Group derecognizes a financial asset only when the contractual rights to the cash flows from the asset expire, or when it transfers the financial asset and substantially all the risks and rewards of ownership of the asset to another entity. If the Group neither transfers nor retains substantially all the risks and rewards of ownership and continues to control the transferred asset, the Group recognizes its retained interest in the asset and an associated liability for amounts it may have to pay. If the Group retains substantially all the risks and rewards of ownership of a transferred financial asset, the Group continues to recognize the financial asset and also recognizes a collateralized borrowing for the proceeds received.

On derecognition of a financial asset measured at amortized cost, the difference between the asset's carrying amount and the sum of the consideration received and receivable is recognized in profit or loss.

On derecognition of an investment in equity instrument which the Group has elected on initial recognition to measure at FVTOCI, the cumulative gain or loss previously accumulated in the investment revaluation reserve is not reclassified to profit or loss, but is transferred to retained earnings.

3. SIGNIFICANT ACCOUNTING POLICIES (Continued)

Financial instruments (Continued)

Financial liabilities and equity

Classification as debt or equity

Debt and equity instruments issued by a group entity are classified as either financial liabilities or as equity in accordance with the substance of the contractual arrangements and the definitions of a financial liability and an equity instrument.

Equity instruments

An equity instrument is any contract that evidences a residual interest in the assets of an entity after deducting all of its liabilities. Equity instruments issued by the Company are recognized at the proceeds received, net of direct issue costs.

Financial liabilities at amortized cost

Financial liabilities namely borrowings and trade and other payables are subsequently measured at amortized cost, using the effective interest method.

Derecognition of financial liabilities

The Group derecognizes financial liabilities when, and only when, the Group's obligations are discharged, cancelled or have expired. The difference between the carrying amount of the financial liability derecognized and the consideration paid and payable is recognized in profit or loss.

Derivative financial instruments

Derivatives are initially recognized at fair value at the date when derivative contracts are entered into and are subsequently remeasured to their fair value at the end of the reporting period. The resulting gain or loss is recognized in profit or loss unless the derivative is designated and effective as a hedging instrument, in which event the timing of the recognition in profit or loss depends on the nature of the hedge relationship.

Hedge accounting

The Group designates certain derivatives as hedging instruments for cash flow hedges.

At the inception of the hedging relationship the Group documents the relationship between the hedging instrument and the hedged item, along with its risk management objectives and its strategy for undertaking various hedge transactions. Furthermore, at the inception of the hedge and on an ongoing basis, the Group documents whether the hedging instrument is highly effective in offsetting changes in cash flows of the hedged item attributable to the hedged risk.

3. SIGNIFICANT ACCOUNTING POLICIES (Continued)

Financial instruments (Continued)

Financial liabilities and equity (Continued)

Assessment of hedging relationship and effectiveness

For hedge effectiveness assessment, the Group considers whether the hedging instrument is effective in offsetting changes in cash flows of the hedged item attributable to the hedged risk, which is when the hedging relationships meet all of the following hedge effectiveness requirements:

- there is an economic relationship between the hedged item and the hedging instrument;
- the effect of credit risk does not dominate the value changes that result from that economic relationship; and
- the hedge ratio of the hedging relationship is the same as that resulting from the quantity of the hedged item that the Group actually hedges and the quantity of the hedging instrument that the entity actually uses to hedge that quantity of hedged item.

If a hedging relationship ceases to meet the hedge effectiveness requirement relating to the hedge ratio but the risk management objective for that designated hedging relationship remains the same, the Group adjusts the hedge ratio of the hedging relationship (i.e. rebalances the hedge) so that it meets the qualifying criteria again.

Cash flow hedges

The effective portion of changes in the fair value of derivatives instruments that are designated and qualify as cash flow hedges is recognized in other comprehensive income and accumulated under the heading of cash flow hedging reserve, limited to the cumulative change in fair value of the hedged item from inception of the hedge. The gain or loss relating to the ineffective portion is recognized immediately in profit or loss, and is included in the "other gains and losses" line item.

Amounts previously recognized in other comprehensive income and accumulated in equity are reclassified to profit or loss in the periods when the hedged item affects profit or loss, in the same line as the recognized hedged item. However, when the hedged forecast transaction results in the recognition of a non-financial asset or a non-financial liability, the gains and losses previously recognized in other comprehensive income and accumulated in equity are removed from equity and included in the initial measurement of the cost of the non-financial asset or non-financial liability. This transfer does not affect other comprehensive income. Furthermore, if the Group expects that some or all of the loss accumulated in the cash flow hedging reserve will not be recovered in the future that amount is immediately reclassified to profit or loss.

3. SIGNIFICANT ACCOUNTING POLICIES (Continued)

Financial instruments (Continued)

Financial liabilities and equity (Continued)

Discontinuation of hedge accounting

The Group discontinues hedge accounting prospectively only when the hedging relationship (or a part thereof) ceases to meet the qualifying criteria (after rebalancing, if applicable). This includes instances when the hedging instrument expires or is sold, terminated or exercised. Discontinuing hedge accounting can either affect a hedging relationship in its entirety or only a part of it (in which case hedge accounting continues for the remainder of the hedging relationship).

For cash flow hedge, any gain or loss recognized in other comprehensive income and accumulated in equity at that time remains in equity and is recognized when the forecast transactions is ultimately recognized in profit or loss. When a forecast transaction is no longer expected to occur, the gain or loss accumulated in equity is recognized immediately in profit or loss.

4. CRITICAL ACCOUNTING JUDGEMENTS AND KEY SOURCES OF ESTIMATION UNCERTAINTY

In the application of the Group's accounting policies, which are described in Note 3, the directors of the Company are required to make judgements, estimates and assumptions about the carrying amounts of assets that are not readily apparent from other sources. The estimates and associated assumptions are based on historical experience and other factors that are considered to be relevant. Actual results may differ from these estimates.

The estimates and underlying assumption are reviewed on an on-going basis. Revisions to accounting estimates are recognized in the period in which the estimate is revised if the revision affects only that period, or in the period of the revision and future periods if revision affects both current and future periods.

Critical judgements in applying accounting policies

The following is the critical judgements, apart from those involving estimations, that the directors of the Company have made in the process of applying the Group's accounting policies and that have the most significant effect on the amounts recognized in the consolidated financial statements.

4. CRITICAL ACCOUNTING JUDGEMENTS AND KEY SOURCES OF ESTIMATION UNCERTAINTY (Continued)

Critical judgements in applying accounting policies (Continued)

Judgements in determining the performance obligations and timing of satisfaction of performance obligations

The Group has different contractual arrangements with different customers. In determining the performance obligations and timing of satisfaction of performance obligations, the management of the Company review the contract term of each individual contract. In making their judgments, the directors of the Company consider the detailed criteria for recognition of revenue set out in IFRS 15.

Performance obligation determination

A performance obligation represents a good and service that is distinct or a series of distinct goods or services that are substantially the same. In certain long-term sales contracts, the Group is required to fulfil multiple promised goods and/or services. In determining performance obligations, the directors of the Company consider whether the nature of the promise, within the context of the contract, is to transfer each of those goods and/or services individually or, instead, to transfer a combined item. Considering those goods and/or services are considered to be distinct, separately identifiable, the directors of the Company concluded those goods and/or services as multiple performance obligations.

Determination on lease term of contracts with renewal options

The Group applies judgment to determine the lease term for lease contracts in which it is a lessee that include renewal option, specifically, the leases relating to a ten-year lease of a plant, which is detailed in Note 2.

The assessment of whether the Group is reasonably certain to exercise renewal options impacts the lease term, which significantly affects the amount of lease liabilities and right-of-use assets recognized. Re-assessment is performed upon the occurrence of either a significant event or a significant change in circumstances that is within the control of lessee and that affects the assessment.

4. CRITICAL ACCOUNTING JUDGEMENTS AND KEY SOURCES OF ESTIMATION UNCERTAINTY (Continued)

Critical judgements in applying accounting policies (Continued)

Determination on lease term of contracts with renewal options (Continued)

When assessing reasonable certainty, the Group considers all relevant facts and circumstances including economic incentives/penalties for exercising or not exercising the options. Factors considered include:

- contractual terms and conditions for the optional periods compared with market rates (e.g. whether the amount of payments in the optional periods is below the market rates);

- costs relating to termination of the lease (e.g. relocation costs, costs of identifying another underlying asset suitable for the Group's needs).

Upon application of IFRS 16 as at January 1, 2019, the Group determines that it is reasonably certain to exercise the renewal option based on facts and circumstances for a ten-year lease of a plant, which is detailed in Note 2, resulted in an additional amount of RMB50,385,000 of lease liabilities recognized.

Significant influence over Shanghai Duoning Biotechnology Co., Ltd. ("Duoning")

Note 16 describes that Duoning is an associate of the Group although the Group only owns 8.13% ownership interest in Duoning. The Group has significant influence over Duoning by virtue of the contractual right to appoint one out of the five directors to the board of directors of that company. Details of Duoning are set out in Note 16.

Key sources of estimation uncertainty

The following are the key assumptions concerning the future, and other key sources of estimation uncertainty at the end of the reporting period that may have a significant risk of causing a material adjustment to the carrying amounts of assets and liabilities within the next financial year.

Estimated impairment of goodwill

Determining whether goodwill is impaired requires an estimation of the recoverable amount of the cash-generating unit (or group of cash-generating units) to which goodwill has been allocated, which is the higher of the value in use or fair value less costs of disposal. The value in use calculation requires the Group to estimate the future cash flows expected to arise from the cash-generating unit (or a group of cash-generating units) and a suitable discount rate in order to calculate the present value. Where the actual future cash flows are less than expected, or change in facts and circumstances which results in downward revision of future cash flows, a material impairment loss may arise. As at December 31, 2019, the carrying amount of goodwill is RMB185,408,000. Details of the recoverable amount calculation are disclosed in Note 15.

4. CRITICAL ACCOUNTING JUDGEMENTS AND KEY SOURCES OF ESTIMATION UNCERTAINTY (Continued)

Key sources of estimation uncertainty (Continued)

Provision of ECL for trade receivables and contract assets

The Group uses provision matrix to calculate ECL for trade receivables and contract assets. The provision rates are based on internal credit ratings as groupings of various debtors that have similar loss patterns. The provision matrix is based on the Group's historical default rates taking into consideration forward-looking information that is reasonable and supportable available without undue costs or effort. At every reporting date, the historical observed default rates are reassessed and changes in the forward-looking information are considered.

The provision of ECL is sensitive to changes in estimates. The information about the ECL and the Group's trade receivables and contract assets and are disclosed in Note 37(b).

As at December 31, 2019, the carrying amounts of trade receivables and contract assets are RMB1,334,640,000 and RMB39,981,000 respectively.

Estimated impairment of property, plant and equipment, right-of-use assets and intangible assets

Property, plant and equipment, right-of-use assets and intangible assets are stated at costs less accumulated depreciation/amortization and impairment, if any. In determining whether an asset is impaired, the Group has to exercise judgment and make estimation, particularly in assessing: (1) whether an event has occurred or any indicators that may affect the asset value; (2) whether the carrying value of an asset can be supported by the recoverable amount, in the case of value in use, the net present value of future cash flows which are estimated based upon the continued use of the asset; and (3) the appropriate key assumptions to be applied in estimating the recoverable amounts including cash flow projections and an appropriate discount rate. When it is not possible to estimate the recoverable amount of an individual asset (including right-of-use assets), the Group estimates the recoverable amount of the cash-generating unit to which the assets belongs. Changing the assumptions and estimates, including the discount rates or the growth rate in the cash flow projections, could materially affect the net present value used in the impairment test.

During the year ended December 31, 2019, the management of the Group assessed whether an event has occurred or any indicators that may affect the asset value and concluded no event has occurred or any indicators that may affect the asset value thus no further impairment assessment on property, plant and equipment, right-of-use assets and intangible assets performed.

4. CRITICAL ACCOUNTING JUDGEMENTS AND KEY SOURCES OF ESTIMATION UNCERTAINTY (Continued)

Key sources of estimation uncertainty (Continued)

Estimated useful lives of property, plant and equipment and intangible assets

The Group determines the estimated useful lives and related depreciation/amortization charges for its property, plant and equipment and intangible assets. This estimate is based on the historical experience of the actual useful lives of property, plant and equipment and intangible assets of similar nature and functions. The Group will increase the depreciation/amortization charge where useful lives are less than previously estimated lives, or will write-off or write-down technically obsolete or non-strategic assets that have been abandoned or sold.

Impairment of contract costs

The Group assesses periodically if contract costs may not be recoverable based on an assessment of the remaining amount of consideration the Group expects to receive in exchange of goods or services. Impairment are applied to contract costs where events or changes in circumstances indicate that the remaining amount of consideration to receive less the costs directly relate to providing goods or services that have not been recognized as expense is lower than the carrying amount of contract costs. The remaining amount of consideration to receive has been determined based on the remaining amount of consideration expects to be recognized upon the completion of the contract. Where the expectation is different from the original estimate, such difference will impact the carrying value of contract costs in the year in which such estimate changes.

As at December 31, 2019, the carrying amounts of contract costs was RMB284,235,000 (net of write downs of RMB9,372,000).

Fair value measurements and valuation processes

Certain of the Group's financial assets including financial assets at FVTPL and equity instruments at FVTOCI amounting to RMB282,479,000 and RMB138,826,000 as at December 31, 2019 respectively are measured at fair value with fair values being determined based on unobserved inputs using valuation techniques, judgement and estimation are required in establishing the relevant valuation techniques and relevant inputs thereof. Changes in assumption relating to these factors could affect the reported fair values of these instruments. See Note 37(c) for further disclosures.

5. REVENUE

(i) Disaggregation of revenue from contracts with customers

The Group derives its revenue from the transfer of goods and services at a point in time and over time in the following major service lines:

	2019 RMB'000	2018 RMB'000
Type of goods or services		
Research services		
— Revenue on FFS basis	**3,707,378**	2,405,627
— Revenue on FTE basis	**98,941**	84,226
	3,806,319	2,489,853
Sales of goods		
— Revenue on CMO basis	**154,041**	44,600
— Revenue from other Biologics Products	**23,327**	—
	177,368	44,600
Total	**3,983,687**	2,534,453

	2019 RMB'000	2018 RMB'000
Timing of revenue recognition		
A point in time	**3,884,746**	2,450,227
Over time	**98,941**	84,226
Total	**3,983,687**	2,534,453

(ii) Transaction price allocated to the remaining performance obligation for contracts with customers

The aggregate amount of the transaction price allocated to performance obligations of goods or services type that are unsatisfied (or partially unsatisfied) are approximately RMB35,594 million as at December 31, 2019 (December 31, 2018: RMB10,799 million) including no variable consideration. The management of the Group expects the transaction price allocated to the unsatisfied contracts will be recognized as revenue with approximately RMB2,773 million within one year (December 31, 2018: RMB2,391 million), approximately RMB6,426 million in 2–5 years (December 31, 2018: RMB3,614 million), approximately RMB19,052 million in 5–10 years (December 31, 2018: RMB4,794 million) and the remaining approximately RMB7,343 million will be recognized as revenue over 10 years from the year ended December 31, 2019.

5. REVENUE (Continued)

(ii) Transaction price allocated to the remaining performance obligation for contracts with customers (Continued)

For the purpose of resources allocation and performance assessment, the chief operating decision maker (i.e. the chief executive officer of the Company) reviews the overall results and financial position of the Group as a whole prepared based on the same accounting policies as set out in Note 3. Accordingly, the Group has only one single operating and reportable segment and no further analysis of this single segment is present.

Geographical information

An analysis of the Group's revenue from external customers, analyzed by their respective country/region of operation, is detailed below:

	2019 RMB'000	2018 RMB'000
Revenue		
— North America	**2,137,515**	1,283,935
— PRC	**1,407,617**	980,024
— Europe	**311,457**	171,664
— Rest of the world	**127,098**	98,830
	3,983,687	2,534,453

As at December 31, 2019, the Group's non-current assets located in Ireland amount to RMB2,088,621,000 (2018: RMB549,426,000), the remaining of the non-current assets are primarily located in the PRC.

Information about major customers

Revenue from customers contributing over 10% of the total revenue of the Group are as follows:

	2019 RMB'000	2018 RMB'000
Customer A	**N/A***	281,281

* The corresponding revenue did not contribute over 10% of the total revenue of the Group for the year concerned.

5. REVENUE (Continued)

(iii) Performance obligations for contracts with customers

For revenue under FFS model, the directors of the Company have determined that performance obligations are satisfied upon finalization, delivery and acceptance of the deliverable units, which is generally in the form of a technical laboratory report and/or product/samples. The key judgement is that the Group's performance does not create an asset with alternative future use since the Group cannot redirect the asset for use on another customer, but the Group has a present right to payment from the customers for the services performed only at a point in time upon finalization, delivery and acceptance of the deliverable units. Therefore, the directors of the Company have concluded that the performance obligation of FFS is satisfied at a point in time and recognized FFS revenue at a point in time. The Group's research contracts include payment schedules which require stage payments over the research period once certain specified milestones are reached.

For the services under FTE model, the directors of the Company have assessed that the customers simultaneously receive and consume benefit provided by the Group's performances. Therefore, the management of the Group have concluded that the performance obligation on FTE services is satisfied over time and recognized FTE revenue over the service period. The customers shall pay the Group a prorated amount for the service based on the fixed rate per employee.

For revenue under CMO model, the directors of the Company have determined that performance obligations are satisfied upon acceptance of the deliverable drug substance and/or products under customers' specific order. Therefore, the directors of the Company have concluded that the performance obligation of CMO is satisfied at a point in time and recognizes revenue at a point in time.

For revenue from sales of other Biologics Products, the directors of the Company have determined that performance obligations are satisfied upon acceptance of the Biologics Products under customers' specific order. Therefore, the directors of the Company have concluded that the performance obligation of sales of other Biologics Products is satisfied at a point in time and recognizes revenue at a point in time.

6. OTHER INCOME

	2019 RMB'000	2018 RMB'000
Bank interest income	**55,129**	78,394
Interest income from other financial assets	**8,727**	—
Government grants and subsidies related to		
— Asset (Note i)	**10,137**	2,845
— Income (Note ii)	**92,112**	112,978
Gain on non-refundable option fee (Note 28(i))	**13,764**	—
	179,869	194,217

Notes:

(i) The Group has received certain government grants and subsidies to invest in laboratory equipment. The grants and subsidies were recognized in profit or loss over the useful lives of the relevant assets. Details of the grants and subsidies are set out in Note 33.

(ii) The government grants have been received for the Group's contribution to the local high-tech industry and economy. These grants are unconditional and accounted for as immediate financial support with neither future related costs expected to be incurred nor related to any assets.

7. OTHER GAINS AND LOSSES

	2019 RMB'000	2018 RMB'000
Net foreign exchange (loss) gain	**(5,967)**	101,224
Gain (loss) on derivative financial instruments	**14,047**	(93,942)
Fair value gain on financial assets at FVTPL	**3,515**	796
Investment income from financial assets at FVTPL	**11,896**	10,374
Others	**(1,971)**	2,676
	21,520	21,128

8. FINANCE COSTS

	2019 RMB'000	2018 RMB'000
Interest expense on bank borrowings	**12,427**	—
Interest expense on lease liabilities	**12,534**	—
Less: amounts capitalized in the cost of qualifying assets	**(5,356)**	—
	19,605	—

Borrowing costs capitalized during the year arose on the specific borrowings with interest rate of 1.5% and 3.33% per annum to expenditure on qualifying assets, respectively.

9. PROFIT BEFORE TAX

Profit before tax has been arrived at after charging (crediting):

	2019 RMB'000	2018 RMB'000
Depreciation for property, plant and equipment	**280,245**	212,143
Less: capitalized in contract costs	**107,698**	80,580
	172,547	131,563
Depreciation for right-of-use assets	**34,892**	—
Less: capitalized in contract costs	**1,131**	—
capitalized in property, plant and equipment	**5,757**	—
	28,004	—
Staff cost (including directors' emoluments):		
— Salaries and other benefits	**1,075,774**	688,228
— Retirement benefits scheme contributions	**100,515**	67,806
— Retention bonus	**3,012**	2,113
— Share-based payment expenses	**203,938**	128,374
	1,383,239	886,521
Less: capitalized in contract costs	**323,226**	264,353
capitalized in property, plant and equipment	**137,203**	41,883
	922,810	580,285
Impairment losses, net of reversal		
— Trade receivables	**5,005**	60,275
— Contract assets	**1,714**	(4,331)
— Receivables for purchase of raw materials on behalf of customers	**123**	(4)
	6,842	55,940
Amortization of intangible assets	**20,814**	9,969
Release of prepaid lease payments	**—**	2,238
Auditors' remuneration	**4,996**	4,591
Write down of inventories (included in cost of services)	**3,561**	4,041
Write down of contract costs (included in cost of services)	**6,897**	2,475
Loss on disposal of property, plant and equipment	**1,437**	1,215
Cost of inventories recognized as an expense	**728,042**	449,306

10. INCOME TAX EXPENSE

	2019 RMB'000	2018 RMB'000
Current tax:		
— the PRC Enterprise Income Tax ("EIT")	**174,591**	133,011
— Hong Kong profits tax	**11,782**	—
— the US Federal and State Income taxes	**522**	1,018
— the UK Income taxes	**4**	218
Over provision in prior years:		
— EIT	**(54,440)**	(8,098)
	132,459	126,149
Deferred tax:		
— Current year	**(16,163)**	(18,892)
	116,296	107,257

The Company is registered as an exempted company and as such is not subject to Cayman Islands taxation.

On March 21, 2018, the Hong Kong Legislative Council passed the Inland Revenue (Amendment) (No. 7) Bill 2017 (the "Bill") which introduces the two-tiered profits tax rates regime. The Bill was signed into law on March 28, 2018 and was gazetted on the following day. Under the two-tiered profits tax rates regime, the first HK$2 million of profits of the qualifying group entity will be taxed at 8.25%, and profits above HK$2 million will be taxed at 16.5%. The profits of the group entities not qualifying for the two-tiered profits tax rates regime will continue to be taxed at a flat rate of 16.5%.

Under the Law of the PRC on Enterprise Income Tax (the "EIT Law") and Implementation Regulation of the EIT Law, the EIT rate of the PRC subsidiaries is 25%, with the exception of WuXi Biologics Co., Ltd. ("WuXi Co."), WuXi Biologics (Shanghai) Co., Ltd. ("Shanghai Biologics"), WuXi Biologics (Suzhou) Co., Ltd. ("Suzhou Biologics") and Pinghu U-Pure Biosciences Co., Ltd. ("U-Pure").

WuXi Co. was accredited as a "High and New Technology Enterprise" on August 5, 2013. In 2016, WuXi Co. renewed its High and New Technology Enterprise status, which has been approved by the relevant government authorities, and it is entitled to a preferential tax rate of 15% for a three-year period commencing from the year of 2016. During the year ended December 31, 2019, WuXi Co. applied for renewal, and was subsequently granted the approval from the relevant government authority, as an accredited High and New Technology Enterprise. Accordingly, the estimated tax rate for WuXi Co. for the year ended December 31, 2019 is 15% (2018:15%).

10. INCOME TAX EXPENSE (Continued)

Shanghai Biologics was accredited as a "High and New Technology Enterprise" in November 2016 and therefore is entitled to an EIT exemption in 2016 followed by three years of 50% tax reduction from 2017 to 2019. Accordingly, the applicable EIT rate of Shanghai Biologics for the year ended December 31, 2019 is 12.5% (2018:12.5%). On October 28, 2019, Shanghai Biologics renewed its High and New Technology Enterprise status, which has been approved by the relevant government authorities, and it is entitled to a preferential tax rate of 15% for a three-year period commencing from the year of 2020.

Suzhou Biologics was accredited as a "High and New Technology Enterprise" on December 12, 2018 and it is entitled to a preferential tax rate of 15% for a three-year period commencing from the year of 2018. Accordingly, the applicable EIT rate of Suzhou Biologics for the year ended December 31, 2019 is 15% (2018:15%).

U-Pure was accredited as a "High and New Technology Enterprise" on November 21, 2016. In 2019, U-Pure renewed its High and New Technology Enterprise status, which has been approved by relevant government authorities and it is entitled to a preferential tax rate of 15% for a three-year period commencing from the year of 2019.

Taxation arising in other jurisdictions is calculated at the rates prevailing in the relevant jurisdictions.

	2019 RMB'000	2018 RMB'000
Profit before tax	**1,126,633**	737,722
Tax charge at the EIT rate of 25%	**281,658**	184,431
Tax effect of income that is exempt from taxation	**(10,191)**	(39,214)
Tax effect of expenses not deductible for tax purpose	**49,847**	31,065
Over provision in respect of prior years	**(54,440)**	(8,098)
Effect of research and development expenses that are additionally deducted	**(45,525)**	—
Effect of unused tax losses not recognized as deferred tax assets	**8,793**	9,023
Effect of previously unrecognized and unused temporary now recognized as deferred assets	**—**	(548)
Utilization of tax losses previously not recognized as deferred tax assets	**(1,872)**	(1,477)
Tax at concessionary rate	**(103,397)**	(64,396)
Effect of different EIT rate applied to deferred tax and current tax	**(2,259)**	503
Effect of different tax rate of operating entities in other jurisdiction	**(6,318)**	(4,032)
Income tax expense	**116,296**	107,257

11. DIRECTORS', CHIEF EXECUTIVE'S AND EMPLOYEES' EMOLUMENTS

Details of the emoluments paid or payable to the directors and the Chief Executive of the Company for the service provided to the Group during the years ended December 31, 2019 and 2018 are as follows:

	2019 RMB'000	2018 RMB'000
Chief Executive and executive director:		
Dr. Zhisheng Chen (Note i)		
— director's fee	**—**	—
— salaries and other benefits	**3,003**	2,438
— performance-based bonus (Note V)	**1,620**	1,261
— retirement benefits scheme contributions	**—**	—
— share-based compensation	**20,573**	15,823
	25,196	19,522

	2019 RMB'000	2018 RMB'000
Executive director:		
Dr. Weichang Zhou (Note ii)		
— director's fee	**—**	—
— salaries and other benefits	**1,545**	1,455
— performance-based bonus (Note V)	**800**	668
— retirement benefits scheme contributions	**55**	89
— share-based compensation	**3,222**	2,416
	5,622	4,628

The executive directors' emoluments shown above were for their service in connection with the management of the affairs of the Company and the Group.

11. DIRECTORS', CHIEF EXECUTIVE'S AND EMPLOYEES' EMOLUMENTS (Continued)

	2019 RMB'000	2018 RMB'000
Non-executive directors:		
Dr. Li		
— director's fee	—	—
— salaries and other benefits	—	—
— performance-based bonus (Note V)	—	—
— retirement benefits scheme contributions	—	—
— share-based compensation	—	—
	—	—
Mr. Edward Hu		
— director's fee	—	—
— salaries and other benefits	—	—
— performance-based bonus (Note V)	—	—
— retirement benefits scheme contributions	—	—
— share-based compensation	**187**	—
	187	—
Mr. Yibing Wu (Note iii)		
— director's fee	—	—
— salaries and other benefits	—	—
— performance-based bonus (Note v)	—	—
— retirement benefits scheme contributions	—	—
— share-based compensation	—	—
	—	—
Mr. Yanling Cao (Note iii)		
— director's fee	—	—
— salaries and other benefits	—	—
— performance-based bonus (Note v)	—	—
— retirement benefits scheme contributions	—	—
— share-based compensation	—	—
	—	—

The non-executive directors' emoluments shown above were for their services as directors of the Company or its subsidiaries.

11. DIRECTORS', CHIEF EXECUTIVE'S AND EMPLOYEES' EMOLUMENTS (Continued)

	2019 RMB'000	2018 RMB'000
Independent non-executive directors:		
Mr. William Robert Keller (Note iv)		
— director's fee	**297**	380
— salaries and other benefits	**—**	—
— performance-based bonus (Note v)	**—**	—
— retirement benefits scheme contributions	**—**	—
— share-based compensation	**94**	—
	391	380
Mr. Teh-Ming Walter Kwauk (Note iv)		
— director's fee	**396**	380
— salaries and other benefits	**—**	—
— performance-based bonus (Note v)	**—**	—
— retirement benefits scheme contributions	**—**	—
— share-based compensation	**—**	—
	396	380
Mr. Wo Felix Fong (Note iv)		
— director's fee	**198**	380
— salaries and other benefits	**—**	—
— performance-based bonus (Note v)	**—**	—
— retirement benefits scheme contributions	**—**	—
— share-based compensation	**187**	—
	385	380

The independent non-executive directors' emoluments shown above were for their services as directors of the Company or its subsidiaries.

11. DIRECTORS', CHIEF EXECUTIVE'S AND EMPLOYEES' EMOLUMENTS (Continued)

Notes:

(i) Dr. Zhisheng Chen is the Chief Executive of the Group and his emoluments disclosed above included those for services rendered by him as the Chief Executive.

(ii) Dr. Weichang Zhou was appointed as a director of the Company in May 2016.

(iii) Mr. Yibing Wu and Mr. Yanling Cao were appointed as non-executive directors of the Company in May 2016.

(iv) Mr. William Robert Keller, Mr. Teh-Ming Walter Kwauk and Mr. Wo Felix Fong were appointed as independent non-executive directors of the Company in May 2017.

(v) The performance-based bonus is discretionary based on the Group's financial results and the directors' performance as decided by the management of the Group.

Five highest paid individuals' emoluments

The five individuals with the highest emoluments in the Group include two (2018: two) directors disclosed above. The emoluments of the five highest paid individuals (including directors) for the years ended December 31, 2019 and 2018 were as follows:

	2019	2018
	RMB'000	RMB'000
Salaries and other benefits	**11,612**	8,493
Performance-based bonus	**4,334**	3,242
Retirement benefits scheme contributions	**55**	179
Share-based compensation	**30,138**	24,417
	46,139	36,331

11. DIRECTORS', CHIEF EXECUTIVE'S AND EMPLOYEES' EMOLUMENTS (Continued)

Five highest paid individuals' emoluments (Continued)

The emoluments of the five highest paid individuals were within the following bands:

	Number of individuals 2019	Number of individuals 2018
HK$3,500,001 to HK$4,000,000	**—**	1
HK$4,000,001 to HK$4,500,000	**1**	1
HK$5,000,001 to HK$5,500,000	**—**	1
HK$6,000,001 to HK$6,500,000	**2**	1
HK$6,500,001 to HK$7,000,000	**1**	—
HK$23,000,001 to HK$23,500,000	**—**	1
HK$28,500,001 to HK$29,000,000	**1**	—
	5	5

During the year ended December 31, 2019, no emoluments (2018: nil) were paid by the Group to the directors of the Company or the five highest paid individuals (including directors and employees) as an inducement to join or upon joining the Group or as compensation for loss of office. None of the directors of the Company have waived any emoluments during the year ended December 31, 2019 (2018: nil).

12. EARNINGS PER SHARE

The calculation of the basic and diluted earnings per share is based on the following data:

	2019 RMB'000	2018 RMB'000
Earnings:		
Earnings for the purpose of calculating basic and diluted earnings per share	**1,013,805**	630,592

	2019	2018
Number of shares:		
Weighted average number of ordinary shares for the purpose of calculating basic earnings per share	**1,239,039,948**	1,210,539,897
Effect of dilutive potential ordinary shares:		
Share options	**88,679,703**	101,850,082
Restricted shares	**4,655,382**	1,481,453
Weighted average number of ordinary shares for the purpose of calculating diluted earnings per share	**1,332,375,033**	1,313,871,432

The weighted average number of ordinary shares show about have been arrived at after deducting the weighted average effect on 8,184,866 shares held by a trustee under Restricted Share Award Scheme in Note 35.

No dividend was paid or proposed for ordinary shareholders of the Company during the year ended December 31, 2019, nor has any dividend been proposed since the end of the reporting period (2018: nil).

13. PROPERTY, PLANT AND EQUIPMENT

	Machinery RMB'000	Furniture fixtures and equipment RMB'000	Transportation equipment RMB'000	Leasehold improvement RMB'000	Construction in progress (or "CIP") RMB'000	Total RMB'000
COST						
At January 1, 2018	1,037,858	68,137	747	556,671	466,001	2,129,414
Additions	11,355	6,967	—	25,361	1,293,933	1,337,616
Transfer from CIP	428,990	49,907	995	233,966	(713,858)	—
Disposals	(5,123)	(1,015)	(218)	—	—	(6,356)
At December 31, 2018	1,473,080	123,996	1,524	815,998	1,046,076	3,460,674
Adjustments upon application of IFRS 16 (Note 2)	—	—	—	—	267	267
At January 1, 2019	**1,473,080**	**123,996**	**1,524**	**815,998**	**1,046,343**	**3,460,941**
Additions	**9,237**	**6,623**	**—**	**35,176**	**3,656,404**	**3,707,440**
Acquisition of subsidiaries (Note 34)	**7,795**	**344**	**397**	**—**	**—**	**8,536**
Transfer from CIP	**521,816**	**61,188**	**—**	**302,033**	**(885,037)**	**—**
Disposals	**(8,126)**	**(1,135)**	**—**	**—**	**—**	**(9,261)**
At December 31, 2019	**2,003,802**	**191,016**	**1,921**	**1,153,207**	**3,817,710**	**7,167,656**
DEPRECIATION AND IMPAIRMENT						
At January 1, 2018	(233,943)	(20,641)	(410)	(94,248)	—	(349,242)
Provided for the year	(142,939)	(13,037)	(155)	(56,012)	—	(212,143)
Eliminated on disposals	3,716	699	196	—	—	4,611
At December 31, 2018	(373,166)	(32,979)	(369)	(150,260)	—	(556,774)
Provided for the year	(191,821)	(22,631)	(347)	(65,446)	—	(280,245)
Eliminated on disposals	6,865	955	—	—	—	7,820
At December 31, 2019	(558,122)	(54,655)	(716)	(215,706)	—	(829,199)
CARRYING VALUES						
At December 31, 2018	1,099,914	91,017	1,155	665,738	1,046,076	2,903,900
At December 31, 2019	**1,445,680**	**136,361**	**1,205**	**937,501**	**3,817,710**	**6,338,457**

The above items of property, plant and equipment except for construction in progress are depreciated on a straight-line basis after taking into account of the residual value as follows:

Machinery	9%-18% per annum
Furniture, fixtures and equipment	9%-18% per annum
Transportation equipment	18% per annum
Leasehold improvement	Over the shorter of the lease term or ten years

14. RIGHT-OF-USE ASSETS

	Leasehold lands RMB'000	Leased properties RMB'000	Total RMB'000
As at January 1, 2019			
Carrying amount (Note 2)	**171,533**	**212,821**	**384,354**
As at December 31, 2019			
Carrying amount	**191,026**	**266,904**	**457,930**
For the year ended December 31, 2019			
Depreciation charge	**3,274**	**31,618**	**34,892**
Capitalized in contract cost	**—**	**(1,131)**	**(1,131)**
Capitalized in property, plant and equipment	**—**	**(5,757)**	**(5,757)**
	3,274	**24,730**	**28,004**
Expense relating to short-term leases and other leases with lease terms end within 12 months of the date of initial application of IFRS 16			**1,184**
Total cash outflow for leases			**63,304**
Additions to right-of-use assets (Note)			**113,385**

Note: Amount includes right-of-use assets resulting from leasehold lands, business combination and new lease contracts entered.

For both years, the Group leases various offices, laboratories and plant for its operations. Lease contracts are entered into for fixed term of two to ten years, but may have extension options as described below. Lease terms are negotiated on an individual basis and contain a wide range of different terms and conditions. In determining the lease term and assessing the length of the non-cancellable period, the Group applies the definition of a contract and determines the period for which the contract is enforceable.

Leasehold lands mainly represent upfront payments for leasehold lands in the PRC, for which the Group has obtained the land use right certificates.

14. RIGHT-OF-USE ASSETS (Continued)

Restrictions or covenants on leases

In addition, lease liabilities of RMB292,601,000 are recognized with related right-of-use assets of RMB266,904,000 as at December 31, 2019. The lease agreements do not impose any covenants other than the security interests in the leased assets that are held by the lessor. Leased assets may not be used as security for borrowing purposes.

15. GOODWILL

	2019 RMB'000
COST	
At the beginning of the year	—
Arising on acquisition of subsidiaries (Note 34)	**185,408**
At the end of the year	**185,408**

For the purposes of impairment testing, goodwill has been allocated to an individual cash generating unit (the "Unit"), comprising two subsidiaries, Pinghu U-Pure Biosciences Co., Ltd. and BestChrom (Shanghai) Biosciences Co., Ltd. (together referred to as "Target Companies").

The recoverable amount of the Unit has been determined based on a value in use calculation. That calculation uses cash flow projections based on financial budgets approved by management covering a 5-year period, and pre-tax discount rate of 17%. The Unit's cash flows beyond the 5-year period are extrapolated using a steady 3% growth rate. This growth rate is based on the relevant industry growth forecasts and does not exceed the average long-term growth rate for the relevant industry. Other key assumptions for the value in use calculations relate to the estimation of cash inflows/outflows which include budgeted sales and gross margin, such estimation is based on the Unit's past performance and management's expectations for the market development.

During the year ended December 31, 2019, management of the Group determines that there is no impairment on the Unit.

16. INVESTMENT IN AN ASSOCIATE

	2019 RMB'000	2018 RMB'000
Cost of unlisted investment in an associate	**33,798**	—
Share of post-acquisition loss and other comprehensive expense	**(3,119)**	—
Other adjustments	**178**	—
	30,857	—

Details of the Group's associate at the end of the reporting period are as follow:

Name of entity	Country of registration	Principal place of business	Proportion of ownership interest held by the Group		Proportion of voting rights held by the Group		Principal activity
			2019	2018	**2019**	2018	
Duoning	PRC	PRC	**8.13%**	—	**20%**	—	Sales of serum-free media and disposable products, formulation production and services

In April 2019, the Group acquired 9.32% of the equity interest in Duoning from independent third parties for a total purchase price of US$5,000,000 (equivalent to RMB33,798,000). In December 2019, other investors further invested in Duoning and the Group's equity interest is diluted to 8.13%. The Group is able to exercise significant influence over Duoning because it has the power to appoint one out of the five directors of Duoning under the Articles of Association of Duoning.

Summarized financial information of associate

Reconciliation of the above summarized financial information to the carrying amount of the interest in the associate recognized in the consolidated financial statements:

	31/12/2019 RMB'000
Net assets	**377,355**
Proportion of the Group's ownership interest in Duoning	**8.13%**
The Group's share of net assets of Duoning	**30,679**
Other adjustments	**178**
Carrying amount of the Group's interest	**30,857**

17. DEFERRED TAXATION

For the purpose of presentation in the consolidated statement of financial position, certain deferred tax assets and liabilities have been offset. The following is a summary of the deferred tax balances for financial reporting purposes:

	2019 RMB'000	2018 RMB'000
Deferred tax assets	**36,043**	22,481
Deferred tax liabilities	**(24,734)**	(2,680)
	11,309	19,801

The following are the major deferred tax assets and liabilities recognized and movements thereon before offsetting during the reporting periods:

	Deferred income RMB'000	Allowance on inventories and credit losses RMB'000	Accrued expenses RMB'000	Accelerated tax depreciation RMB'000	Deferred rental under IFRS 16 RMB'000	Fair value adjustment arising from acquisition of subsidiaries RMB'000	Others RMB'000	Total RMB'000
At January 1, 2018	2,467	3,611	3,548	(8,717)	—	—	—	909
Credited (charged) to profit or loss	10,916	7,169	2,577	(1,770)	—	—	—	18,892
At December 31, 2018	13,383	10,780	6,125	(10,487)	—	—	—	19,801
IFRS 16 adjustments (Note 2)	—	—	—	—	2,746	—	—	2,746
At January 1, 2019	**13,383**	**10,780**	**6,125**	**(10,487)**	**2,746**	**—**	**—**	**22,547**
Acquisition of subsidiaries (Note 34)	**—**	**—**	**—**	**—**	**—**	**(27,401)**	**—**	**(27,401)**
Credited to profit or loss	**5,795**	**2,512**	**1,465**	**2,390**	**1,307**	**2,667**	**27**	**16,163**
At December 31, 2019	**19,178**	**13,292**	**7,590**	**(8,097)**	**4,053**	**(24,734)**	**27**	**11,309**

As at December 31, 2019, the Group had unused tax losses of RMB88,366,000 (2018: RMB73,490,000) after deducting expired tax losses of RMB12,806,000 arising from a subsidiary located in Cayman, available to offset against future profits. No deferred tax asset has been recognized in respect of such losses in both 2019 and 2018 due to the unpredictability of future profit streams.

17. DEFERRED TAXATION (Continued)

Apart from unused tax losses as mentioned above, at December 31, 2019, the Group had other deductible temporary differences of RMB218,947,000 (2018: RMB191,503,000), available to offset against future profits. As at December 31, 2019 and 2018, all the deductible temporary differences had been recognized in deferred tax assets.

The unrecognized tax losses as at December 31, 2019 include RMB69,026,000 (December 31, 2018: RMB69,698,000) of the losses arising from subsidiaries located in Hong Kong, Cayman and Ireland which will be carried forward indefinitely until it's fully offset. The remaining unrecognized tax losses will be carried forward and expire in years as follows:

	2019 RMB'000	2018 RMB'000
2020	**—**	140
2021	**—**	25
2022	**736**	1,455
2023	**2,172**	2,172
2024	**16,432**	—
	19,340	3,792

Deferred taxation has not been provided for in the consolidated financial statements in respect of temporary differences attributable to accumulated profits of the PRC subsidiaries amounting to RMB1,950,000,000 as at December 31, 2019 (December 31, 2018: RMB939,159,000) as the Group is able to control the timing of the reversal of the temporary differences and it is probable that the temporary differences will not be reversed in the foreseeable future.

18. INTANGIBLE ASSETS

	Technology RMB'000 (Note i)	Customer relationship RMB'000 (Note i)	Patent and license RMB'000 (Note ii)	Total RMB'000
Cost				
At January 1, 2018	—	—	—	—
Additions	—	—	333,254	333,254
Exchange alignment	—	—	8,528	8,528
At December 31, 2018	—	—	341,782	341,782
Acquisition of subsidiaries (Note 34)	57,600	47,400	—	105,000
Additions	—	—	1,191	1,191
Exchange alignment	—	—	(1,345)	(1,345)
At December 31, 2019	57,600	47,400	341,628	446,628
Amortization				
At January 1, 2018	—	—	—	—
Charge for the year	—	—	(9,969)	(9,969)
At December 31, 2018	—	—	(9,969)	(9,969)
Charge for the year	(1,309)	(2,370)	(17,135)	(20,814)
At December 31, 2019	**(1,309)**	**(2,370)**	**(27,104)**	**(30,783)**
Carrying Values				
At December 31, 2018	—	—	331,813	331,813
At December 31, 2019	**56,291**	**45,030**	**314,524**	**415,845**

Notes:

i. Technology and customer relationship are recognized during the acquisition of subsidiaries (see Note 34 for details). They represent the intellectual property and existing customer relationships which have finite useful life and are amortized on a straight-line basis over its estimated useful life of 11 and 5 years respectively.

ii. On June 25, 2018, the Group has entered into a platform license agreement with Open Monoclonal Technology, Inc. ("OMT"), an independent third party not connected to the Group, under which OMT has granted the Group a non-exclusive, non-transferable, non-sublicensable license to use certain animals, namely, OmniRat, OmniMouse and OmniFlic, for the purpose of researching, developing, and making antibodies, for a cash consideration of US$51million (equivalent to approximately RMB333,254,000). The Group has estimated the useful life of this license is 18 years and therefore the license payment is amortized over 18 years on a straight-line basis.

19. PREPAID LEASE PAYMENTS

	2018 RMB'000
Analysed for reporting purposes as:	
Current asset	2,910
Non-current asset	168,623
	171,533

Prepaid lease payments represent the land use rights located in the PRC and Ireland respectively which are released to profit or loss on a straight-line basis over the lease period of 50 years and 999 years in line with land use right certificates. The amount to be amortized within one year is presented as current portion of prepaid lease payments as at December 31, 2018 but is reclassified to right-of-use assets as at January 1, 2019 (see Note 2 for details).

20. EQUITY INSTRUMENTS AT FVTOCI

On June 25, 2018, the Group subscribed 19.9% of the equity interest of Tysana Pte. Ltd. ("Tysana"), a Singapore corporation, for a cash consideration of US$9,950,000 (equivalent to approximately RMB64,569,000).Tysana focuses on the business of infectious diseases drug research, development and commercialization in respect of the monoclonal antibodies.

On July 16, 2018, the Group subscribed 19.9% of the equity interest of Privus Biologics, LLC ("Privus"), a limited liability company organized under the law of the State of Delaware, U.S.A., with a consideration of US$9,950,000 (equivalent to approximately RMB66,424,000). Privus focuses on the business of optimizing, manufacturing and developing pharmaceuticals intended for use in the field containing one or more subject antibodies as an active ingredient.

The Group has no controlling power nor significant influence over the management and the operations of Tysana and Privus. At the date of initial recognition, the Group made an irrevocable election to designate these equity instruments as at FVTOCI as the management of the Company believes that recognizing short-term fluctuations in these investments' fair value in profit or loss would not be consistent with the Group's strategy of holding these investments for long-term purposes and realizing their performance potential in the long run.

During the year ended December 31, 2019, the Group managed and evaluated the above unlisted investments purchased on a fair value basis in accordance with the Group's investment strategy. Details of the fair value measurement of the equity instrument at FVTOCI are set out in Note 37(c).

20. EQUITY INSTRUMENTS AT FVTOCI (Continued)

Movement of equity instruments at FVTOCI are as follows:

	RMB'000
As at January 1, 2019	**136,578**
Exchange alignment	**2,248**
As at December 31, 2019	**138,826**

21A. FINANCIAL ASSETS AT FVTPL

	2019 RMB'000	2018 RMB'000
Current assets		
Financial products	**543,000**	—
Less: other financial assets (Note 21B)	**458,000**	—
Other financial assets at FVTPL (Note i)	**85,000**	—
Non-current assets		
Unlisted investments (Note ii)	**282,479**	55,699

i. During the year ended December 31, 2019, the Group entered into several contracts of financial products with different banks for periods up to one year. While most of the financial products are principal guaranteed, their returns were determined by reference to the performance of the underlying instruments in the currency market, the interbank market, the bond market, the security and equity market and the derivative financial assets. Thus, these financial products are recognized as financial assets at FVTPL. The fair value of these financial products were RMB85,000,000 as at December 31, 2019; and their expected return rates vary from 3.15% to 3.5% per annum.

21A. FINANCIAL ASSETS AT FVTPL (Continued)

ii. In May 2018 and January 2019, the Group entered into agreements to purchase 429,799 and 1,719,197 Series Mezzanine 2 Preferred Shares of Inhibrx, Inc. ("Inhibrx") respectively for cash consideration of US$3,000,000 (equivalent to approximately RMB19,130,000) and US$12,000,000 (equivalent to approximately RMB82,178,000) respectively. Inhibrx is a Delaware corporation and focuses on the business of delivering optimized, biologic therapeutics to people with life-threatening conditions and building a large and diverse pipeline with the potential to impact cancer, infectious disease and orphan diseases.

In September 2018 and January 2019, the Group entered into agreements to purchase 481,454 Series C-1 and 481,454 Series C-3 Preferred Shares of CANBridge Pharmaceuticals Inc. ("Canbridge") respectively for a cash consideration of US$5,000,000 (equivalent to approximately RMB34,195,000) and US$5,000,000 (equivalent to approximately RMB33,672,000) respectively. Gain on fair value change of RMB6,468,000 was recognized for the equity instrument in Canbridge for the year ended December 31, 2019 (2018: RMB796,000). Canbridge is an exempted company incorporated with limited liability under the laws of Cayman Islands and focuses on the business of developing, selling, or marketing the pharmaceuticals for treatment or prevention of oncology or rare disease indications.

In March 2019, the Group entered into an agreement to purchase 2,856,055 Series A Preferred Shares of Virtuoso Therapeutics, Inc. ("Virtuoso") for a cash consideration of US$1,875,000 (equivalent to approximately RMB12,572,000). Virtuoso is an exempted company incorporated with limited liability under the laws of Cayman Islands and focuses on the business of researching and developing antibodies and the therapeutics on oncology.

In July 2019, the Group entered into an agreement to purchase 1,428,571 Series C-1 Preferred Shares of I-Mab for a cash consideration of US$10,000,000 (equivalent to approximately RMB68,737,000). I-Mab is an exempted company incorporated with limited liability under the laws of the Cayman Islands and focused on the business of discovery, development and commercialization of novel or highly differentiated biologics to treat diseases with significant unmet medical needs, particularly cancers and autoimmune disorders.

In October and December 2019, the Group invested US$2,000,000 (equivalent to approximately RMB14,146,000) and US$1,000,000 (equivalent to approximately RMB7,038,000) respectively to BB Pureos Bioventures, LP, ("BB Pureos") as a limited partnership and strategic investor. Loss on fair value change of RMB2,953,000 was recognized for the investment in BB Pureos for the year ended December 31, 2019. BB Pureos is incorporated in Guernsey and mainly venture capital in private innovative drug development companies, with an emphasis on the next generation of biological drugs and drug formats.

21A. FINANCIAL ASSETS AT FVTPL (Continued)

During the year ended December 31, 2019, the Group managed and evaluated the unlisted investment purchased on a fair value basis in accordance with the Group's investment strategy. Details of the fair value measurement of the financial assets at FVTPL are set out in Note 37(c).

Movement of unlisted investments under financial assets at FVTPL are as follows:

	Inhibrx RMB'000	Canbridge RMB'000	Virtuoso RMB'000	I-Mab RMB'000	BB Pureos RMB'000	Total RMB'000
As at January 1, 2018	19,130	—	—	—	—	19,130
Additions	—	34,195	—	—	—	34,195
Fair value change	—	796	—	—	—	796
Exchange alignment	1,460	118	—	—	—	1,578
As at December 31, 2018	20,590	35,109	—	—	—	55,699
Additions	**82,178**	**33,672**	**12,572**	**68,737**	**21,184**	**218,343**
Fair value change	**—**	**6,468**	**—**	**—**	**(2,953)**	**3,515**
Exchange alignment	**1,875**	**1,754**	**508**	**1,025**	**(240)**	**4,922**
As at December 31, 2019	**104,643**	**77,003**	**13,080**	**69,762**	**17,991**	**282,479**

Financial assets at FVTPL that are denominated in currencies other than the functional currency of the respective group entities are set out below:

	2019 RMB'000	2018 RMB'000
United States Dollars ("US$")	**282,479**	55,699

21B. OTHER FINANCIAL ASSETS

During the year ended December 31, 2019, the Group entered into several contracts of financial products with banks, for a period of two to six months, amounting of RMB458,000,000. These financial products are principal guaranteed with fixed interest rate and therefore are recognized as other financial assets at amortized costs. The fixed interest rates ranged from 3.2% to 3.8% per annum.

22. OTHER LONG-TERM DEPOSITS AND PREPAYMENTS

Other long-term deposits represent rental deposits paid for certain lease arrangements of office premises and deposits paid to guarantee certain milestones of construction projects.

Prepayments represent interest paid for borrowings.

23. INVENTORIES

	2019 RMB'000	2018 RMB'000
Raw material and consumables	**336,906**	227,189
Work in progress	**43,874**	—
Finished goods	**18,609**	—
Total	**399,389**	227,189

The inventories are net of a write-down of approximately RMB10,267,000 as at December 31, 2019 (2018: RMB6,706,000).

24. CONTRACT COSTS

	2019 RMB'000	2018 RMB'000
Costs to fulfil contracts	**284,235**	294,569

The contract costs are net of a write-down of approximately RMB9,372,000 as at December 31, 2019 (2018: RMB2,475,000).

25. TRADE AND OTHER RECEIVABLES

	2019 RMB'000	2018 RMB'000
Trade receivables from contracts with customers		
— related parties	**4,184**	8,791
Less: Allowance for credit losses	**(22)**	(3)
— third parties	**1,394,856**	810,365
Less: Allowance for credit losses	**(64,378)**	(56,295)
	1,334,640	762,858
Bill receivables from contracts with customers	**2,248**	—
Receivables for purchase of raw materials on behalf of customers		
— third parties	**87,080**	87,980
Less: Allowance for credit losses	**(1,137)**	(1,014)
	85,943	86,966
Advances to suppliers	**21,565**	18,647
Prepayments	**4,096**	3,153
Other receivables	**42,030**	26,273
Value added tax recoverable	**246,137**	169,338
	313,828	217,411
Total trade and other receivables	**1,736,659**	1,067,235

Details of the trade and other receivables due from related parties are set out in Note 42(2).

Rental deposits paid were adjusted upon the initial application of IFRS 16. Details of the adjustments are set out in Note 2.

As at January 1, 2018, trade receivables from contracts with customers amounted to RMB289,857,000.

25. TRADE AND OTHER RECEIVABLES (Continued)

The Group allows a credit period ranging from 10 to 90 days to its customers. The following is an aged analysis of trade receivables (net of allowance for credit losses) presented based on the invoice dates:

	2019 RMB'000	2018 RMB'000
Not past due	**833,005**	461,772
Within 90 days	**309,276**	236,288
91 days to 1 year	**168,467**	60,556
Over 1 year	**23,892**	4,242
	1,334,640	762,858

As at December 31, 2019, included in the Group's trade receivables balance are debtors with aggregate carrying amount of RMB501,635,000 (2018: RMB301,086,000) which are past due as at the reporting date. Out of the past due balances, RMB192,359,000 (2018: RMB64,798,000) have been past due 90 days or more and are not considered as in default as the amounts will be repaid by the customers based on the customers' promise and historical experience. The Group does not hold any collateral over these balances.

Details of impairment assessment of trade receivables and receivables for purchase of raw materials on behalf of customers for the year ended December 31, 2019 are set out in Note 37(b).

Trade and other receivables that are denominated in currencies other than the functional currency of the respective group entities are set out below:

	2019 RMB'000	2018 RMB'000
US$	**1,007,555**	520,779
SG$	**114**	1,178

26. CONTRACT ASSETS

	2019 RMB'000	2018 RMB'000
Contract assets	**48,331**	42,657
Less: Allowance for credit losses	**(8,350)**	(6,631)
	39,981	36,026

As at January 1, 2018, contract assets amounted to RMB20,631,000.

The contract assets primarily relate to the Group's right to consideration for work completed and not billed because the rights are conditioned upon the Group's future performance in achieving specified milestones as stipulated in the contract. The contract assets are transferred to trade receivables when the rights become unconditional.

Typical payment terms which impact on the amount of contract assets recognized are as follows:

— Revenue on FFS basis

The Group's research contracts include payment schedules which require stage payments over the research period once certain specified milestones are reached. The Group requires certain customers to pay 20%-50% of total contract value as project start-up cost as part of its credit risk management policies.

The Group classifies these contract assets as current because the Group expects to realize them in their normal operating cycle.

Details of the impairment assessment of contract assets for the year ended December 31, 2019 are set out in Note 37(b).

Contract assets that are denominated in currencies other than the functional currency of the respective group entities are set out below:

	2019 RMB'000	2018 RMB'000
US$	**2,998**	22,967

27. BANK BALANCES AND CASH/PLEDGED BANK DEPOSITS

Bank balances and cash of the Group comprised of cash and short term bank deposits with an original maturity of three months or less. The short term bank deposits carry interests at market rates which ranged from 0% to 3.32% per annum as at December 31, 2019 (2018: 0.001% to 3.55%).

Certain deposits are pledged to banks as collateral for the issue of letter of credit by the banks in connection with the purchase of raw materials and property, plant and equipment by the Group. Such bank deposits carry fixed interest rates.

For the years ended December 31, 2019 and 2018, the Group performed impairment assessment on pledged bank deposits and bank balances and concluded that the probability of defaults of the counterparty banks are insignificant and accordingly, no allowance for credit losses is provided.

Bank balances and cash and pledged bank deposits that are denominated in currencies other than the functional currency of the respective group entities are set out below:

	2019	2018
	RMB'000	RMB'000
US$	**4,814,698**	708,093
Hong Kong dollars ("HK$")	**76,005**	44,934
EUR	**241**	6,461

28. TRADE AND OTHER PAYABLES

	2019 RMB'000	2018 RMB'000
Trade payables		
— related parties	**9,507**	9,143
— third parties	**176,303**	211,840
	185,810	220,983
Other payables and accrual		
— related parties	**736**	—
— third parties	**216,665**	107,855
	217,401	107,855
Option fee received (Note i)	**—**	27,453
Advance from customers (Notes i and ii)	**404,077**	—
Advance from disposal of property, plant and equipment	**47,641**	—
Payable for purchase of property, plant and equipment	**695,798**	210,052
Consideration payables for acquisition of subsidiaries (Note 34)	**28,702**	—
Salary and bonus payables	**257,043**	142,161
Other taxes payable	**7,180**	3,275
	1,843,652	711,779

28. TRADE AND OTHER PAYABLES (Continued)

Notes:

i. The balance of December 31, 2018 represents a US$4 million non-refundable option fee received from an independent third party for granting the party an option to purchase certain of the Group's assets. In December 2015, an agreement (hereafter referred to as the "Option to Purchase Agreement") was entered into between the Company and a Company's strategic customer, pursuant to which the Company granted the customer an option to acquire certain of its biologics manufacturing facilities. The total consideration for the option was US$8 million, 50% of which had been paid in March 2016 and the remaining 50% shall be payable upon the Company completing certain required documentations. Pursuant to the Option to Purchase Agreement, the customer has a right to exercise the purchase option on or before June 30, 2020, which upon mutual agreement between the Company and the customer, may be extended until no later than June 30, 2023. Should the customer choose to exercise the purchase option, it has to pay the Company an acquisition price for the biologics manufacturing facilities determined on the basis as specified in the Option to Purchase Agreement; and the Company has to fulfill certain stipulated conditions including completing the transfer of the title of the biologics manufacturing facilities to the customer or its designated person, and obtaining all necessary regulatory approvals and consents in relation to the transfer of the facilities. The option fee would then be applied for part payment for the manufacturing facilities acquisition price. Should the customer choose to terminate the agreement without exercising the purchase option, the customer could apply the option fee to pay for any service fees due and payable to the Group for services rendered by the Group, up to a maximum of 50% of the option fee paid, and the remaining 50% will become forfeited payment to the Group.

   During the current year, the Group acknowledged receipt of termination notice to the Option to Purchase Agreement from the customer, and accordingly US$2 million (equivalent to RMB13,952,000) is reclassified to "advance from customers" and the remaining US$2 million (equivalent to RMB13,764,000) is recognized as "other income".

ii. In May 2019, the Group entered into a letter of intent with an independent global vaccine leader (the "Vaccine Partner"), according to which the Group and the Vaccine Partner are contemplating entering into a contract manufacturing agreement (the "Vaccine Manufacturing Agreement") pursuant to which the Group shall build an integrated vaccine manufacturing facility in Ireland, and manufacture for, and supply to, the Vaccine Partner certain vaccine products. The Group received first instalment of US$55 million (equivalent to RMB390,125,000) in December 2019 and recognizes the amount as "advance to customers". The Group has subsequently entered into the Vaccine Manufacturing Agreement with the Vaccine Partner in February 2020, details of which are set out in Note 48.

28. TRADE AND OTHER PAYABLES (Continued)

Details of the trade and other payables due to related parties are set out in Note 42(2).

Payment terms with suppliers are mainly on credit within 90 days from the time when the goods are received from the suppliers. The following is an age analysis of trade payables presented based on invoice date at the end of the reporting period:

	2019	2018
	RMB'000	RMB'000
Within three months	**165,838**	192,189
Over three months but within one year	**18,764**	27,721
Over one year but within two years	**1,208**	1,073
	185,810	220,983

Trade and other payables that are denominated in currencies other than the functional currency of the respective group entities are set out below:

	2019	2018
	RMB'000	RMB'000
US$	**150,797**	154,276
EUR	**279,771**	12,187
Swiss Francs ("CHF")	**6,690**	5,258

29. CONTRACT LIABILITIES

	2019	2018
	RMB'000	RMB'000
Contract liabilities	**336,395**	499,743

As at January 1, 2018, contract liabilities amounted to RMB345,890,000.

Revenue of RMB451,352,000 was recognized during the year ended December 31, 2019 that was included in the contract liabilities at the beginning the year of 2019 (2018: RMB303,337,000).

The Group classifies these contract liabilities as current because the Group expects to realize them in their normal operating cycle.

29. CONTRACT LIABILITIES (Continued)

Typical payment terms which impact on the amount of contract liabilities recognized are as follows:

— Revenue on FFS basis

The Group normally requires certain customers to pay a percentage of total contract value as a down payment as project start-up cost as part of its credit risk management policies. The advance payment schemes result in contract liabilities which represent the Group's obligation to transfer services to a customer for which the Group has received consideration (or an amount of consideration is due) from the customer.

— Revenue on CMO basis

The Group shall invoice client for products and services upon commencement thereof, which will give rise to contracts liability at the start of a contract. The Group normally invoices its clients a percentage of the price on acceptance of manufacturing orders to commence work.

— Revenue from other Biologics Products

The Group normally invoices its clients a percentage of the price on acceptance of other Biologics Products orders to commence work, which will give rise to contract liability at the start of a contract.

Contract liabilities that are denominated in currencies other than the functional currency of the respective group entities are set out below:

	2019	2018
	RMB'000	RMB'000
US$	**209,563**	359,038
EUR	**—**	650

30. DERIVATIVE FINANCIAL ASSETS AND LIABILITIES

	Assets		Liabilities	
	December 31, 2019 RMB'000	December 31, 2018 RMB' 000	**December 31, 2019 RMB'000**	December 31, 2018 RMB'000
Derivatives not under hedge accounting				
Foreign currency forward contracts	**—**	—	**—**	14,010
Less: current portion	**—**	—	**—**	14,010
Non-current portion	**—**	—	**—**	—

	Assets		Liabilities	
	December 31, 2019 RMB'000	December 31, 2018 RMB' 000	**December 31, 2019 RMB'000**	December 31, 2018 RMB'000
Derivatives under hedge accounting				
Foreign currency forward contracts — Cash flow hedges	**31,446**	16,721	**16,406**	5,058
Less: current portion	**31,446**	6,874	**16,406**	4,981
Non-current portion	**—**	9,847	**—**	77

Derivatives not under hedge accounting

During the year ended December 31, 2018, the Group entered into several US$/RMB foreign currency forward contracts with banks in order to manage the Group's currency risk. Under the foreign currency forward contracts, the Group will pay to the bank notional amount of US$ and receive from the bank an amount in RMB equal to the product of the relevant notional amount of US$ and the relevant forward rate as specified within the respective contracts.

The Group did not elect to adopt hedge accounting for these contracts and therefore, during the year ended December 31, 2019, gains for settled foreign currency forward contracts of RMB14,047,000 was recognized as "gain (loss) on derivative financial instruments" in other gains and losses, and losses for settled foreign currency forward contracts of RMB11,799,000 was recognized as "net foreign exchange loss" in other gains and losses.

30. DERIVATIVE FINANCIAL ASSETS AND LIABILITIES (Continued)

Derivatives under hedge accounting

The Group entered into foreign currency forward contracts with banks to manage its foreign exchange rate risk arising from anticipated future foreign currency sales transactions up to 12 months (2018: 18 months), in particular, the exchange rate between US$ and RMB, as well as US$ and EUR which are designated as cash flow hedges. The major terms of these contracts on a net settlement basis as at December 31, 2019 presented are as follows:

	Average strike/ forward rate	Foreign currency US$'000	Total outstanding notional value RMB'000	Fair value assets RMB'000
Sell US$				
Less than 3 months	7.0000	52,000	364,000	1,242
4 to 6 months	7.0004–7.0067	74,000	518,336	953
7 to 12 months	7.0744–7.2132	279,000	1,987,925	29,251

	Average strike/ forward rate	Foreign currency US$'000	Total outstanding notional value RMB'000	Fair value liabilities RMB'000
Sell US$				
Less than 3 months	6.7540–6.9675	97,000	671,924	4,516
4 to 6 months	6.7655–7.0000	97,000	673,487	4,719
7 to 12 months	6.8820–7.0169	189,000	1,319,210	6,121

	Average strike/ forward rate	Foreign currency US$'000	Total outstanding notional value EUR'000	Fair value liabilities RMB'000
Sell US$				
7 to 12 months	1.1358–1.1525	16,018	14,000	1,050

30. DERIVATIVE FINANCIAL ASSETS AND LIABILITIES (Continued)

Derivatives under hedge accounting (Continued)

As at December 31, 2019, the aggregate amount of gains after tax under foreign currency forward contracts recognized in other comprehensive income and accumulated in the cash flow hedging reserve relating to the exposure on anticipated future sales transactions and repayment of borrowings denominated in US$ is RMB15,120,000 (2018: RMB11,701,000). It is anticipated that the sales will take place within next 12 months (2018: 18 months) at which time the amount deferred in equity will be reclassified to profit or loss.

During the current year, losses relating to the transactions not actually occurred portion of RMB7,346,000 (2018: nil) is recognized immediately in profit or loss, and is included as "net foreign exchange loss" in other gains and losses.

During the current year, amounts previously recognized in debit side of other comprehensive income and accumulated in equity of RMB9,550,000 are reclassified to revenue when the hedged item affects profit or loss.

Derivative financial instruments that are denominated in currencies other than the functional currency of the respective group entities are set out below:

	2019 RMB'000	2018 RMB'000
Assets		
US$	**31,446**	16,721
Liabilities		
US$	**16,406**	19,068

31. BORROWINGS

	2019 RMB'000	2018 RMB'000
Unsecured bank loans	**1,901,347**	—
The carrying amounts of the above borrowings are repayable*:		
Within one year	**506,107**	—
Within a period of more than one year but not exceeding two years	**139,524**	—
Within a period of more than two years but not exceeding five years	**1,255,716**	—
	1,901,347	—
Less: Amounts due within one year shown under current liabilities	**(506,107)**	—
Amounts shown under non-current liabilities	**1,395,240**	—

* The amounts due are based on scheduled repayment dates set out in the loan agreements.

The exposure of the Group's bank borrowings are as follows:

	2019 RMB'000	2018 RMB'000
Fixed-rate borrowings	**280,000**	—
Variable-rate borrowings	**1,621,347**	—
	1,901,347	—

The Group's variable-rate borrowings carry interest at London Interbank Offered Rate ("LIBOR") plus 1.2% and European Central Bank Rate plus 1.5%. Interest is reset each one to three months based on the contracts.

31. BORROWINGS (Continued)

The ranges of effective interest rates (which are also equal to contracted interest rates) on the Group's borrowings are as follows:

	2019 RMB'000	2018 RMB'000
Effective interest rate:		
Fixed-rate borrowings	3.70% to 3.92%	N/A
Variable-rate borrowings	1.50% to 3.33%	N/A

The Group's bank borrowings that are denominated in currencies other the functional currencies of the relevant group entities are set out below:

	2019 RMB'000	2018 RMB'000
US$	1,409,192	—
EUR	212,155	—

As at the end of the reporting period, the Group has the following undrawn borrowing facilities:

	2019 RMB'000	2018 RMB'000
Floating rate		
— expiring within one year	1,473,360	—
Fixed rate		
— expiring within one year	160,000	—
	1,633,360	—

32. LEASE LIABILITIES

	2019 RMB'000
Lease liabilities payable:	
Within one year	**26,489**
Within a period of more than one year but not exceeding two years	**28,057**
Within a period of more than two years but not exceeding five years	**79,591**
Within a period of more than five years	**158,464**
	292,601
Less: Amounts due within one year shown under current liabilities	**(26,489)**
Amounts shown under non-current liabilities	**266,112**

33. DEFERRED INCOME

	2019 RMB'000	2018 RMB'000
Assets related government grants	**146,524**	77,408
Income related government grants	**2,361**	—
	148,885	77,408

Movements of government grants:

	Assets related RMB'000	Income related RMB'000	Total RMB'000
At January 1, 2018	19,711	—	19,711
Government grants received	60,542	—	60,542
Credited to profit or loss (Note 6)	(2,845)	—	(2,845)
At December 31, 2018	77,408	—	77,408
Government grants received	79,253	94,473	173,726
Credited to profit or loss (Note 6)	(10,137)	(92,112)	(102,249)
At December 31, 2019	146,524	2,361	148,885

During the year ended December 31, 2019, the Group received government grants of RMB79,253,000 (2018: RMB60,542,000) for its investment in laboratory equipment. The grants were recognized in profit or loss over the useful lives of the relevant assets.

34. ACQUISITION OF SUBSIDIARIES

On September 26, 2019, WuXi Co., a wholly-owned subsidiary of the Group, entered into agreements with independent third parties not connected to the Group to acquire 50.1% equity interest in Target Companies for consideration of RMB300,600,000. This acquisition has been accounted for using the acquisition method. The amount of goodwill arising as a result of the acquisition was RMB185,408,000. Target Companies are limited liability companies under the laws of the PRC, primarily engaged in production and sale of biologics purification medium and chromatographic column. Target Companies were acquired so as to integrate up-stream suppliers.

Acquisition-related costs were not material and have been expensed as incurred as part of administrative expenses in the consolidated statement of profit or loss and other comprehensive income.

Details of the fair value of assets and liabilities acquired at the date of acquisition are as follows:

	RMB'000
Property, plant and equipment	8,536
Right-of-use assets	2,663
Intangible assets	105,000
Inventories	81,934
Trade and other receivables	23,390
Financial assets at FVTPL	38,000
Bank balances and cash	4,875
Trade and other payables	(2,685)
Contract liabilities	(1,514)
Lease liabilities	(2,645)
Income tax payable	(229)
Deferred tax liabilities	(27,401)
Net assets acquired	229,924

34. ACQUISITION OF SUBSIDIARIES (Continued)

Goodwill arising on acquisition:

	RMB'000
Consideration transferred	300,600
Plus: non-controlling interests	114,732
Less: net assets acquired	229,924
Goodwill arising on acquisition	185,408

Goodwill arose in the acquisition of Target Companies because the cost of the combination included a control premium. In addition, the consideration paid for the combination effectively included amounts in relation to the benefit of expected synergies, revenue growth, future market development and the assembled workforce of Target Companies. These benefits are not recognized separately from goodwill because they do not meet the recognition criteria for identifiable intangible assets.

None of the goodwill arising on the acquisitions is expected to be deductible for tax purposes.

Consideration for acquisition:

	RMB'000
Cash consideration paid	271,898
Consideration payable	28,702
Total consideration	300,600

Net cash outflow on acquisition:

	RMB'000
Cash consideration paid	271,898
Less: bank balances and cash acquired	(4,875)
	267,023

Included in the profit of the Group for the year is a loss of RMB3,978,000 attributable to the post-acquistion results of Target Companies. Revenue for the year includes RMB23,327,000 generated from Target Companies.

34. ACQUISITION OF SUBSIDIARIES (Continued)

Had the acquisition been completed on January 1, 2019, revenue for the year of the Group would have been RMB4,024,022,000, and profit for the year of the Group would have been RMB1,013,848,000. The pro forma information is for illustrative purposes only and is not necessarily an indication of revenue and results of operations of the Group that actually would have been achieved had the acquisition been completed on January 1, 2019, nor is it intended to be a projection of future results.

In determining the 'pro-forma' revenue and profit of the Group had Target Companies been acquired at the beginning of the current year, the directors of the Company have calculated amortization of intangible assets acquired on the basis of the fair values arising in the initial accounting for the business combination rather than the carrying amounts recognized in the pre-acquisition financial statements.

35. SHARE CAPITAL

	Number of shares	Amount US$
ORDINARY SHARES OF US$0.000025 EACH		
AUTHORIZED:		
At January 1, 2018, December 31, 2018 and December 31, 2019	2,000,000,000	50,000

ISSUED AND FULLY PAID:

	Number of shares	Amount US$	Shown in the financial statements as RMB'000
At January 1, 2018	1,163,065,057	29,077	192
Issue of new shares (Note i)	57,000,000	1,425	9
Exercise of pre-IPO share options	5,876,333	147	1
At December 31, 2018	1,225,941,390	30,649	202
Issue of new shares (Note ii)	54,684,866	1,368	10
Exercise of pre-IPO share options	13,899,730	347	2
At December 31, 2019	1,294,525,986	32,364	214

35. SHARE CAPITAL (Continued)

Notes:

i. On March 29, 2018, the Company issued 57,000,000 new ordinary shares of US$0.000025 each through placement to certain independent third parties at a price of HK$70.00 per share. The net cash proceeds was HK$3,966,060,000 (equivalent to approximately RMB3,186,690,000), after deducting the issue cost of HK$23,940,000 (equivalent to approximately RMB19,236,000).

ii. On May 30, 2019, the Company issued and allotted 8,184,866 new ordinary shares at nil consideration to trustee under the Restricted Share Award Scheme. Details of the Restricted Share Award Scheme are set out in Note 43. On November 8, 2019, the Company issued 46,500,000 new ordinary shares of US$0.000025 each through placement to certain independent third parties at a price of HK$85.00 per share. The net cash proceeds was HK$3,928,760,000 (equivalent to approximately RMB3,512,221,000), after deducting the issue cost of HK$23,740,000 (equivalent to approximately RMB21,393,000).

All the shares issued by the Company ranked pari passu in all respects.

36. CAPITAL RISK MANAGEMENT

The Group manages its capital to ensure that entities in the Group will be able to continue as going concern while maximizing the return to shareholders through the optimization of the debt and equity balance.

The capital structure of the Group consists of net debt, which includes borrowings disclosed in Note 31, net of cash and cash equivalents, and equity attributable to owners of the Company, comprising issued share capital and reserves.

The directors of the Company review the capital structure on a continuous basis taking into account the cost of capital and the risks associated with each class of capital. The Group will balance its overall capital structure through the payment of dividends, capital injection, new share issues as well as the issue of new debts or the redemption of existing debt.

37. FINANCIAL INSTRUMENTS

a. Categories of financial instruments

	2019 RMB'000	2018 RMB'000
Financial assets		
Financial assets at amortized cost (including bank balances and cash)	**8,579,104**	4,985,689
Financial assets at FVTPL	**367,479**	55,699
Equity instruments at FVTOCI	**138,826**	136,578
Derivative financial assets	**31,446**	16,721
Financial liabilities		
Derivative financial liabilities	**16,406**	19,068
Financial liabilities at amortized cost	**2,683,200**	495,186

b. Financial risk management objectives and policies

The Group's major financial assets and liabilities include trade and other receivables, bill receivables, other long-term deposits, financial assets at FVTPL, equity instruments at FVTOCI, derivative financial assets, other financial assets, pledged bank deposits, bank balances and cash, derivative financial liabilities, bank borrowings and trade and other payables. Details of these financial instruments are disclosed in the respective notes. The risks associated with these financial instruments and the policies on how to mitigate these risks are set out below. The management of the Group manages and monitors these exposures to ensure appropriate measures are implemented on a timely and effective manner.

Market risk

The Group's activities expose it primarily to currency risk, interest rate risk and other price risk. There had been no change in the Group's exposure to these risks or the manner in which it managed and measured the risks during the year ended December 31, 2019.

37. FINANCIAL INSTRUMENTS (Continued)

b. Financial risk management objectives and policies (Continued)

Market risk (Continued)

Currency risk

Certain group entities have foreign currency transactions, including sales and purchases and bank borrowings, which expose the Group to foreign currency risk. Certain of the Group's bank balances and cash, time deposits, pledged bank deposits, trade and other receivables, trade and other payables are denominated in currencies other than the functional currency of the relevant group entities and expose to such foreign currency risk. The carrying amounts of relevant group entities' foreign currency denominated monetary assets and liabilities other than their functional currency are disclosed in the respective notes.

The Group mainly exposes to foreign currency of US$, EUR, HK$ and CHF. During the year ended December 31, 2019, the Group entered into several US$/RMB and US$/EUR foreign currency forward contracts with banks in order to manage the Group's currency risk associated with anticipated sales transactions and repayment of bank borrowings up to 12 months (2018: 18 months) (see Note 30 for details). All foreign currency forward contracts are to hedge the fall of US$ against RMB and EUR (2018: the fall of US$ against RMB).

Before considering the hedging activities, the carrying amounts of the Group's foreign currency denominated monetary assets (trade and other receivables, pledged bank deposits and bank balances and cash) and liabilities (trade and other payables and borrowings) at the end of the reporting period are as follows:

	2019 RMB'000	2018 RMB'000
Assets		
US$	**5,822,253**	1,268,560
EUR	**241**	6,461
HK$	**76,005**	44,934
Liabilities		
US$	**1,559,989**	532,382
EUR	**491,926**	12,837
CHF	**6,690**	5,258

37. FINANCIAL INSTRUMENTS (Continued)

b. Financial risk management objectives and policies (Continued)

Market risk (Continued)

Currency risk (Continued)

Sensitivity analysis

The following table details the Group's sensitivity to a 5% increase and decrease in RMB against US$ and EUR, the foreign currencies with which the Group may have a material exposure. No sensitivity analysis has been disclosed for the HK$ and CHF denominated assets/liabilities as the impact on profit is immaterial. 5% represents management's assessment of the reasonably possible change in foreign exchange rate. The sensitivity analysis uses outstanding foreign currency denominated monetary items as a base and adjusts their translation at the end of the reporting period for a 5% change in foreign currency rate. A negative number below indicates a decrease in post-tax profit where RMB strengthens 5% against US$ while a positive number indicates an increase in post-tax profit where RMB strengthens 5% against EUR.

	2019 RMB'000	2018 RMB'000
Impact on profit or loss before hedging sensitivity:		
US$	**(191,162)**	(31,457)
EUR	**22,052**	273

Interest rate risk

The Group is exposed to fair value interest rate risk in relation to fixed-rate bank borrowings (see Note 31 for details) and fixed-rate pledged bank deposits (see Note 27 for details) and lease liabilities (see Note 32 for details). The Group currently does not have an interest rate hedging policy to mitigate interest rate risk; nevertheless, the management monitors interest rate exposure and will consider hedging significant interest rate risk should the need arise.

The Group is also exposed to cash flow interest rate risk in relation to variable-rate bank balances (see Note 27 for details) and variable-rate bank borrowings (see Note 31 for details). The Group's cash flow interest rate risk is mainly concentrated on the fluctuation of interest rates on bank balances, LIBOR and European Central Bank Rate arising from the Group's bank borrowings. The Group aims at keeping borrowings at variable rates. The Group manages its interest rate exposures by assessing the potential impact arising from any interest rate movements based on interest rate level and outlook. The management will review the proportion of borrowings in fixed and floating rates and ensure they are within reasonable range.

37. FINANCIAL INSTRUMENTS (Continued)

b. Financial risk management objectives and policies (Continued)

Market risk (Continued)

Interest rate risk (Continued)

Sensitivity analyses

Bank balances, pledged bank deposits and variable-rate bank borrowings are excluded from sensitivity analysis as the directors of the Company consider that the exposure of cash flow interest rate arising from variable-rate bank balances, pledged bank deposits and variable-rate bank borrowings is insignificant.

Other price risk

The Group is exposed to other price risk through its equity instruments measured at FVTOCI and financial assets at FVTPL. The management manages this exposure by maintaining a portfolio of investments with different risks. In addition, the Group has appointed a special team to monitor the price risk and will consider hedging the risk exposure should the need arise. The directors of the Company consider that the exposure of other price risk arising from equity instruments measured at FVTOCI and financial assets at FVTPL is insignificant, therefore no sensitivity analysis on such risk has been prepared.

Credit risk and impairment assessment

Credit risk refers to the risk that a counterparty will default on its contractual obligations resulting in financial loss to the Group. At the end of each reporting period, the Group's maximum exposure to credit risk which cause a financial loss to the Group due to failure to discharge an obligation by the counterparties is arising from the carrying amount of the respective recognized financial assets as stated in the consolidated statement of the financial position.

In order to minimize credit risk, the Group has developed and maintained the Group's credit risk grading to categorize exposures according to their degree of risk of default. Management uses publicly available financial information and the Group's own historical repayment records to rate its major customers and other debtors. The Group's exposure and the credit ratings of its counterparties are continuously monitored and the aggregate value of transactions concluded is spread amongst approved counterparties.

37. FINANCIAL INSTRUMENTS (Continued)

b. Financial risk management objectives and policies (Continued)

Credit risk and impairment assessment (Continued)

The Group's current credit risk grading framework comprises the following categories:

Internal credit rating	Description	Trade receivables/ contract assets	Receivables for purchase of raw materials on behalf of customers/other financial assets
Low risk	The counterparty has a low risk of default and does not have any past due amounts	Lifetime ECL — not credit-impaired	12-month ECL
Watch list	Debtor frequently repays after due dates but usually settle after due date in full	Lifetime ECL — not credit-impaired	12-month ECL
Doubtful	There has been a significant increase in credit risk since initial recognition through information developed internally or external resources	Lifetime ECL — not credit-impaired	Lifetime ECL — not credit-impaired
Loss	There is evidence indicating the asset is credit-impaired	Lifetime ECL — credit-impaired	Lifetime ECL — credit impaired
Write-off	There is evidence indicating that the debtor is in severe financial difficulty and the Group has no realistic prospect of recovery	Amount is written off	Amount is written off

37. FINANCIAL INSTRUMENTS (Continued)

b. Financial risk management objectives and policies (Continued)

Credit risk and impairment assessment (Continued)

The tables below detail the credit risk exposures of the Group's financial assets and contract assets which are subject to ECL assessment:

	Internal credit rating	12-month or lifetime ECL	**2019 Gross carrying amount RMB'000**	2018 Gross carrying amount RMB'000
Financial assets at amortized cost				
Pledged bank deposits	Low risk	12-month ECL	**431,640**	25,197
Bank balances	Low risk	12-month ECL	**6,205,496**	4,084,395
Other financial assets	Low risk	12-month ECL	**458,000**	—
Other receivables	Low risk	12-month ECL	**42,030**	24,604
Receivables for purchase of raw materials on behalf of customers	note 1	12-month ECL	**87,080**	87,980
Trade receivables	note 2	Lifetime ECL (provision matrix)	**1,399,040**	819,156
Bill receivables	note 3	Lifetime ECL	**2,248**	—
Other long-term deposits	Low risk	12-month ECL	**19,107**	—
Other items				
Contract assets	note 2	Lifetime ECL (provision matrix)	**48,331**	42,657

Notes:

1. For receivables for purchase of raw materials on behalf of customers, the Group has applied the 12-month ECL approach.

2. For trade receivables and contract assets, the Group has applied the simplified approach in IFRS 9 to measure the loss allowance at lifetime ECL. The Group determines the ECL on these items by using a provision matrix and categorizes its customers into three types: strategic type customers, normal risk type customers and high risk type customers, based on financial quality of debtors and historical credit loss experience based on the past due status of the debtors, adjusted as appropriate to reflect current conditions and estimates of future economic conditions.

3. For bill receivables, the Group are assessed individually.

37. FINANCIAL INSTRUMENTS (Continued)

b. Financial risk management objectives and policies (Continued)

Credit risk and impairment assessment (Continued)

Provision matrix — internal credit rating

As part of the Group's credit risk management, the Group applies internal credit rating for its customers. The following table provides information about the exposure to credit risk for trade receivables and contract assets which are assessed based on provision matrix as at December 31, 2019 within lifetime ECL.

Gross carrying amount	2019			2018		
Internal credit rating	Average loss rate	Trade receivables RMB'000	Contract assets RMB'000	Average loss rate	Trade receivables RMB'000	Contract assets RMB'000
Grade A: Low risk and watch list	0.06%	957,601	16,351	0.08%	643,606	25,350
Grade B: Doubtful	3.52%	391,471	24,459	3.39%	123,841	11,177
Grade C: Loss	100%	49,968	7,521	100%	51,709	6,130
		1,399,040	48,331		819,156	42,657

The estimated loss rates are estimated based on historical observed default rates over the expected life of the debtors and are adjusted for forward-looking information that is available without undue cost or effort. The grouping is regularly reviewed by management of the Company to ensure relevant information about specific debtors is updated. The contract assets have substantially the same risk characteristics as the trade receivables for the same type of contracts. The Group has therefore concluded that the loss rates for trade receivables are a reasonable approximation of the loss rates for contract assets.

As of December 31, 2019, the Group provided RMB64,400,000 and RMB8,350,000 (2018: RMB56,298,000 and RMB6,631,000) impairment allowance for trade receivables and contract assets respectively, based on the provision matrix.

37. FINANCIAL INSTRUMENTS (Continued)

b. Financial risk management objectives and policies (Continued)

Credit risk and impairment assessment (Continued)

Provision matrix — internal credit rating (Continued)

The following table shows the movement in lifetime ECL that has been recognized for trade receivables and contract assets under the simplified approach.

	Lifetime ECL (not credit-impaired) RMB'000	Lifetime ECL (credit-impaired) RMB'000	Total RMB'000
As at January 1, 2018	(7,451)	(17,364)	(24,815)
Changes due to financial instruments recognized as at January 1:			
— Impairment losses recognized	—	(22,296)	(22,296)
— Impairment losses reversed	7,105	3,948	11,053
— Write-offs	—	17,830	17,830
New financial assets originated or purchased	(4,744)	(39,957)	(44,701)
As at December 31, 2018	(5,090)	(57,839)	(62,929)
Acquisition of subsidiaries (Note 34)	(509)	(2,057)	(2,566)
Changes due to financial instruments recognized as at January 1, 2019:			
— Impairment losses recognized	**—**	**—**	**—**
— Impairment losses reversed	**3,696**	**41,360**	**45,056**
— Write-offs	**200**	**53**	**253**
New financial assets originated or purchased	**(13,558)**	**(39,006)**	**(52,564)**
As at December 31, 2019	**(15,261)**	**(57,489)**	**(72,750)**

37. FINANCIAL INSTRUMENTS (Continued)

b. Financial risk management objectives and policies (Continued)

Credit risk and impairment assessment (Continued)

Provision matrix — internal credit rating (Continued)

The following table shows the reconciliation of loss allowances that has been recognized for receivables for purchase of raw materials on behalf of customers.

	12m ECL RMB'000
As at January 1, 2018	(1,018)
Changes due to financial instruments recognized as at January 1:	
— Impairment losses reversed	959
New financial assets originated or purchased	(955)
As at December 31, 2018	(1,014)
Changes due to financial instruments recognized as at January 1:	
— Impairment losses reversed	**816**
New financial assets originated or purchased	**(939)**
As at December 31, 2019	**(1,137)**

For the purposes of impairment assessment, other current assets are considered to have low credit risk. Accordingly, for the purpose of impairment assessment for these financial assets, the loss allowance is measured at an amount equal to 12-month ECL. In determining the ECL for other financial assets at amortized cost, the directors of the Company have taken into account the historical default experience and the future prospects of the industries and/or considering various external sources of actual and forecast economic information, as appropriate, in estimating the probability of default of each of the other financial assets at amortized cost occurring within their respective loss assessment time horizon, as well as the loss upon default in each case. The directors of the Company considered that the 12-month ECL allowance is insignificant at the end of each reporting period.

37. FINANCIAL INSTRUMENTS (Continued)

b. Financial risk management objectives and policies (Continued)

Liquidity risk

In the management of the liquidity risk, the Group monitors and maintains a level of bank balances and cash and unused banking facilities deemed adequate by the management to finance the Group's operations and mitigate the effects of fluctuations in cash flows.

The management of the Group monitors the utilization of bank borrowings and ensures compliance with loan covenants.

The Group relies on bank borrowings as a source of liquidity. As at December 31, 2019, the Group has available unutilized bank loan facilities of approximately RMB1,633,360,000. Details of which are set out in Note 31.

The following table details the Group's remaining contractual maturity for its financial liabilities and derivative instrument. The table has been drawn up based on the undiscounted cash flows of financial liabilities based on the earliest date on which the Group can be required to pay. The table includes both interest and principal cash flows. To the extent that interest flows are floating rate, the undiscounted amount is derived from interest rate at the end of the reporting period.

37. FINANCIAL INSTRUMENTS (Continued)

b. Financial risk management objectives and policies (Continued)

Liquidity risk (Continued)

In addition, the following table details the Group's liquidity analysis for its derivative financial instruments. The tables have been drawn up based on the undiscounted contractual net cash (inflows) and outflows on derivative instruments that settle on a net basis, and the undiscounted gross (inflows) and outflows on those derivatives that require gross settlement. When the amount payable is not fixed, the amount disclosed has been determined by reference to the projected interest rates as illustrated by the yield curves existing at the end of the reporting period. The liquidity analysis for the Group's derivative financial instruments are prepared based on the contractual settlement dates as the management consider that the settlement dates are essential for an understanding of the timing of the cash flows of derivatives.

	Weighted average interest rate	On demand or less than one year RMB'000	One to five years RMB'000	Over five years RMB'000	Total undiscounted cash flows RMB'000	Carrying amount RMB'000
2019						
Trade and other payables	N/A	780,645	1,208	—	781,853	781,853
Bank borrowings						
— fixed rate	3.70% to 3.92%	287,056	—	—	287,056	280,000
— variable rate	1.50% to 3.33%	272,195	1,463,705	—	1,735,900	1,621,347
Total financial liabilities		1,339,896	1,464,913	—	2,804,809	2,683,200
Lease liabilities	4.75% to 4.90%	39,916	148,910	193,999	382,825	292,601
		1,379,812	1,613,823	193,999	3,187,634	2,975,801
Derivative — net settlement						
Foreign exchange forward contracts		16,406	—	—	16,406	16,406

	Weighted average interest rate	On demand or less than one year RMB'000	One to five years RMB'000	Over five years RMB'000	Total undiscounted cash flows RMB'000	Carrying amount RMB'000
2018						
Trade and other payables	N/A	495,186	—	—	495,186	495,186
Derivative — net settlement						
Foreign exchange forward contracts		4,981	77	—	5,058	5,058

37. FINANCIAL INSTRUMENTS (Continued)

c. Fair value measurements of financial instruments

Fair value of the Group's financial assets and financial liabilities that are measured at fair value on a recurring basis.

Some of the Group's financial assets and financial liabilities are measured at fair value at the end of the reporting period. The following table gives information about how the fair values of these financial assets and financial liabilities are determined (in particular, the valuation technique(s) and inputs used), as well as the level of the fair value hierarchy into which the fair value measurements are categorized (Levels 1 to 3) based on the degree to which the inputs to the fair value measurements is observable.

- Level 1 fair value measurements are quoted prices (unadjusted) in active market for identical assets or liabilities;
- Level 2 fair value measurements are those derived from inputs other than quoted prices included within Level 1 that are observable for the asset or liability, either directly (i.e. as prices) or indirectly (i.e. derived from prices); and
- Level 3 fair value measurements are those derived from valuation techniques that include inputs for the asset or liability that are not based on observable market data (unobservable inputs).

37. FINANCIAL INSTRUMENTS (Continued)

c. Fair value measurements of financial instruments (Continued)

Financial assets/ financial liabilities	Fair value as at		Fair value hierarchy	Valuation technique and key inputs
	December 31, 2019	December 31, 2018		
Financial assets at FVTPL	**Inhibrx: RMB104,643,000 Virtuoso: RMB13,080,000 I-Mab: RMB69,762,000 BB Pureos: RMB17,991,000**	Inhibrx: RMB20,590,000	Level 2	Recent transaction price (Note)
	Financial products: RMB85,000,000	Nil	Level 3	Discounted cash flows method, estimated based on expected return and market interest rate.
	Canbridge: RMB77,003,000	Canbridge: RMB35,109,000	Level 3	Backsolve from most recent transaction price
Equity instruments at FVTOCI	**Tysana: RMB69,413,000**	Tysana: RMB68,289,000	Level 3	Backsolve from recent transaction price (Note)
	Privus: RMB69,413,000	Privus: RMB68,289,000		
Foreign currency forward contracts classified as derivative financial assets and liabilities at FVTPL	**Nil**	Derivative financial liabilities: RMB14,010,000	Level 2	Discounted cash flows. Future cash flows are estimated based on forward exchange rates and contracted forward rates, discounted at a rate that reflects the credit risk of the banks.
Foreign currency forward contracts classified as derivative financial assets and liabilities at FVTOCI	**Derivative financial assets: RMB31,446,000**	Derivative financial assets: RMB16,721,000	Level 2	Discounted cash flows. Future cash flows are estimated based on forward exchange rates and contracted forward rates, discounted at a rate that reflects the credit risk of the banks.
	Derivative financial liabilities: RMB16,406,000	Derivative financial liabilities: RMB5,058,000		

Note: The investments were respectively acquired from middle 2018 to 2019. The management of the Group assessed that since there was no significant milestone achieved in each of the investments since their respectively acquisitions, the most recent transaction price, which is the cost of acquisition, is used as the best estimate of the fair value.

37. FINANCIAL INSTRUMENTS (Continued)

c. Fair value measurements of financial instruments (Continued)

The Group owns 19.9% equity interest in Tysana and Privus that are classified as investment at FVTOCI and are measured at fair value at each reporting date. The fair value of the investments as at December 31, 2019 amounts to RMB138,826,000 (2018: RMB136,578,000). The fair value of the investments as at December 31, 2019 was measured using a valuation technique with significant unobservable inputs and hence was classified as Level 3 of the fair value hierarchy. The directors of the Company consider that the carrying amounts of financial assets and financial liabilities recorded at amortized cost in the consolidated financial statements approximate their fair values.

Reconciliation of Level 3 fair value measurements of financial assets

	Equity instruments at FVTOCI RMB'000	Financial assets at FVTPL RMB'000
At January 1, 2019	—	**35,109**
Total gains — in profit or loss	—	**6,468**
Acquisition of subsidiaries (Note 34)	—	**38,000**
Disposals	—	**(2,696,021)**
Purchases	—	**2,776,693**
Transfers into level 3	**138,826**	—
Exchange alignment	—	**1,754**
At December 31, 2019	**138,826**	**162,003**

Fair value of financial assets and financial liabilities that are not measured at fair value on a recurring basis

The management of the Group considers the carrying amounts of financial assets and financial liabilities recorded at amortized cost in the consolidated financial statements approximate their fair value.

The fair values of these financial assets and financial liabilities at amortized cost are determined in accordance with generally accepted pricing models based on discounted cash flow analysis with the most significant inputs being the discount rate that reflects the credit risk of counterparties.

38. OPERATING LEASES

The Group as Lease

Minimum lease payment paid under operating leases during the year:

	2018 RMB'000
Minimum lease payment paid under operating leases during the year	239,229

The Group had commitments for future minimum lease payments under non-cancellable operating leases in respect of land and buildings as follows:

	2018 RMB'000
Within one year	40,327
In the second to fifth year inclusive	124,648
Over five years	74,254
	239,229

Operating lease payments represent rentals payable by the Group for certain of its office premises, factories and laboratories. Leases are for a term of 8 to 10 years and rentals are fixed for a range of 8 to 10 years.

39. CAPITAL COMMITMENTS

The Group had capital commitments for land, equipment purchase and building construction and investments accounted as financial assets at FVTPL under non-cancellable contracts as follows:

	2019 RMB'000	2018 RMB'000
Contracted but not provided for		
Land, property, plant and equipment	**3,744,458**	1,366,689
Financial assets at FVTPL	**118,595**	—
	3,863,053	1,366,689

40. RETIREMENT BENEFIT PLANS

The employees of the Group's subsidiaries are members of the state-managed retirement benefits schemes operated by government. The subsidiaries are required to contribute a certain percentage of payroll costs to the retirement benefits schemes to fund the benefits. The only obligation of the Group with respect to the retirement benefits schemes is to make the specified contributions.

The total cost charged to profit or loss in respect of the above-mentioned schemes amounted to approximately RMB100,515,000 for the year ended December 31, 2019 (for the year ended December 31, 2018: RMB67,806,000).

41. RECONCILIATION OF LIABILITIES ARISING FROM FINANCING ACTIVITIES

The table below details changes in the Group's liabilities arising from financing activities, including both the cash and non-cash changes. Liabilities arising from financing activities are those for which cash flows were, or future cash flows will be classified in the Group's consolidated statement of cash flows as cash flows from financing activities.

	Bank borrowings RMB'000	Interest prepayments and payable RMB'000	Lease liabilities RMB'000	Total RMB'000
At January 1, 2018 and December 31, 2018	—	—	—	—
Adjustment upon application of IFRS16	—	—	229,090	229,090
At January 1, 2019 (restated)	**—**	**—**	**229,090**	**229,090**
Financing cash flows	**1,909,825**	**(49,801)**	**(22,174)**	**1,837,850**
Interest expenses	**—**	**24,961**	**—**	**24,961**
Acquisition of subsidiaries (Note 34)	**—**	**—**	**2,645**	**2,645**
New leases entered	**—**	**—**	**87,841**	**87,841**
Early terminated lease	**—**	**—**	**(4,801)**	**(4,801)**
Exchange alignment	**(8,478)**	**369**	**—**	**(8,109)**
At December 31, 2019	**1,901,347**	**(24,471)**	**292,601**	**2,169,477**

The financing cash flows of bank borrowings represent the proceeds from and repayment of bank borrowings and interest paid in the consolidated statement of cash flows.

42. RELATED PARTY TRANSACTIONS AND BALANCES

In addition to the balances disclosed in Notes 25, 28 and 29, the Group had the following significant transactions and balances with related parties during the year ended December 31, 2019:

(1) Related party transactions:

(a) Provision of research and development service to related parties

	2019 RMB'000	2018 RMB'000
WuXi MedImmune Biopharmaceutical Co., Ltd. ("WX MedImmune")	**12,558**	19,763
JW Therapeutics (Shanghai) Co., Ltd ("JW Therapeutics")	**499**	391
WuXi AppTec (Shanghai) Co., Ltd. ("WXAT Shanghai")	**417**	—
Hejing Pharmaceutical Technology (Shanghai) Co., Ltd.	**205**	—
	13,679	20,154

Note:

WX MedImmune is a joint venture held by WuXi AppTec (Hong Kong) Limited ("WAHK"), an indirect wholly-owned subsidiary of WuXi PharmaTech.

JW Therapeutics (Shanghai) Co., Ltd. is an associate held by WAHK.

Hejing Pharmaceutical Technology (Shanghai) Co., Ltd. is an associate held by WXAT Shanghai, an indirect wholly-owned subsidiary of WuXi PharmaTech.

(b) Provision of materials to related parties

	2019 RMB'000	2018 RMB'000
WuXi ATU Co., Ltd.	**796**	—
Duoning (note)	**10**	—
	806	—

Note: As disclosed in Note 16, Duoning is an associate of the Group.

42. RELATED PARTY TRANSACTIONS AND BALANCES (Continued)

(1) Related party transactions: (Continued)

(c) Testing service received

	2019 RMB'000	2018 RMB'000
WuXi NextCode Genomics (Shanghai) Co., Ltd.	**693**	622
WuXi AppTec, Inc.	**2,972**	8,998
WXAT Shanghai	**3,159**	—
WuXi AppTec (Suzhou) Co., Ltd. ("WASZ")	**5,801**	—
WuXi AppTec HDB LLC ("HDB")	**906**	—
WuXi Clinical Development Services (Shanghai) Co., Ltd.	**202**	—
	13,733	9,620

(d) Other services received

	2019 RMB'000	2018 RMB'000
WXAT Shanghai	**939**	—

(e) Purchase of materials, plant and equipment

	2019 RMB'000	2018 RMB'000
Duoning	**13,689**	—
Shanghai SynTheAll Pharmaceutical Co., Ltd. ("STA")	**112**	—
	13,801	—

42. RELATED PARTY TRANSACTIONS AND BALANCES (Continued)

(1) Related party transactions: (Continued)

(f) Premises leasing services received

	2019 RMB'000	2018 RMB'000
WXAT Shanghai	**1,340**	1,431
— *Interest expenses on lease liabilities*	***90***	—
— *Operating lease expenses*	***1,250***	*1,431*
Shanghai Waigaoqiao Wuxi AppTec Incubator Management Co., Ltd. ("WXAT Incubator")	**1,669**	—
— *Interest expenses on lease liabilities*	***201***	—
— *Operating lease expenses*	***1,468***	—
WuXi AppTec Sales LLC	**153**	—
	3,162	1,431

WXAT Incubator is a joint venture held by WXAT Shanghai, an indirect wholly-owned subsidiary of WuXi PharmaTech.

The transactions above were carried out in accordance with the terms agreed with the counterparties.

(2) Related party balances:

As at December 31, 2019, the Group had balances with related parties as follows:

	2019 RMB'000 Non-interest bearing	2018 RMB'000 Non-interest bearing
Amounts due from related parties		
Trade related		
WX MedImmune	**3,535**	8,791
Less: Allowance for credit losses	**(1)**	(3)
WXAT Shanghai	**117**	—
Duoning	**12**	—
WuXi ATU Co., Ltd.	**520**	—
Less: Allowance for credit losses	**(21)**	—
	4,162	8,788

42. RELATED PARTY TRANSACTIONS AND BALANCES (Continued)

(2) Related party balances: (Continued)

	2019 RMB'000 Non-interest bearing	2018 RMB'000 Non-interest bearing
Amounts due to related parties		
Trade related		
WASZ	**5,801**	—
Duoning	**2,810**	—
HDB	**491**	—
WXAT Shanghai	**405**	8,894
JW Therapeutics	**—**	249
	9,507	9,143
Non-trade related		
WXAT Shanghai	**493**	—
STA	**127**	—
Duoning	**116**	—
	736	—
Lease liabilities		
WXAT Shanghai	**1,272**	—
WXAT Incubator	**3,402**	—
	4,674	—

Except for lease liabilities, all the above balances with related parties are unsecured, interest free and repayable on demand.

Except for WX MedImmune, JW Therapeutics, Hejing Pharmaceutical Technology (Shanghai) Co., Ltd. and Duoning, whose relationship with the Group have been disclosed previously, all of the other above mentioned related parties are considered to be related to the Group because they are the fellow subsidiaries of the Group under the common control of the Controlling Shareholders.

42. RELATED PARTY TRANSACTIONS AND BALANCES (Continued)

(3) Compensation of key management personnel

The remuneration of the directors of the Company and other members of key management of the Group during the years ended December 31, 2019 were as follows:

	2019	2018
	RMB'000	RMB'000
Director's fee	**891**	1,140
Salaries and other benefits	**11,612**	10,840
Performance-based bonus	**4,334**	4,162
Retirement benefits scheme contributions	**55**	245
Share-based compensation	**30,607**	25,914
	47,499	42,301

The remuneration of key management is determined with reference to the performance of the individuals and market trends.

43. SHARE-BASED COMPENSATION

Equity instruments granted by WuXi PharmaTech to employees of the Group

WuXi PharmaTech was once listed on the New York Stock Exchange and used to have an employee stock incentive plan ("WuXi PharmaTech Stock Units and Options"). Pursuant to the WuXi PharmaTech Stock Units and Options, certain directors of the Company and employees of the Group were issued shares of WuXi PharmaTech which are restricted in that these shares are subject to vesting term of one to five years ("WX RSUs"). The share restriction will be released when vested.

WuXi PharmaTech was privatized and delisted from the New York Stock Exchange on December 10, 2015, and was taken control by New WuXi Life Science Holdings Limited ("Life Science Holdings") which is a company controlled by the Controlling Shareholders. As part of the privatization process, the terms and conditions of WuXi PharmaTech Stock Units and Options were modified.

43. SHARE-BASED COMPENSATION (Continued)

Equity instruments granted by WuXi PharmaTech to employees of the Group (Continued)

Under the modified WuXi PharmaTech Stock Units and Options, the total number of the outstanding WX RSUs remained unchanged, but all outstanding WX RSUs as at December 10, 2015 would be settled by a cash consideration based on the closing price of WuXi PharmaTech on December 10, 2015 (US$5.75 per share). Part of the cash consideration was paid out immediately to some of the designated employees ("Designated Employees") of the Group holding outstanding WX RSUs as their WX RSUs were deemed to be immediately vested. For the other remaining employees of the Group ("Non-designated Employees") holding outstanding WX RSUs, an escrow arrangement was made by Life Science Holdings to put aside the cash consideration in an escrow account and the cash consideration would be paid out to the Non-designated Employees when the original vesting conditions of the WX RSUs are met.

Because the fair values of the outstanding WX RSUs under both the original and modified WuXi PharmaTech Stock Units and Options as measured at the date of modification are determined to be the same, therefore, the outstanding WX RSUs would continue to be measured at the original grant-date fair value. For the Designated Employees, because their outstanding WX RSUs were deemed to be immediately vested, the Group recognized the share-based compensation expense related to this acceleration of vesting immediately in the profit and loss of the year ended December 31, 2015. For the Non-designated Employees, the Group continued to recognize the corresponding share-based compensation expense of their outstanding WX RSUs in the profit and loss of the Group over the original vesting periods.

For the year ended December 31, 2019, the Group recognized RMB823,000 (2018: RMB2,495,000) share-based compensation expense in relation to WuXi PharmaTech Stock Units and Options.

Pre-IPO Share Option Scheme

The Company's Pre-IPO Share Option Scheme was adopted pursuant to resolutions passed on January 5, 2016 for the primary purpose of attracting, retaining and motivating employees and directors. Under the Pre-IPO Share Option Scheme, the directors of the Company may grant up to 144,600,000 share options to eligible employees, including the directors of the Company and its subsidiaries, to subscribe for shares in the Company. Grantee accepting an option grant offered by the Company has to sign an acceptance letter and pay to the Company an amount of HK$1.00 as consideration for the grant.

43. SHARE-BASED COMPENSATION (Continued)

Pre-IPO Share Option Scheme (Continued)

(1) As of December 31, 2019, pre-IPO share options granted to the employees of the Group and directors of the Company are as follows:

Date of grant	Number of options	Exercise price per share
January 7, 2016	89,364,668	US$0.50
March 28, 2016	2,412,750	US$0.50
August 10, 2016	5,729,313	US$0.66
November 11, 2016	6,321,000	US$0.79
March 15, 2017	20,970,000	US$1.02
May 12, 2017	3,804,000	US$1.80

(2) Each option granted under the Pre-IPO Share Option Scheme can only be exercised in the following manners (each date on which any portion of option granted shall be vested is hereinafter referred to as a "Vesting Date" and each tranche on which any portion of option granted shall be vested is hereinafter referred to as a "Tranche"):

Tranche	Vesting Date
twenty percent (20%) of the shares subject to an option so granted	second (2nd) anniversary of the offer date for an Option
twenty percent (20%) of the shares subject to an option so granted	third (3rd) anniversary of the offer date for an Option
twenty percent (20%) of the shares subject to an option so granted	fourth (4th) anniversary of the offer date for an Option
forty percent (40%) of the shares subject to an option so granted	fifth (5th) anniversary of the offer date

43. SHARE-BASED COMPENSATION (Continued)

Pre-IPO Share Option Scheme (Continued)

Set out below are details of the movements of the outstanding options granted under the Pre-IPO Share Option Scheme during the years ended December 31, 2019 and 2018:

Option batch	Outstanding as at January 1, 2019	Granted during the year	Exercised during the year	Forfeited during the year	Outstanding as at December 31, 2019
January 7, 2016	**76,112,259**	**—**	**8,783,600**	**108,000**	**67,220,659**
March 28, 2016	**1,276,275**	**—**	**346,575**	**—**	**929,700**
August 10, 2016	**5,006,438**	**—**	**974,355**	**102,314**	**3,929,769**
November 11, 2016	**5,032,000**	**—**	**1,315,200**	**156,000**	**3,560,800**
March 15, 2017	**19,847,500**	**—**	**1,944,700**	**650,400**	**17,252,400**
May 12, 2017	**3,718,000**	**—**	**535,300**	**664,000**	**2,518,700**
	110,992,472	**—**	**13,899,730**	**1,680,714**	**95,412,028**
Exercisable at the end of the year	**12,353,416**				**22,261,563**
Weighted average exercise price (US$)	**0.66**	**—**	**0.66**	**1.25**	**0.65**

Option batch	Outstanding as at January 1, 2018	Granted during the year	Exercised during the year	Forfeited during the year	Outstanding as at December 31, 2018
January 7, 2016	81,281,882	—	4,995,983	173,640	76,112,259
March 28, 2016	1,414,750	—	102,475	36,000	1,276,275
August 10, 2016	5,570,313	—	470,275	93,600	5,006,438
November 11, 2016	5,575,000	—	307,600	235,400	5,032,000
March 15, 2017	20,048,000	—	—	200,500	19,847,500
May 12, 2017	3,758,000	—	—	40,000	3,718,000
	117,647,945	—	5,876,333	779,140	110,992,472
Exercisable at the end of the year	—				12,353,416
Weighted average exercise price (US$)	0.65	—	0.53	0.81	0.66

43. SHARE-BASED COMPENSATION (Continued)

Pre-IPO Share Option Scheme (Continued)

The estimated fair value of the Pre-IPO share options granted were approximately US$20,489,000, US$555,000, US$1,773,000, US$2,227,000, US$9,430,000 and US$2,974,000 as at January 7, 2016, March 28, 2016, August 10, 2016, November 11, 2016, March 15, 2017 and May 12, 2017 grants, respectively. The fair values were calculated using the Binomial model. The major inputs into the model are as follows:

Grant date	January 7, 2016	March 28, 2016	August 10, 2016	November 11, 2016	March 15, 2017	May 12, 2017
Share price (US$)	0.48	0.48	0.65	0.75	0.95	1.65
Exercise price (US$)	0.50	0.50	0.66	0.79	1.02	1.80
Expected volatility	40.80%	40.80%	40.92%	40.87%	40.65%	40.46%
Expected life (years)	10	10	10	10	10	10
Risk-free interest rate	2.92%	2.92%	2.72%	2.83%	3.39%	3.67%
Forfeiture rate	7.70%	7.70%	7.70%	7.70%	7.70%	7.70%

Share price is determined as the total fair value of the Company's equity divided by the total number of shares, assuming the allotment of shares has been effective on January 1, 2016. To determine the grant date fair values of the Company's equity prior to the Company's Initial Public Offering on May 31, 2017, the Company used primarily the discounted cash flow method under the income approach, using cash flow projections based on financial forecasts approved by management covering a five-year period as appropriate and a discount rate of 13%. Cash flow beyond that five-year period has been extrapolated using a steady 5% growth rate. This growth rate does not exceed the long-term average growth rate for the market in which the Group operates. The result from the income approach was cross checked with the market approach, which incorporates certain assumptions, including the market performance of comparable listed companies, as well as the financial results and growth trends of the Company, to derive the total equity of the Group.

The risk-free interest rate was based on market yield rate of China government bonds with the term corresponding to the contractual life of the options. Expected volatility was determined by using the historical volatility of the comparable companies. Changes in variables and assumptions may result in changes in the fair values of the share options.

43. SHARE-BASED COMPENSATION (Continued)

Pre-IPO Share Option Scheme (Continued)

The variables and assumptions used in computing the fair value of the share options are based on the directors' best estimate. The value of an option varies with different variables of certain subjective assumptions.

The Group recognized total expense of approximately RMB35,789,000 for the year ended December 31, 2019 (for the year ended December 31, 2018: RMB50,515,000) in relation to share options granted by the Company under the Pre-IPO Share Option Scheme.

In respect of the share options exercised during the year, the weighted average share price at the dates of exercise was HK$81.71 (2018: HK$66.28).

Restricted Share Award Scheme

On January 15, 2018, the Company adopted the Restricted Share Award Scheme for the primary purpose of (i) recognize the contributions by certain employee of the Group (the "Selected Participants"); (ii) encourage, motivate and retain the Selected Participants, whose contributions are beneficial to the continual operation, development and long-term growth of the Group; and (iii) provide additional incentive for the Selected Participants to achieve performance goals, with a view to achieving the objectives of increasing the value of the Group and aligning the interests of the Selected Participants to the shareholders of the Company through ownership of Shares. The total number of the restricted shares underlying all grants made pursuant to the Restricted Share Award Scheme shall not exceed three percent (i.e. 34,953,032 shares) of the issued share capital of the Company as at the adoption date.

The Company will issue and allot to trustee new shares under the general mandate granted by the shareholders of the Company from time to time. The new shares so issued will be held on trust until the end of each vesting period and will be transferred to the Selected Participants upon satisfaction of the relevant original vesting conditions.

The fair value of the restricted shares awarded was determined based on the market value of the Company's shares at the grant date.

43. SHARE-BASED COMPENSATION (Continued)

Restricted Share Award Scheme (Continued)

(1) As of December 31, 2019, the restricted share granted to the employees of the Group and directors of the Company are as follows:

Date of grant	Number of restricted shares	Fair value per share
January 15, 2018	3,122,240	HK$55.00
March 20, 2018	1,846,677	HK$75.70
June 13, 2018	784,946	HK$88.50
August 21, 2018	1,339,787	HK$70.50
November 20, 2018	1,026,230	HK$65.55
March 19, 2019	1,223,464	HK$83.35
June 5, 2019	3,306,712	HK$71.70
August 20, 2019	1,610,661	HK$83.00
November 20, 2019	545,498	HK$89.40

(2) Except for 14,138 restricted shares granted on June 5, 2019 with vesting period of one year, each other restricted share granted under the Restricted Share Award Scheme can only be vested in the following manners (each date on which any portion of restricted share granted shall be vested is hereinafter referred to as a "Vesting Date" and each tranche on which any portion of restricted share granted shall be vested is hereinafter referred to as a "Tranche"):

Tranche	Vesting Date
twenty percent (20%) of the restricted shares so granted	second (2nd) anniversary of the grant date for an restricted share
twenty percent (20%) of the restricted shares so granted	third (3rd) anniversary of the grant date for an restricted share
twenty percent (20%) of the restricted shares so granted	fourth (4th) anniversary of the grant date for an restricted share
forty percent (40%) of the restricted shares so granted	fifth (5th) anniversary of the grant date for an restricted share

43. SHARE-BASED COMPENSATION (Continued)

Restricted Share Award Scheme (Continued)

Set out below are details of the movements of the outstanding restricted shares granted under the Restricted Share Award Scheme during the year ended December 31, 2019 and 2018:

Option batch	Outstanding as at January 1, 2019	Granted during the year	Vested during the year	Forfeited during the year	Outstanding as at December 31, 2019
January 15, 2018	**2,778,660**	**—**	**—**	**271,000**	**2,507,660**
March 20, 2018	**1,750,883**	**—**	**—**	**99,153**	**1,651,730**
June 13, 2018	**741,702**	**—**	**—**	**94,265**	**647,437**
August 21, 2018	**1,326,060**	**—**	**—**	**138,474**	**1,187,586**
November 20, 2018	**1,021,371**	**—**	**—**	**137,872**	**883,499**
March 19, 2019	**—**	**1,223,464**	**—**	**9,865**	**1,213,599**
June 5, 2019	**—**	**3,306,712**	**—**	**107,533**	**3,199,179**
August 20, 2019	**—**	**1,610,661**	**—**	**47,220**	**1,563,441**
November 20, 2019	**—**	**545,498**	**—**	**9,824**	**535,674**
	7,618,676	**6,686,335**	**—**	**915,206**	**13,389,805**
Weighted average fair value per share (HK$)	**67.13**	**78.00**	**—**	**68.71**	**72.45**

Option batch	Outstanding as at January 1, 2018	Granted during the year	Vested during the year	Forfeited during the year	Outstanding as at December 31, 2018
January 15, 2018	—	3,122,240	—	343,580	2,778,660
March 20, 2018	—	1,846,677	—	95,794	1,750,883
June 13, 2018	—	784,946	—	43,244	741,702
August 21, 2018	—	1,339,787	—	13,727	1,326,060
November 20, 2018	—	1,026,230	—	4,859	1,021,371
	—	8,119,880	—	501,204	7,618,676
Weighted average fair value per share (HK$)	—	66.84	—	62.37	67.13

The Group recognized total expense of approximately RMB167,326,000 for the year ended December 31, 2019 (for the year ended December 31, 2018: RMB75,364,000) in relation to restricted shares granted by the Company under the Restricted Share Award Scheme.

44. DETAILS OF SUBSIDIARIES

The direct and indirect interests in the following subsidiaries held by the Company during the years ended December 31, 2019 and 2018 are as follows:

Name of subsidiaries	Place of Incorporation/ operation, date of incorporation	Authorized share capital/ Registered capital	Paid up capital	Attributable equity interests held by the Company as at December 31		Principal activities
				2019 %	2018 %	
Directly held:						
WuXi Biologics Investments Limited ("Biologics Investments")	Hong Kong November 18, 2010	Not applicable	RMB2,065,376,000	**100**	100	Investment holding
WuXi Biologics Ireland Limited ("Biologics Ireland")	Ireland March, 2018	Not applicable	EUR1,875,001	**100**	100	Sales and marketing services in Europe
無錫明德生物醫藥有限公司 (WuXi Medi Biologics, Inc.)# *(Note b)*	The PRC September 26, 2016	US$20,000,000	—	**100**	100	Development of, and the provision of consultation services in relation to the biopharmaceutical technology
WuXi Biologics HealthCare Venture (Cayman) Inc.	Cayman Islands April 10, 2018	Not applicable	—	**100**	100	Investment holding
WuXi Biologics HealthCare Venture Hong Kong Holding Limited	Hong Kong April 25, 2018	Not applicable	—	**100**	100	Investment holding
Indirectly held:						
無錫藥明康德企業管理有限公司 (WuXi Biologics Holdings Co., Ltd.)#*(Note b)*	The PRC August 14, 2014	RMB2,711,180,000	RMB2,221,180,000	**100**	100	Investment holding
無錫藥明生物技術股份有限公司 (WuXi Biologics Co., Ltd.)# ("WuXi Co.") *(Note a)*	The PRC May 25, 2010	RMB4,915,770,000	RMB3,985,770,000	**100**	100	Development of, and the provision of consultation services in relation to the biopharmaceutical technology
WuXi Biologics (Hong Kong) Limited	Hong Kong May 12, 2014	Not applicable	HK$1	**100**	100	International sales contracting service

44. DETAILS OF SUBSIDIARIES (Continued)

Name of subsidiaries	Place of Incorporation/ operation, date of incorporation	Authorized share capital/ Registered capital	Paid up capital	Attributable equity interests held by the Company as at December 31		Principal activities
				2019 %	2018 %	
Indirectly held: (Continued)						
蘇州藥明檢測檢驗有限公司 (WuXi Biologics (Suzhou) Co., Ltd.)# ("Suzhou Biologics") *(Note c)*	The PRC May 30, 2012	RMB42,860,000	RMB42,860,000	**100**	100	Testing and development of testing technologies
上海藥明生物技術有限公司 (WuXi Biologics (Shanghai) Co., Ltd.)# ("Shanghai Biologics") *(Note c)*	The PRC January 6, 2015	RMB1,330,000,000	RMB1,330,000,000	**100**	100	Research and development in relation to biologics
WuXi Biologics USA, LLC. ("USA Biologics")	The United States of America April 21, 2016	US$6,200,100	US$6,200,100	**100**	100	Sales and marketing services in US, biologics clinical and manufacturing service
WuXi Biologics UK Ltd. ("UK Biologics")	The United Kingdom December 2, 2016	Pound Sterling 1,000	Pound Sterling 1,000	**100**	100	Sales and marketing services in Europe
上海藥明生物醫藥有限公司 (WuXi Biopharmaceuticals (Shanghai) Co., Ltd)# *(Note a)*	The PRC April 7, 2017	US$50,000,000	RMB180,341,000	**100**	100	Production and sales of medicals, and provision of services in relation to the biopharmaceutical technology
成都藥明生物技術有限公司 (WuXi Biologics (Chengdu) Co., Ltd)# *(Note a)*	The PRC December 4, 2017	US$80,000,000	RMB179,340,000	**100**	100	Research and development in relation to biologics
上海藥明海德生物科技有限公司 (WuXi Vaccines Co., Ltd.)# *(Note a)*	The PRC August 1, 2018	RMB500,000,000	RMB2,000,000	**70**	70	Biologics manufacturing service
無錫藥明偶聯生物技術有限公司 (WuXi Biologics Conjugation Co., Ltd.)# ("Biologics Conjugation") *(Note b)*	The PRC March 13, 2018	US$40,000,000	RMB275,048,000	**100**	100	Biologics discovery, development and manufacturing service
河北藥明生物技術有限公司 (WuXi Biologics (Hebei) Co., Ltd.)# *(Note a)*	The PRC June 19, 2018	US$17,000,000	RMB51,912,000	**100**	100	Biologics discovery, development and manufacturing service

44. DETAILS OF SUBSIDIARIES (Continued)

Name of subsidiaries	Place of Incorporation/ operation, date of incorporation	Authorized share capital/ Registered capital	Paid up capital	Attributable equity interests held by the Company as at December 31		Principal activities
				2019 %	2018 %	
Indirectly held: (Continued)						
WuXi Biologics HealthCare Venture	Hong Kong May 29, 2018	Not applicable	—	**100**	100	Investment holding
杭州明德生物醫藥技術有限公司 (WuXi Biologics (Hangzhou) Co., Ltd.)# *(Note a)*	The PRC September 16, 2019	US$35,000,000	RMB70,521,000	**100**	N/A	Biologics discovery, development and manufacturing service
WuXi Biologics Singapore Private Limited	Singapore February 1, 2019	US$1	—	**100**	N/A	Biologics manufacturing service
WuXi Vaccines (Hong Kong) Limited	Hong Kong May 24, 2019	HK$1,000	—	**100**	N/A	Investment holding
WuXi Vaccines Ireland Limited	Ireland June 20, 2019	EUR1,000	—	**100**	N/A	Vaccine CDMO and related business
WuXi Biologics Alliance Limited	Hong Kong June 27, 2019	HK$1,000	—	**100**	N/A	Investment holding
平湖優譜生物技術有限公司 (Pinghu U-Pure Biosciences Co. Ltd.)# *(Note a)*	The PRC June 18, 2013	RMB2,000,000	RMB2,000,000	**50.1** *(note 1)*	N/A	Biologics manufacturing service and material supplier
博格隆(上海)生物技術有限公司 (BestChrom (Shanghai) Biosciences Co., Ltd.)# *(Note a)*	The PRC July 1, 2008	US$150,000	US$150,000	**50.1** *(note 1)*	N/A	Biologics manufacturing service and material supplier
WuXi Biologics Germany GmbH	The Federal Republic of Germany December 20, 2019	EUR25,000	—	**100**	N/A	Biologics manufacturing service

Note:

\# English name is for identification purpose only.

a. This Company is a sino-foreign joint venture.

b. This Company is a wholly-foreign owned enterprise.

c. This Company is a wholly-domestic owned enterprise.

Note 1: These companies were newly acquired in 2019. Details are set out in Note 34.

45. FINANCIAL POSITION OF THE COMPANY

	2019 RMB'000	2018 RMB'000
Non-current Assets		
Investments in subsidiaries	**2,491,115**	2,288,456
Derivative financial assets	**—**	7,211
	2,491,115	2,295,667
Current Assets		
Other receivables and prepayments	**5,892**	4,301
Amounts due from subsidiaries	**3,843,108**	1,429,652
Pledged bank deposits	**431,640**	—
Bank balances and cash	**4,125,961**	3,275,568
Derivative financial assets	**—**	3,465
	8,406,601	4,712,986
Current Liabilities		
Trade and other payables	**38,537**	41,719
Amounts due to subsidiaries	**64,599**	2,883
Derivative financial liabilities	**—**	4,351
	103,136	48,953
Net Current Assets	**8,303,465**	4,664,033
Total Assets Less Current Liabilities	**10,794,580**	6,959,700
Non-current Liabilities		
Derivative financial liabilities	**—**	77
Net Assets	**10,794,580**	6,959,623
Capital and Reserves		
Share capital	**214**	202
Reserves	**10,794,366**	6,959,421
Total Equity attributable to the Owners of the Company	**10,794,580**	6,959,623

46. RESERVES MOVEMENT OF THE COMPANY

The movement of the reserves of the Company are as follows:

	Share premium RMB'000	Equity-settled share-based compensation reserve RMB'000	Accumulated profit (loss) RMB'000	Total reserves RMB'000
At January 1, 2018	3,436,155	97,201	(131,767)	3,401,589
Total comprehensive income for the year	—	—	225,739	225,739
Issue of new shares, net of transaction costs	3,206,214	—	—	3,206,214
Recognition of equity-settled share-based compensation	—	125,879	—	125,879
At December 31, 2018	6,642,369	223,080	93,972	6,959,421
Total comprehensive income for the year	—	—	119,536	119,536
Issue of new shares, net of transaction costs	3,512,212	—	—	3,512,212
Recognition of equity-settled share-based compensation	—	203,197	—	203,197
At December 31, 2019	10,154,581	426,277	213,508	10,794,366

47. INVESTMENTS IN SUBSIDIARIES

	2019 RMB'000	2018 RMB'000
Unlisted shares, at cost (Note i)		
Biologics Investment	**2,065,376**	2,065,376
Deemed capital contributions to (Note ii):		
WuXi Co.	**192,313**	92,225
Shanghai Biologics	**207,995**	120,276
USA Biologics	**11,368**	4,513
Suzhou Biologics	**8,685**	4,389
UK Biologics	**1,222**	838
Biologics Ireland	**3,050**	641
Biologics Conjugation	**885**	198
WuXi Biologics (Hebei) Co., Ltd.	**116**	—
WuXi Biopharmaceuticals (Shanghai) Co., Ltd	**87**	—
Wuxi Biologics (Chengdu) Co., Ltd	**18**	—
	2,491,115	2,288,456

Notes:

(i) The amount represents the cost of investment amounting to HK$2,357,198,000 (equivalent to approximately RMB2,065,376,000) in Biologics Investments, a wholly owned subsidiary of the Company incorporated in Hong Kong.

(ii) The amounts represent the equity-settled share-based compensation in respect of the respective share options and restricted shares granted by the Company to certain employees of the specified subsidiaries for employees' services rendered to the respective subsidiaries under the Company's Pre-IPO Share Option Scheme and Restricted Share Award Scheme as disclosed in Note 43. Since the subsidiaries have no obligation to reimburse such expense, the amounts are treated as deemed capital contribution by the Company to the subsidiaries and included in the Company's cost of investments in subsidiaries.

48. SUBSEQUENT EVENTS

The Group has the following events taken place subsequent to December 31, 2019:

Assets Acquisition

On January 16, 2020, WuXi Biologics Germany GmbH ("WuXi Biologics Germany"), a limited company incorporated in Germany and an indirect wholly owned subsidiary of the Company, has entered into an Asset Purchase Agreement with Bayer Aktiengesellschaft ("Bayer"), being a listed company whose shares are traded on the German Stock Exchanges, pursuant to which WuXi Biologics Germany will purchase from Bayer the Facility Assets of the biologics drug product Manufacturing Plant located in Leverkusen, Germany at the total consideration of Euro77 million (equivalent to approximately RMB602 million), so as to continue the Group's capacity expansion to further capture the growing global demand for biologics manufacturing. To ensure the smooth operation of the Manufacturing Plant after the acquisition, WuXi Biologics Germany has also entered into the Sublease Agreement and the Transitional Service Agreement with Bayer in relation to a long-term sublease for the building housing the Manufacturing Plant and certain related transitional services, respectively.

Vaccine Manufacturing Agreement

On February 14, 2020, WuXi Vaccines Ireland Limited ("WuXi Vaccines"), a wholly owned subsidiary of the Company, entered into a master Vaccine Manufacturing Agreement with the Vaccine Partner, pursuant to which WuXi Vaccines shall build an integrated vaccine manufacturing facility, including drug substance and drug product manufacturing as well as quality control labs in Ireland, and manufacture for, and supply to, the Vaccine Partner certain vaccine products for an initial term commencing from February 14, 2020 to December 31, 2039, subject to an option to renew for successive three years by the Vaccine Partner, with a total contract value of up to approximately US$3 billion (equivalent to approximately RMB21 billion).

2019 Novel Coronavirus impact

The outbreak of the 2019 Novel Coronavirus ("COVID-19") in the PRC and the subsequent mandatory quarantine measures imposed by the PRC government as well as the travel restrictions imposed by other countries in early 2020 has impact on the business and operations of the Group as majority of the Group's operations are located in the PRC. As required by the local government offices in which the Group's operate, entities including the Group were not allowed to resume operations until mid-February 2020 in an effort to contain the spread of the epidemic. As at the date of the approval of these consolidated financial statements, COVID-19 has not resulted in material impact to the Group. Pending on the further development and spread of COVID-19, further changes in economic conditions for the Group arising thereof may have impact on the financial results of the Group. However, the extent of which could not be estimated as of the date of the approval of these consolidated financial statements.

Definitions

"Audit Committee"	the audit committee of the Board
"Biologics Holdings"	WuXi Biologics Holdings Limited, a company incorporated under the laws of the British Virgin Islands on December 17, 2015 with limited liability, and a controlling shareholder of the Company
"Board" or "Board of Directors"	the board of Directors of the Company
"CDMO"	Contract development and manufacturing organization
"CG Code"	the Corporate Governance Code as set out in Appendix 14 to the Listing Rules
"cGMP"	Current Good Manufacturing Practice regulations, regulations enforced by the Food and Drug Administration of the United States on pharmaceutical and biotech firms to ensure that the products produced meet specific requirements for identity, strength, quality and purity
"Chairman"	the Chairman of the Board
"China" or "the PRC"	the People's Republic of China excluding, for the purpose of this annual report, Hong Kong, Macau Special Administrative Region and Taiwan
"Controlling Shareholders"	has the meaning ascribed thereto under the Listing Rules and unless the context requires otherwise, includes the Founding Individuals, Biologics Holdings, G&C Limited, G&C I Limited, G&C III Limited, G&C V Limited, G&C VI Limited, G&C IX Limited, G&C Partnership L.P. Group & Cloud Limited and New WuXi ESOP L.P.

"Company"	WuXi Biologics (Cayman) Inc. (藥明生物技術有限公司*), an exempted company incorporated in the Cayman Islands with limited liability on February 27, 2014
"Director(s)"	the director(s) of the Company
"Eligible Participant(s)"	any Director or employee of the Company or any of its subsidiaries
"EU"	a politico-economic union of 28 member states that are located primarily in Europe
"EU EMA"	European Medicines Agency
"Founding Individuals"	Dr. Ge Li, Dr. Ning Zhao, Mr. Xiaozhong Liu and Mr. Zhaohui Zhang
"GMP"	Good Manufacturing Practice
"Group" or "we" or "our"	the Company and its subsidiaries
"H.K. dollar(s)" or "HK$"	Hong Kong dollars, the lawful currency of Hong Kong
"Hong Kong"	the Hong Kong Special Administrative Region of the PRC
"IFRS"	International Financial Reporting Standards
"IND"	investigational new drug, an experimental drug for which a pharmaceutical company obtains permission to ship across jurisdictions (usually to clinical investigators) before a marketing application for the drug has been approved

Definitions

"Life Science Holdings"	New WuXi Life Science Holdings Limited, a company incorporated under the laws of the Cayman Islands on July 2, 2015 with limited liability, which holds 100% issued share capital of Life Science Limited
"Life Science Limited"	New WuXi Life Science Limited, a company incorporated under the laws of the Cayman Islands on July 2, 2015 with limited liability, which holds 100% issued share capital of WuXi PharmaTech
"Listing" or "IPO"	the listing of the Shares on the Main Board of the Stock Exchange on June 13, 2017
"Listing Date"	June 13, 2017, being the date on which the Shares were listed on the Main Board
"Listing Rules"	the Rules Governing the Listing of Securities on The Stock Exchange of Hong Kong Limited, as amended or supplemented from time to time
"Main Board"	the Main Board of the Stock Exchange
"Model Code"	the Model Code for Securities Transactions by Directors of Listed Issuers contained in Appendix 10 to the Listing Rules
"Pre-IPO Share Option Scheme"	the pre-IPO share option scheme adopted by the Company with effect from January 5, 2016, and amended on August 10, 2016, the principal terms of which are summarised in "Statutory and General Information — E. Pre-IPO Share Option Scheme" in Appendix IV to the Prospectus

"Prospectus"	the prospectus issued by the Company dated May 31, 2017
"Remuneration Committee"	the remuneration committee of the Board
"Renminbi" or "RMB"	Renminbi Yuan, the lawful currency of China
"Reporting Period"	the one-year period from January 1, 2019 to December 31, 2019
"Restricted Share Award Scheme"	the restricted share award scheme adopted by the Company on January 15, 2018
"Selected Participant(s)"	any Eligible Participant(s) selected by the Board in accordance with the terms of the Restricted Share Award Scheme
"SFO"	the Securities and Futures Ordinance (Chapter 571 of the Laws of Hong Kong), as amended or supplemented from time to time
"Shareholder(s)"	holder(s) of Shares
"Share(s)"	ordinary share(s) in the capital of the Company with nominal value of US$0.000025 each
"Stock Exchange"	The Stock Exchange of Hong Kong Limited
"U.S. dollar(s)" or "US$" or "USD"	United States dollars, the lawful currency of the United States of America

Definitions

"U.S. FDA"	The Food and Drug Administration of the United States of America
"Written Guidelines"	the Written Guidelines for Securities Transactions by Directors adopted by the Company
"WuXi AppTec"	WuXi AppTec Co., Ltd. (無錫藥明康德新藥開發股份有限公司), a company incorporated in the PRC on December 1, 2000 and the shares of which are listed on Shanghai Stock Exchange (Stock code: 603259) and the Main Board of the Stock Exchange (Stock code: 2359)
"WuXi AppTec Group"	WuXi AppTec and its subsidiaries
"WuXi PharmaTech"	WuXi PharmaTech (Cayman) Inc., a company incorporated under the laws of the Cayman Islands on March 16, 2007 with limited liability. Its shares were listed on the New York Stock Exchange (stock code: WX), and were delisted from the New York Stock Exchange on December 10, 2015

In this annual report, unless otherwise indicated, the terms "associate", "associated corporation", "connected person", "controlling shareholder", "subsidiary" and "substantial shareholder" shall have the meanings given to such terms in the Listing Rules.