三生制药
3SBIO INC.

(Incorporated in the Cayman Islands with limited liability)
Stock Code: 1530
Convertible Bonds Code: 5241

2019
ANNUAL REPORT

*Keep **Commitment**, and Deliver **Hope***

Contents

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3SBIO INC.

Company Profile

3SBio Inc. (the "**Company**"or "**3SBio**", and with its subsidiaries collectively, the "**Group**") is a leading biotechnology company in the People's Republic of China (the "**PRC**"). As a pioneer in the Chinese biotechnology industry, the Group has extensive expertise in researching and developing, manufacturing and marketing biopharmaceuticals. The core products of the Group include TPIAO (特比澳), Yisaipu (益賽普), and recombinant human erythropoietin ("**rhEPO**") products EPIAO (益比奧) and SEPO (賽博爾). All four products are market leaders in Mainland China[1]. TPIAO is the only commercialized recombinant human thrombopoietin ("**rhTPO**") product in the world. According to IQVIA[2], the market share in the treatment of thrombocytopenia, in terms of sales value, of TPIAO in Mainland China increased to 73.2% in 2019. Yisaipu is a Tumour Necrosis Factor ("**TNF**") α inhibitor product with a continuing dominant market share in Mainland China of 60.9% in 2019. With its two rhEPO products, the Group has been the premier market leader in the rhEPO market in Mainland China for nearly two decades, holding a total market share of 41.6% in 2019. The Group has been expanding its therapeutic coverage by adding products through internal research and development ("**R&D**") and various external strategic partnerships.

As at 31 December 2019, amongst the 32 product candidates within the Group's active pipeline, 22 were being developed as National New Drugs (including registration Class I and Biologics Class II) in Mainland China. The Group has 11 product candidates in oncology; 12 product candidates that target auto-immune diseases including rheumatoid arthritis ("**RA**"), and other diseases including refractory gout and ophthalmological diseases such as age-related macular degeneration ("**AMD**"); six product candidates in nephrology; two product candidates in the metabolic area that target type 2 diabetes; and one product candidate in dermatology. A total of 23 of the 32 product candidates are biologics, and the other nine are small molecules.

The Group operates in a highly attractive industry. Biotechnology has revolutionized the pharmaceutical industry by addressing unmet medical needs and offering innovative treatments for a wide array of human diseases. In Mainland China, the biotechnology industry enjoys strong government support and has been selected by the State Council of the PRC as a key strategic emerging industry. Strong government support along with increasing physician adoption of biopharmaceuticals has driven strong industry growth in China.

The Group is well positioned for global expansion. Outside of Mainland China, TPIAO has been approved in eight countries; Yisaipu has been approved in 15 countries; and EPIAO has been approved in 22 countries. In the long term, the Group aims to market its products in developed countries. Furthermore, the Group is collaborating with international partners to develop and market the Group's product candidates, such as pegsiticase. The Group aims to focus its R&D to provide innovative therapeutics for patients in Mainland China and globally.

As at 31 December 2019, the Group had operation facilities in Shenyang, Shanghai, Hangzhou and Shenzhen, all in Mainland China, as well as in Como, Italy, with over 5,000 employees. The Group's pharmaceutical products are marketed and sold in all provinces, autonomous regions and special municipalities in Mainland China, as well as a number of foreign countries and regions. For the year ended 31 December 2019 (the "**Reporting Period**"), the Group's nationwide sales and distribution network enabled it to sell its products to over 17,000 hospitals and medical institutions in Mainland China.

[1] Hereinafter referred to as the mainland area of the PRC.

[2] Formerly IMS Health Inc. All market share information throughout this report cites the IQVIA data, unless otherwise noted.

Corporate Information

BOARD OF DIRECTORS

Executive Directors

Dr. LOU Jing *(Chairman & Chief Executive Officer)*
Ms. SU Dongmei
Mr. TAN Bo (resigned on 2 December 2019)

Non-executive Directors

Mr. HUANG Bin (re-designated from executive Director on 20 June 2019)
Mr. TANG Ke (appointed on 10 February 2020)
Mr. WANG Steven Dasong (resigned on 8 October 2019)
Mr. LIU Dong (resigned on 10 February 2020)

Independent Non-executive Directors

Mr. PU Tianruo
Mr. David Ross PARKINSON
Dr. WONG Lap Yan (appointed on 8 October 2019)
Mr. MA Jun (resigned on 20 June 2019)
Mr. WANG Rui (appointed on 20 June 2019, and resigned on 8 October 2019)

COMPANY SECRETARY

Ms. LEUNG Suet Wing (became the sole secretary on 8 October 2019)
Ms. LIU Yanli (resigned on 8 October 2019)

AUTHORIZED REPRESENTATIVES

Ms. LEUNG Suet Wing (appointed on 8 October 2019)
Ms. SU Dongmei (appointed on 2 December 2019)
Ms. LIU Yanli (resigned on 8 October 2019)
Mr. TAN Bo (resigned on 2 December 2019)

AUDIT COMMITTEE

Mr. PU Tianruo *(Chairman)*
Mr. HUANG Bin (became a member on 20 June 2019)
Dr. WONG Lap Yan (appointed on 8 October 2019)
Mr. WANG Steven Dasong (ceased to be a member from 20 June 2019)
Mr. MA Jun (resigned on 20 June 2019)
Mr. WANG Rui (became a member on 20 June 2019 and resigned on 8 October 2019)

REMUNERATION COMMITTEE

Dr. WONG Lap Yan (*Chairman*, appointed on 8 October 2019)
Mr. PU Tianruo
Mr. TANG Ke (appointed on 10 February 2020)
Mr. MA Jun (resigned as Chairman on 20 June 2019)
Mr. WANG Rui (appointed chairman on 20 June 2019 and resigned on 8 October 2019)
Mr. LIU Dong (resigned on 10 February 2020)

NOMINATION COMMITTEE

Dr. LOU Jing *(Chairman)*
Mr. PU Tianruo
Dr. WONG Lap Yan (appointed on 8 October 2019)
Mr. MA Jun (resigned on 20 June 2019)
Mr. WANG Rui (became a member on 20 June 2019 and resigned on 8 October 2019)

REGISTERED OFFICE (IN THE CAYMAN ISLANDS)

Cricket Square, Hutchins Drive
PO Box 2681
Grand Cayman, KY1-1111
Cayman Islands

PRINCIPAL PLACE OF BUSINESS IN HONG KONG

31/F, Tower Two, Times Square
1 Matheson Street
Causeway Bay
Hong Kong

HEADQUARTER

No. 3 A1, Road 10
Shenyang Economy and Technology Development Zone
Shenyang
People's Republic of China

PRINCIPAL SHARE REGISTRAR AND TRANSFER OFFICE

Codan Trust Company (Cayman) Limited
Cricket Square, Hutchins Drive
PO Box 2681
Grand Cayman, KY1-1111
Cayman Islands

HONG KONG SHARE REGISTRAR

Computershare Hong Kong Investor Services Limited
Shops 1712–1716, 17th Floor
Hopewell Centre
183 Queen's Road East
Wanchai, Hong Kong

PRINCIPAL BANK

Industrial Bank Co., Ltd, Shenyang Branch
No. 36 Shiyiwei Road
Heping District
Shenyang
People's Republic of China

AUDITOR

Ernst & Young
Certified Public Accountants
22/F, CITIC Tower
1 Tim Mei Avenue
Central, Hong Kong

LEGAL ADVISERS

As to Hong Kong law and United States law:
Baker & McKenzie
14th Floor, One Taikoo Place
979 King's Road
Quarry Bay
Hong Kong

As to PRC law:
Jingtian & Gongcheng
34th Floor, Tower 3, China Central Place
77 Jianguo Road
Chaoyang District
Beijing
People's Republic China

As to Cayman Islands law:
Conyers Dill & Pearman
SIX, 2nd Floor, Cricket Square
171 Elgin Ave, George Town, Grand Cayman
Cayman Islands

SECURITIES CODES

Shares Listing
Ordinary Shares
The Stock Exchange of Hong Kong Limited
(Stock Code: 1530)

Convertible Bonds Listing
EUR300,000,000 Zero-Coupon
Convertible Bonds due 2022
The Stock Exchange of Hong Kong Limited
(Convertible Bonds Code: 5241)

COMPANY'S WEBSITE

www.3sbio.com

Financial Highlights

	2015 RMB'000	2016 RMB'000	2017 RMB'000	2018 RMB'000	**2019 RMB'000**
Revenue	1,673,126	2,797,289	3,734,334	4,583,869	**5,318,091**
Gross Profit	1,431,215	2,395,021	3,058,099	3,706,614	**4,392,744**
Research and Development Costs	111,324	243,006	257,310	362,706	**526,565**
EBITDA	660,705	1,141,324	1,476,817	1,892,824	**1,586,379**
Normalized EBITDA	734,136	1,151,789	1,445,451	1,781,760	**2,005,009**
Net Profit Attributable to Owners of the Parent	526,280	712,564	935,389	1,277,167	**973,717**
Normalized Net Profit Attributable to Owners of the Parent	599,711	719,970	904,023	1,166,103	**1,392,347**
Net Cash Flows from Operating Activities	455,274	1,004,324	1,074,098	1,150,251	**1,887,384**
Gearing Ratio (excluding Convertible Bonds)	7.2%	45.2%	28.0%	11.2%	**4.8%**
Total Assets	6,630,432	11,038,802	13,752,971	13,839,655	**14,809,306**
Total Liabilities	994,967	4,272,460	6,123,325	4,932,285	**4,449,987**
Total Equity	5,635,465	6,766,342	7,629,646	8,907,370	**10,359,319**

Chairman's Statement

Dear Shareholders:

On behalf of the board of directors (the "**Directors**") of the Company (the "**Board**"), I am pleased to present the annual results for the financial year ended 31 December 2019. 3SBio is a leading innovative biopharmaceutical company in Mainland China with a 27-year track record in R&D, manufacturing and sales in our core therapeutic areas of oncology, immunology, nephrology, metabolic disorders, and dermatology. 3SBio provides patients with innovative medicines that comply with global quality standards and aspires to be a China-based leading global biopharmaceutical company. Government initiatives such as the new 2019 PRC Pharmaceutical Administration Law will continue to support the development of innovative drugs through pricing and reimbursement policies. From 2020 onwards, I believe we will see further differentiation in Mainland China's biopharmaceutical industry based on the capability to transform the latest scientific advances into safe, effective and affordable medicines for patients with unmet medical needs, not only in Mainland China but also around the world.

Clinical stage R&D progress

We have made excellent progress in several 3SBio's key internal R&D projects over the past year. Xenopax (Jiannipai), a humanized recombinant anti-CD25 antibody to prevent acute rejection of kidney transplantation, was Mainland China's first ever approved humanized antibody therapeutic developed by a domestic company. Two innovative biologics candidates have reached the final approval stage from the PRC National Medical Products Administration[3] ("**NMPA**"): Saiputing (inetetamab), a humanized anti-HER2 antibody, will likely be the first-to-market anti-HER2 antibody developed by a domestic company for the treatment of HER2-positive metastatic breast cancer patients; Yisaipu pre-filled syringe aqueous injection, once approved, will continue to reinforce 3SBio's leadership position in the rapidly growing market of the anti-TNFα agents. We received five new investigational new drug ("**IND**") approval in 2019, including 608, an anti-interleukin ("**IL**")-17A injection for psoriasis; TRK-820 (REMITCH, a novel medicine in-licensed from Toray Industries, Inc. ("**Toray**")) for pruritus in hemodialysis patients; SSS17 (a small molecule HIF-PH inhibitor) for oral treatment for anemia in patients with chronic kidney diseases ("**CKD**"); and 609A (a humanized anti-programmed cell death protein 1 ("**PD1**") antibody) for the treatment of various cancers. Phase 1 trials for 609A are currently ongoing in both the United States and the PRC.

Global strategic partnerships

3SBio continues to pursue strategic R&D collaborations and partnerships to accelerate the development of innovative products with high level of unmet medical needs. We established strategic collaboration and partnership with Verseau Therapeutic, Inc. ("**Verseau**"), and have nominated VTX-0811, a humanized PSGL-1-targeted antibody as our first collaboration program generated from Verseau's proprietary platform for discovering first-in-class macrophage checkpoint modulators ("**MCM**"). We partnered with Switzerland-based Numab Therapeutics ("**Numab**") to develop multiple bi- and multi-specific antibodies with the potential to unlock entirely novel modes-of-action with superior benefit-to-risk profiles relative to conventional cancer immune therapies. Our collaboration with Samsung Bioepis Co., Ltd. ("**Samsung Bioepis**") focuses on biosimilars, including SB8, an anti-vascular endothelial growth factor ("**VEGF**") biosimilar candidate for metastatic colorectal

[3] Formerly the China Food and Drug Administration.

cancer and non-small cell lung cancer. We have also partnered with Taiwan Liposome Company, Ltd. (Nasdaq: TLC, TWO: 4152) ("**TLC**") to develop novel liposomal products for cancer and infectious diseases. We are collaborating with GenSight Biologics (Euronext: SIGHT) ("**GenSight**") on its innovative gene therapy products for eye disease, and with Sensorion (Paris Stock Quote: ALSEN) on its novel therapeutics for inner ear disease. 3SBio also invested in the MPM Oncology Innovations Fund ("**INV**") and agreed to make donation to the Dana-Farber Cancer Research Institute's Innovations Research Fund ("**IRF**"). Part of the INV-IRF collaboration involves the right of first offer to license certain Dana-Farber technologies that have been identified for commercialization.

COVID-19

Due to the COVID-19 pandemic, we are collectively experiencing one of the darkest moments of global health insecurity and capital market uncertainty, which has affected the pharmaceutical industry to varying degrees. More than 95% of our business is from Mainland China and we will continue to use our best efforts to support our nation to get through these challenges. 3SBio has actively participated in the fight against COVID-19 by providing hospitals in Wuhan with 100,000 doses of interferon alpha2 as well as complex bio-engineering support to help alleviate the urgent needs of doctors and their patients. While the pandemic may have an impact on some of 3SBio's businesses in the short term, the Company's fundamentals remain solid; R&D, manufacturing, sales and investment cooperation are all progressing smoothly and as planned. I am confident that 3SBio will continue to thrive and create value for all our shareholders.

Finally, on behalf of 3SBio, I give my sincerest thanks to all our valued stakeholders — including patients, front-line medical workers, employees and shareholders — for supporting our efforts to extend 3SBio's capabilities and contribute to improving patients' health.

Dr. LOU Jing
Chairman & Chief Executive Officer
30 March 2020

Management Discussion and Analysis

BUSINESS REVIEW

Proposed Spin-off of Sunshine Guojian

As announced on 31 October 2019, the Shanghai Stock Exchange (the "**SSE**") has formally accepted the spin-off application by Sunshine Guojian Pharmaceutical (Shanghai) Co., Ltd. ("**Sunshine Guojian**"), an indirect non-wholly owned subsidiary of the Company, for listing on its Science and Technology Innovation Board (the "**STAR Market**"). The Stock Exchange of Hong Kong Limited (the "**Stock Exchange**") has also confirmed that the Company may proceed with the proposed spin-off.

The Company expects that the proposed listing will involve issuance and allotment of only new ordinary shares of Sunshine Guojian (the "**Guojian Shares**") and the Company does not intend to sell any Guojian Shares under the proposed listing.

The proposed spin-off is expected to be effected by way of a public offering of up to 10% of the share capital of Sunshine Guojian as enlarged by the proposed spin-off and listing of such shares on the STAR Market. The offering size of the proposed listing is subject to the requirements of the PRC regulations and prevailing market conditions. The Company currently holds 89.96% of Sunshine Guojian's share capital. It is anticipated that the Company will continue to hold more than 50% of Sunshine Guojian's share capital upon completion of the proposed listing and the offering; hence, Sunshine Guojian will remain as a non-wholly owned subsidiary of the Company.

The proposed spin-off is conditional upon, among other things, the approval of the China Securities Regulatory Commission and the SSE to the proposed listing and completion of the offering.

The Directors consider that the proposed spin-off will, among other things, (i) marketize the price of the equity interests of Sunshine Guojian; (ii) provide new sources of capital for Sunshine Guojian; (iii) enhance corporate and brand awareness on both the Group level and Sunshine Guojian level; (iv) attract talents to join Sunshine Guojian; and (v) enable Sunshine Guojian and the other part of the Group to be more focused in developing and strategically planning their respective businesses. As such, the Board believes that there are clear commercial benefits to the Group to conduct the proposed spin-off.

For further details, please refer to the Company's announcement dated 31 October 2019. As at the date of this annual report, the proposed spin-off has not been completed and further announcements in connection with the proposed spin-off will be made by the Company as and when applicable.

Key Events

In view of the contemplated listing of Guojian Shares and as announced on 2 July 2019, as part of the Group's initiatives to incentivise the performance of its directors, senior management and employees, Sunshine Guojian entered into a subscription agreement and other employee share ownership plan (the "**ESOP**") agreements with relevant parties on 30 June 2019 in relation to the subscription of certain allotted shares in Sunshine Guojian under the ESOP. Guojian Shares were granted and allotted to selected participants comprising connected persons and independent employees of the Group. For details of the ESOP and grant of awarded shares by Sunshine Guojian, please refer to the Company's announcement dated 2 July 2019.

On 20 August 2019, the PRC National Healthcare Security Administration released the 2019 National Reimbursement Drug List ("**NRDL**"). In the 2019 NRDL, among the Group's products, two indications and one product were newly included,

and one product (in one specification) was re-classified from Class B to Class A, namely: for Yisaipu, the indication of the treatment of adult patients with severe plaque psoriasis was added; for EPIAO and SEPO, the indication of chemotherapy-induced anemia in patients with non-hematological malignancies was added; Fluticasone Propionate Cream (Shinuo), a product with broad applications in the treatment of a variety of dermatological disorders, was newly included; and Humulin NPH was reclassified from Class B to Class A. Additionally, in November 2019, Byetta was included in the 2019 NRDL to treat type 2 diabetes through the negotiated mechanism. The 2019 NRDL took effect on 1 January 2020; and the preceding version, the 2017 NRDL, was then repealed.

Please also refer to "Key Product Developments" and "Key R&D Collaboration and Partnership Activities" sections below.

Key Events after the Reporting Period

As announced on 25 February 2020, the Group has received an IND approval from the NMPA to conduct clinical trials of an anti-IL-5 antibody (610) in patients with severe eosinophilic asthma. The Group is actively preparing to initiate patient enrollment.

Key Products

TPIAO is the Group's self-developed proprietary product, and has been the only commercialized rhTPO product in the world since its launch in 2006. TPIAO has been approved by the NMPA for two indications: the treatment of chemotherapy-induced thrombocytopenia ("**CIT**") and immune thrombocytopenia ("**ITP**"). TPIAO has the advantages of higher efficacy, faster platelet recovery and fewer side effects as compared to alternative treatments for CIT and ITP.

TPIAO is listed in the 2019 NRDL as a Class B Drug ("Western Medicine" Section No. 234) for the treatment of severe CIT in patients with solid tumors or ITP. In "Consensus on the Clinical Diagnosis, Treatment, and Prevention of Chemotherapy-Induced Thrombocytopenia in China (2019 version)" (authored by the Society of Chemotherapy and Committee of Neoplastic Supportive-Care (CONS), both subordinate units under China Anti-Cancer Association), TPIAO is one of the primary treatments for CIT. In "The Chinese Guidelines for Treatment of Adult Primary Immune Thrombocytopenia", published in International Journal of Hematology in April 2018, rhTPO was included as the first choice recommendation for the second line treatments list. In "The Consensus of the China Experts on Diagnosis and Treatment of Adult Primary Immune Thrombocytopenia" (2016 Version), rhTPO products were included as the first choice recommendation for the second line treatments list and were recommended among the medicines to boost platelet production in certain emergency cases. In "The Guidelines of Chinese Society of Clinical Oncology (CSCO) — Soft Tissue Sarcoma (2019)", rhTPO is a primary treatment strategy for thrombocytopenia accompanying treating soft tissue sarcoma. TPIAO has also received similar professional endorsements in several national guidelines and experts consensus on treating other diseases in Mainland China, including conventional osteosarcoma and certain other off-label uses.

TPIAO has experienced significant sales growth due to increasing physician awareness of its safety and efficacy as a treatment for CIT and ITP and its quick adoption in Mainland China. The inclusion in the NRDL led to an accelerated growth for TPIAO. The Group believes that TPIAO is still at an early stage of its product life cycle. The Group estimates that its penetration rates for both CIT and ITP indications in Mainland China are in the range of approximately 23% to 30%. Currently,

the majority of the Group's sales of TPIAO is generated from approximately 10% of the hospitals covered by the Group's sales team. In 2019, its market share for the treatment of thrombocytopenia in Mainland China, in terms of sales volume, was 25.8%; and, in terms of sales value, was 73.2%. The Group has started a phase III clinical trial of TPIAO in the pediatric ITP indication. Patient enrollment is ongoing. A phase I clinical trial for TPIAO in surgery patients with hepatic dysfunction at the risk of thrombocytopenia has been completed, and the Group is planning to initiate the phase II trials soon. Outside of Mainland China, TPIAO has been approved in eight countries, including Ukraine, the Philippines and Thailand.

Yisaipu, generically known as etanercept, is a TNF α inhibitor product. It was first launched in 2005 in Mainland China for RA. Its indications were expanded to ankylosing spondylitis ("**AS**") and psoriasis in 2007. The Group actively participated in the development of "The 2018 China Rheumatoid Arthritis Treatment Guidance" (the "**Guidance**"), an authoritative document issued by the China Medical Association. Yisaipu was adopted in the Guidance under 'TNF α inhibitors' as one of the RA treatment options, and the Guidance deemed TNF α inhibitors as a group of biological agents with relatively sufficient evidence and relatively wide adoption in treating RA. Yisaipu is listed in the 2019 NRDL as a Class B Drug ("Western Medicine" Section No. 857) for the treatment of patients with confirmed diagnosis of RA and for the treatment of patients with confirmed diagnosis of AS (excluding pre-radiographic axial spondyloarthritis), each subject to certain medical prerequisites, and for the treatment of adult patients with severe plaque psoriasis. Yisaipu has experienced a significant growth as the first-to-market etanercept product in Mainland China, with a dominant market share in Mainland China of 60.9% by sales value in 2019. The sales coverage of Yisaipu extended to more than 3,500 hospitals in Mainland China, including over 1,500 Grade III hospitals. The Group believes that Yisaipu is still at an early stage of its product life cycle. The Group estimates that its penetration rates for RA and AS in Mainland China are in the range of approximately 5% to 9%. Currently, the majority of the Group's sales of Yisaipu is generated from approximately 8% of the hospitals covered by the Group's sales team. The Group completed the Phase III trial for pre-filled aqueous injection solution of Yisaipu and submitted the application for manufacturing approval in July 2019. The application was accepted for review by the NMPA. Yisaipu aqueous injection solution is the first self-developed pre-filled fusion protein injection solution in Mainland China. If approved, Yisaipu will likely be the only TNF α inhibitor product in pre-filled format among its Chinese peers. The Group is of the view that the pre-filled aqueous injection solution of Yisaipu will improve convenience and compliance for patients, and contribute to further growth of Yisaipu. Outside of Mainland China, Yisaipu has been approved in 15 countries, including India, Thailand, the Philippines, and Mexico.

EPIAO is still the only rhEPO product approved by the NMPA for the following three indications: the treatment of anemia associated with CKD, the treatment of chemotherapy-induced anemia ("**CIA**") and the reduction of allogeneic blood transfusion in surgery patients. EPIAO has been listed in the NRDL as a Class B Drug, for renal anemia since 2000, and, additionally in 2019 NRDL, for CIA in patients with non-hematological malignancies. EPIAO has also been listed in the 2018 National Essential Drug List. EPIAO has consistently been the dominant market leader in Mainland China rhEPO market since 2002 in terms of both sales volume and value. EPIAO is the only rhEPO product in Mainland China available at 36,000 IU (international unit per vial) dosage, and together with SEPO, claims the majority of Mainland China rhEPO market share at 10,000 IU dosage. Future growth for EPIAO is expected to be driven by: (1) the increase of the dialysis penetration rate among stages IV and V CKD patients, which the Group believes is substantially lower in Mainland China as compared with other countries; and (2) the increase in the applications of EPIAO in CIA oncology indication and in reducing allogeneic blood transfusion in Mainland China, which the Group believes is at a very early stage of growth. The 2019 NRDL addition of a CIA oncology indication validates the growth potential of EPIAO as well as the Group's assessment. With contribution from the second brand of the Group's rhEPO products, SEPO, market coverage of the Group's rhEPO products has expanded

in Grade II and Grade I hospitals in Mainland China, where sales of its rhEPO products have been experiencing significant growth. The Group expects that SEPO will continue to gain market share in the rhEPO market in Mainland China. The Group has initiated patient enrollment in phase II clinical trials on NuPIAO (SSS06), a second-generation rhEPO to treat anemia. The Group is currently planning for phase II trials on RD001, a pegylated long-acting rhEPO to treat anemia. Outside of Mainland China, EPIAO has been approved in 22 countries, including Ukraine, Thailand and Egypt. The multi-center biosimilar clinical trials for EPIAO in Russia and Thailand have made good progress, and patient recruitment were completed by the end of 2019. The trial is expected to complete in 2020.

Humulin was the first bio-synthetic human insulin product and was also the first medical product for human therapeutic use produced by recombinant DNA technology in the world. Humulin is licensed from Eli Lilly and Company (NYSE: LLY) ("**Lilly**"), and the Group started to consolidate the revenue of Humulin from July 2017. Diabetes is a major chronic disease in Mainland China, which has the largest diabetes patient population in the world. The Group is of the view that the classification of human insulin as a Class A Drug in the NRDL and the establishment and implementation of the tiered medical service system will lead to further growth of human insulin in lower tier markets in Mainland China.

Byetta, generically known as "exenatide injection", is an injectable GLP-1 receptor agonist, administered twice daily as an adjunct to diet and exercise to improve glycemic control in adults with type 2 diabetes mellitus, which is indicated for treatment of patients who have not achieved adequate glycaemic control on metformin, sulphonylureas, or metformin plus sulphonylureas. Byetta is licensed from AstraZeneca PLC ("**AstraZeneca**"), and the Group has started to record the revenue of Byetta from October 2016. Byetta was included in the 2019 NRDL to treat type 2 diabetes through the negotiated mechanism in November 2019. Bydureon, the weekly administered GLP-1 receptor agonist product licensed

from AstraZeneca, was launched in May 2018, and the Group has started to record its revenue since then. In "The Clinical Application of GLP-1 receptor agonists — Experts Guidance" (the "**Experts Guidance**") published in Chinese Journal of Diabetes (May 2018, Vol. 26, No. 5), the experts were of the opinion that GLP-1 receptor agonists are an important class of novel hypoglycemic drug in the treatment of type 2 diabetes mellitus, with increasingly wider clinical application; that they have reliable and safe hypoglycemic efficacy, and have additional benefits outside blood glucose reduction including body weight reduction, systolic pressure reduction and blood lipid profile improvement. The Experts Guidance recommended that GLP-1 receptor agonists can be used in mono-therapy, or in combination therapy when other multiple oral hypoglycemic drug and basal insulin fail to achieve desired glycemic control. In "Standards of Medical Care in Diabetes 2019" (the "**Standards**"), issued by the American Diabetes Association, GLP-1 receptor agonists was recommended in various type 2 diabetes comorbidities scenarios as pharmacologic therapy, and the Standards stated that in most patients who need the greater glucose-lowering effect of an injectable medication, GLP-1 receptor agonists are preferred over insulin; and GLP-1 receptor agonists were also recommended as the best choice for a second agent in combination therapy for patients in whom certain comorbidities predominate.

Qiming Keli (芪明颗粒), Mandi (蔓迪), Disu (迪蘇) and Laiduofei (萊多菲) are a group of dermatology and ophthalmology drugs, indicated to treat diabetic retinopathy, alopecia areata, chronic bronchitis and chronic idiopathic urticaria, respectively. Qiming Keli is listed in the 2019 NRDL as a Class B Drug ("Traditional Chinese Medicine — Prepared Prescription" Section No. 1064) for the treatment of non-proliferative retinopathy caused by type 2 diabetes.

Research and Development

The Group's integrated R&D platform covers a broad range of technical expertise in the discovery and development of various innovative bio-pharmaceutical and small molecule products, including antibody discovery, molecular cloning, antibody/protein engineering, gene expression, cell line construction, manufacturing process development, pilot and large scale manufacturing, quality control and assurance, design and management of pre-clinical and clinical trials, and regulatory filing and registration. The Group is experienced in the R&D of mammalian cell-expressed, bacterial cell-expressed and chemically-synthesized pharmaceuticals.

The Group focuses its R&D efforts on researching and developing innovative biological products as well as in small molecule therapeutics. Currently, the Group has several leading biological products in various stages of clinical development, including 302H (an anti-HER2 antibody to treat metastatic breast cancer), 304R (an anti-CD20 antibody to treat Non-Hodgkin's lymphoma and other autoimmune diseases), 301S (the pre-filled aqueous injection solution of Yisaipu), SSS06 (NuPIAO, a second-generation rhEPO to treat anemia), RD001 (a pegylated long-acting rhEPO to treat anemia), SSS07 (an anti-TNFα antibody to treat RA and other inflammatory diseases), pegsiticase (a modified pegylated recombinant uricase from candida utilis to treat refractory gout), 601A (an anti-VEGF antibody to treat AMD and other ophthalmological diseases), 602 (an anti-epidermal growth factor receptor ("**EGFR**") antibody to treat cancer), 608 (an anti-IL-17A antibody to treat autoimmune and other inflammatory diseases), 609A (an anti-PD1 antibody to treat cancer) and 610 (an anti-IL-5 antibody to treat severe asthma). On the small molecule side, the Group is initiating clinical trials of two innovative products: nalfurafine hydrochloride (TRK-820, a highly selective kappa receptor agonist) to treat pruritus in hemodialysis patients, and HIF-117 capsule (SSS17, a selective small molecule inhibitor to hypoxia inducible factor proline hydroxylase) to treat anemia. In addition, the Group is

performing bio-equivalency studies of a number of generic small molecule products in the field of nephrology, autoimmune and dermatological diseases.

On the research front, the Group is developing a panel of novel biological products, including monoclonal antibodies ("**mAb**"), bi-specific antibodies and fusion proteins, and a number of small molecule drugs, both innovative and generic, in the areas of oncology, autoimmune and inflammatory diseases, nephrology, metabolic and dermatological diseases.

The Group's R&D team consisting of over 380 (as at 31 December 2019) experienced scientists is working diligently to research and discover new medicines, to accelerate the progress of clinical development, and to bring breakthrough therapies to fulfill the unmet medical needs of patients.

Product Pipeline

As at 31 December 2019, amongst the 32 product candidates within the Group's active pipeline, 22 were being developed as National New Drugs (including registration Class I and Biologics Class II) in Mainland China. The Group has 11 product candidates in oncology; 12 product candidates that target auto-immune diseases including RA, and other diseases including refractory gout and ophthalmological diseases such as AMD; six product candidates in nephrology; two product candidates in the metabolic area that target type 2 diabetes; and one product candidate in dermatology. A total of 23 of the 32 product candidates are biologics, and the other nine are small molecules.

Robust and Innovative Product Pipeline Supported by Integrated R&D Platform

Key Product Developments

During the period from 2009 to 2013, the Group conducted an open label, multi-center, perspective phase III trial in Mainland China with 302H (inetetamab/伊尼妥單抗, Cipterbin®/賽普汀®), a humanized anti-HER2 antibody for injection, in patients with HER2 over-expressing metastatic breast cancer. During the years of 2017 and 2018, the Group completed a thorough inspection and audit of all the clinical sites involved in the trial and the associated clinical data, with the assistance of a retained third-party clinical study audit firm. In September 2018, the Group re-submitted a new drug application to the NMPA for the approval of 302H for the treatment of patients with HER2 over-expressing metastatic breast cancer. The application was granted with a priority review status by the NMPA. As at the date of this annual report, technical reviews, clinical trial site inspection as well as manufacturing site inspection have all been completed by the Center of Drug Evaluation of the NMPA.

The Group has completed the phase III trial on the pre-filled aqueous injection solution of Yisaipu (301S) and submitted an application to the NMPA for manufacturing approval in July 2019. The application was accepted for review by the NMPA.

The Group has completed a phase I head-to-head trial comparing 304R (Jiantuoxi, an anti-CD20 antibody) with rituximab (Rituxan®) in non-Hodgkin's lymphoma patients with zero tumor burden, with major endpoints of safety and pharmacokinetics. The data is being analyzed, and study report will be finalized soon.

The Group has started a phase III clinical trial of TPIAO in the pediatric ITP indication. Patient enrollment is ongoing. A phase I clinical trial for TPIAO in surgery patients with hepatic dysfunction at the risk of thrombocytopenia has been completed, and the Group is planning to initiate the phase II trials soon.

The Group has completed multiple phase I trials on NuPIAO (SSS06) in anemic patients, and has initiated patient enrollment in phase II clinical trials.

The Group has completed a dose-escalating phase I safety and pharmacokinetics study on RD001 in healthy volunteers, and is currently planning for phase II trials in anemic patients.

The Group has completed the phase I clinical trial of a humanized anti-TNF α antibody (SSS07) in both healthy volunteers and RA patients, and is currently preparing for phase II trials in patients with RA and other inflammatory diseases.

The Group has completed two phase I trials of an anti-EGFR antibody (602) in healthy volunteers and patients with colorectal cancers, and is currently planning advanced clinical trials of the product in patients with colorectal cancer.

The Group is currently conducting the phase I clinical trials for pegsiticase (SSS11) in refractory gout patients with high uric acid level. In the United States, the Group's business partner, Selecta Biosciences, Inc. (NASDAQ: SELB) ("**Selecta**"), has completed a phase II clinical trial for SEL-212 (consisting of pegsiticase, co-administered with SVP-Rapamycin to prevent the formation of anti-drug antibodies), and results showed that SEL-212 treatment led to 66% of evaluable patients maintaining a serum uric acid level below 6 mg/ml throughout 5 months of therapy. Selecta has since launched a head-to-head safety and efficacy trial comparing SEL-212 with Krystexxa® (pegloticase), a therapy for the treatment of severe, treatment-refractory, chronic gout approved by the U.S. Food and Drug Administration ("**US FDA**"). Selecta expects to release interim results soon.

As announced on 25 June 2019, the Group has obtained the Certificate of Good Manufacturing Practice ("**GMP**") for Pharmaceutical Products issued by the NMPA for its recombinant anti-CD25 humanized mAb injection Xenopax®. The product is approved for prevention of acute rejection of kidney transplantation and can be used in combination with conventional immune-suppressive therapy to significantly improve the survival rate of transplanted organs and to enhance patient quality of life. Xenopax is the first humanized therapeutic mAb developed by a domestic company and approved for launch in Mainland China. The Group began to market this product in October 2019.

As announced on 1 August 2019, the Group has received an IND approval from the NMPA to conduct clinical trials of an anti-IL-17A antibody (608) in patients with moderate to severe plaque psoriasis and other inflammatory diseases. The phase I trial has been initiated and patient enrollment is ongoing.

On 29 August 2019, the Group has received an IND approval from the NMPA to conduct clinical trials of an anti-PD1 antibody (609A) in patients with various cancers. Patient enrollment is expected to start soon. The Group also received an IND approval from the US FDA for 609A for clinical trials in patients with various cancers in January 2019. Patient enrollment in US phase I trial is progressing smoothly according to the plan.

As announced on 18 September 2019, the Group has received an IND approval from the NMPA to conduct clinical trials of nalfurafine hydrochloride (TRK-820, known as "REMITCH" as approved in Japan), an in-licensed product from Toray, to treat pruritus in hemodialysis patients. TRK-820 is a highly selective κ (kappa)-opioid receptor agonist marketed in Japan since 2009 to treat pruritus in patients with chronic kidney and liver diseases. Patient enrollment is expected to start soon.

On 12 November 2019, the Group received an IND approval from the NMPA to conduct clinical trials of HIF-117 capsule (SSS17) to treat anemia patients. SSS17 is a selective small molecule inhibitor to hypoxia inducible factor proline hydroxylase (HIF-PH), a molecule which can improve the stability and half-life of hypoxia inducible factor α (HIFα), so as to motivate the secretion of erythropoietin, or EPO. It is expected that SSS17 will create synergies with the Group's rhEPO injections and provide CKD patients with alternative treatment options, particularly for pre-dialysis patients, a large and under-treated patient population in Mainland China. Patient enrollment is expected to start soon.

On 18 November 2019, the Group received a license granted by Verseau for a novel PSGL-1-targeted antibody (VTX-0811) in the field of immune-oncology to treat various cancers. PSGL-1 is an adhesion molecule that is highly expressed on tumor-associated macrophages across most tumor types. VTX-0811 reprograms macrophages to a pro-inflammatory state, activates T cells and other immune cells and generates a greater antitumor response compared to current immunotherapies.

As announced on 25 February 2020, the Group has received an IND approval from the NMPA to conduct clinical trials of an anti-IL-5 antibody (610) in patients with severe eosinophilic asthma. The Group is actively preparing to initiate patient enrollment.

Key R&D Collaboration and Partnership Activities

As announced on 7 January 2019, Hongkong Sansheng Medical Limited ("**Hongkong Sansheng**"), a wholly-owned subsidiary of the Company, has entered into a collaboration agreement (the "**Samsung Agreement**") with Samsung Bioepis for the clinical development and commercialization of multiple biosimilar candidates developed by Samsung Bioepis, including the SB8 bevacizumab biosimilar candidate in Mainland China. Pursuant to the Samsung Agreement, Samsung Bioepis is responsible for manufacturing and supplying products, and collaborating with the Group across a number of areas including clinical development, regulatory registration and commercialization in Mainland China. The indications of the bevacizumab biosimilar candidate in Mainland China will focus on metastatic colorectal cancer (mCRC) and non-small cell lung cancer (NSCLC).

On 11 February 2019, the Group and Cambridge, Massachusetts-based Verseau announced the entering into of a partnership agreement (the "**Partnership Agreement**") focusing on the development and commercialization of novel mAbs in the field of immuno-oncology for a broad range of cancers. Verseau's proprietary drug discovery platform generates first-in-class MCM to benefit patients with cancer, immune and inflammatory diseases. Under the terms of the Partnership Agreement, the Group receives an exclusive license to develop and commercialize a selective number of MCM antibodies for all human oncology indications in the agreement-defined territory. Verseau is responsible for the discovery and optimization of MCM antibodies. The Group funds and conducts antibody development, GMP manufacturing and commercialization in the agreement-defined territory. This collaboration with Verseau provides the Group with access to novel and differentiated immune-modulating antibodies that will complement the Group's growing innovative oncology portfolio. On 18 November 2019, the Group selected a humanized PSGL-1-targeted antibody (VTX-0811) as the first licensed program under the Partnership Agreement.

On 4 March 2019, the Group and TLC announced an exclusive partnership to commercialize in Mainland China two liposomal products utilizing TLC's proprietary NanoX™ technology platform in the therapeutic areas of oncology and severe infectious diseases. Under this partnership, TLC and the Group will cooperate to obtain regulatory approvals in Mainland China, and TLC will utilize its commercial scale manufacturing capabilities to supply the two liposomal products to the Group for commercialization in Mainland China. The two companies also agreed to further collaborate in researching and developing other novel liposomal products in the therapeutic areas of osteoarthritis, pain management, ophthalmology and oncology. NanoX™ active drug loading technology is designed to alter the systemic exposure of the drug, potentially reducing dosing frequency and enhancing distribution of liposome-encapsulated active agents to the desired site.

In June 2019, the Group participated as a limited partner in INV. INV collaborates with IRF of Dana-Farber Cancer Institute, one of the world's leading centers of cancer research and treatment. The Group also agreed to make donations to IRF, to support early-stage oncology research at Dana-Farber. 50% of the capital from INV is expected to be invested in new companies generated from the Dana-Farber research. Part of the INV-IRF collaboration also involves the right of first offer to license certain Dana-Farber technologies that have been identified for commercialization.

In September 2019, in connection with a financing arrangement, Sensorion (Paris Stock Quote: ALSEN), a French pioneering clinical-stage biopharmaceutical company, which specializes in the development of novel therapies to restore, treat and prevent inner ear diseases such as hearing loss, granted the Group a right of first refusal for potential licensing on any of its four current pipeline products in the Greater China region. Sensorion's clinical-stage portfolio includes two phase 2 products: Seliforant (SENS-111), which is under investigation, for acute unilateral vestibulopathy and Arazasetron (SENS-401) for sudden sensorineural hearing loss (SSNHL). Sensorion has built a unique R&D technology platform to expand its understanding of the physiopathology and etiology of inner ear related diseases enabling it to select the best targets and modalities for drug candidates. It has also identified biomarkers to improve diagnosis and treatment of these underserved illnesses. Its two preclinical gene programs aim at correcting hereditary monogenic forms of deafness including Usher Type 1 and deafness caused by a mutation of the gene encoding for Otoferlin.

As announced on 12 December 2019, Sunshine Guojian has entered into a collaboration agreement with Numab, pursuant to which Sunshine Guojian will develop and commercialize a portfolio of novel multi-specific antibodies for cancer therapy based on Numab's technology platform. Under the agreement, Sunshine Guojian has the right to select up to five antibody molecules emerging from up to three multi-specific antibody programs based on Numab's R&D platform and has the exclusive licenses to develop and commercialize each of the selected antibody molecules in Greater China territories, including Mainland China, Hong Kong, Macao and Taiwan, while Numab retains exclusive commercial rights in the rest of the world. Multi-specific antibodies have the potential to unlock entirely novel modes-of-action aiming at superior benefit-to-risk profiles relative to conventional cancer immune therapies. Numab's proprietary MATCH™ technology platform represents one of the most versatile and flexible sources for multi-specific antibodies. MATCH™ molecules can incorporate up to six binding specificities in true plug-and-play fashion. The individual antibody Fv building blocks are designed for maximum stability and developability.

On 20 December 2019, in connection with a financing arrangement, GenSight, a French biopharma company focused on discovering and developing innovative gene therapies for retinal neurodegenerative diseases and central nervous system disorders, agreed to grant 3SBio a right of first refusal (subject to buy-back by GenSight in certain event) for potential licensing or co-development, encompassing manufacturing rights, in Greater China area, on its two lead products, GS010 for Leber Hereditary Optic Neuropathy (LHON) and GS030 for Retinitis Pigmentosa. GenSight and 3SBio have agreed to enter discussions on a potential licensing or co-development collaboration for these two products for Greater China area.

Sales, Marketing and Distribution

The Group's sales and marketing efforts are characterized by a strong emphasis on academic promotion. The Group aims to promote and strengthen the Group's academic recognition and the brand awareness of its products among medical experts. The Group markets and promotes its key products mainly through its in-house team. The Group sells these products to distributors who are responsible for delivering products to hospitals and other medical institutions. The Group relies on third-party promoters to market certain products.

As at 31 December 2019, the Group's extensive sales and distribution network in Mainland China was supported by approximately 3,372 sales and marketing employees, 660 distributors and 2,079 third-party promoters. As at 31 December 2019, the Group's sales team covered over 2,000 Grade III hospitals and over 14,000 Grade II or lower hospitals and medical institutions, reaching all provinces, autonomous regions and special municipalities in Mainland China. In addition, TPIAO, Yisaipu, EPIAO, SEPO and some of the Group's other products are exported to a number of countries through international promoters.

Outlook

With the deepening of the healthcare reform in Mainland China, the Group is of the view that the pharmaceutical industry landscape is in transformation. The healthcare reform favors companies that focus on innovation, product quality and market access. The preferential policies towards innovative drugs with proven efficacy extend over the full pharmaceutical life cycle, from R&D, regulatory review, manufacturing to payment. More policy supports will be given to innovative drugs and drugs with urgent clinical needs, indicating accelerated approval timeline and greater chance for such drugs to be included in the NRDL.

The R&D standard has been raised, which promotes better product quality. The acceptance of overseas clinical trial data will help bring in more innovative drugs to address unmet medical needs in Mainland China. The improved living standards and the accelerated-aging population will demand more high quality healthcare products.

The mission of the Group is to stand at the forefront of innovation and to provide medicines that are innovative, affordable, and of international quality standard to the public. The Group aims to become a China-based, leading global bio-pharmaceutical company by leveraging its integrated R&D, production and marketing platforms.

According to IQVIA, in 2019, the Group ranked 25th in the Mainland China hospital sales market, in terms of sales value, among all the pharmaceutical companies. The Group plans to improve the accessibility of its marketed products by further penetrating into the hospitals currently covered by the Group's sales and marketing team and new hospitals to be reached and brought under coverage, and through sustained academic promotion in the medical profession. The current market penetration rates of the Group's core products are still relatively low, promising significant growth potentials in the future.

The Group has consistently pursued innovation and technology excellence. Its rich pipeline now includes 32 candidates, with 22 candidates being developed as National New Drugs (including registration Class I and Biologics Class II). The Group will continue to focus its resources on core therapeutical areas including oncology, autoimmune diseases, and nephrology. The Group focuses on researching and developing next generation bio-therapeutics, including programmed CAR-T cell therapeutics, immune checkpoint inhibitors, MCMs, bi-specific antibodies and other innovative antibody molecules, antibodies to novel targets, and various combination therapies based on the Group's comprehensive antibody pipeline. The Group will continue to build up its in-house clinical development capacity and advance its integrative research capability on a highly focused basis.

The Group will continue to build up a comprehensive quality management system and voluntarily adheres to global quality standards. The Group has a proven track record of efficacy and safety profile of its products and the Group's manufacturing facilities have passed numerous inspections conducted by the NMPA and local authorities in the past years. With the Group's approximately 38,000-liter capacity mAb facility, as well as its mammalian cell-based, bacteria cell-based and small molecule manufacturing facilities and over 27 years of experience in the biological medicine manufacturing field, the Group is able to manufacture high quality pharmaceutical products with scalable manufacturing capacity at competitive cost.

The Group continues to seek selective merger and acquisition and collaboration opportunities to enrich its existing product portfolio and pipeline to sustain long-term growth. The strategic collaborations with companies such as AstraZeneca, Lilly, Toray, Samsung Bioepis, Refuge Biotechnologies, Verseau, TLC, Numab, GenSight, Sensorion and INV affirm the Group as a partner of choice to leading pharmaceutical companies around the world, and will serve as stepstones for future strategic collaborations. The Group is growing its international sales through registration of existing products in new countries and development of new products in highly regulated markets.

The outbreak of COVID-19 pandemic in early 2020 has confronted businesses with unfathomable uncertainties, risks and challenges. In the first quarter of 2020, work resumption was delayed, transportation was affected, and flow of goods and people was restricted, all of which impacted on the Group's operations. While fully cognizant of and calling attention to the uncertainties, the Group holds cautious confidence that stable growth may be sustained throughout the year.

FINANCIAL REVIEW

Revenue

For the year ended 31 December 2019, the Group's revenue amounted to approximately RMB5,318.1 million, as compared to approximately RMB4,583.9 million for the year ended 31 December 2018, representing an increase of approximately RMB734.2 million, or approximately 16.0%. The increase was mainly attributable to the strong sales growth of TPIAO and small molecule therapeutics.

For the year ended 31 December 2019, the Group's sales of TPIAO increased to approximately RMB2,322.9 million, as compared to approximately RMB1,669.5 million for the year ended 31 December 2018, representing an increase of approximately RMB653.4 million, or approximately 39.1%. The increase was primarily attributable to an increase in sales volume, which in turn was primarily driven by the increase in recognition of TPIAO within the medical profession and the accelerated growth due to the implementation of the NRDL beginning from September 2017. For the year ended 31 December 2019, the sales of TPIAO accounted for approximately 43.5% of the Group's total sales of goods.

For the year ended 31 December 2019, the Group's sales of Yisaipu increased to approximately RMB1,143.6 million, as compared to approximately RMB1,111.4 million for the year ended 31 December 2018, representing an increase of approximately RMB32.2 million, or approximately 2.9%. The limited increase was largely due to the fact that competing products were included in the NRDL in 2019 causing Yisaipu sales to slow down in the fourth quarter of 2019. For the year ended 31 December 2019, the sales of Yisaipu accounted for approximately 21.4% of the Group's total sales of goods.

For the year ended 31 December 2019, the Group's combined sales of EPIAO and SEPO decreased to approximately RMB749.0 million, as compared to approximately RMB896.6 million for the year ended 31 December 2018, representing a decrease of approximately RMB147.6 million, or approximately 16.5%. The decrease was mainly attributable to a decrease in the ex-factory price of EPIAO as the bidding price decreased in 2019 as compared to the same period in 2018. For the year ended 31 December 2019, the Group's sales of SEPO increased to approximately RMB202.8 million, as compared to approximately RMB192.5 million for the year ended 31 December 2018, representing an increase of approximately RMB10.3 million, or approximately 5.3%. For the year ended 31 December 2019, the Group's sales of EPIAO decreased to approximately RMB546.3 million, as compared to approximately RMB704.1 million for the year ended 31 December 2018, representing a decrease of approximately RMB157.8 million, or approximately 22.4%. For the year ended 31 December 2019, the sales of EPIAO and SEPO accounted for a total of approximately 14.0% of the Group's total sales of goods.

For the year ended 31 December 2019, the Group's sales of small molecule therapeutics were approximately RMB527.1 million, as compared to approximately RMB379.0 million for the year ended 2018, representing an increase of approximately RMB148.2 million, or approximately 39.1%. The increase was mainly attributable to the increased sales volume of Sparin and Mandi. For the year ended 31 December 2019, the Group's sales of Mandi increased to approximately RMB250.2 million, as compared to approximately RMB127.2 million for the year ended 31 December 2018, representing an increase of approximately RMB122.9 million, or approximately 96.6%. The increase was mainly attributable to the increased market demand for hair loss and growth treatments, which was driven by the Group's diversified and effective promotional efforts.

For the year ended 31 December 2019, the sales of small molecule therapeutics accounted for approximately 9.9% of the Group's total sales.

For the year ended 31 December 2019, the Group's export sales decreased to approximately RMB68.0 million, as compared to approximately RMB84.2 million for the year ended 31 December 2018, representing a decrease of approximately RMB16.2 million, or approximately 19.2%. The decrease was mainly attributable to the decreased export sales of EPIAO.

For the year ended 31 December 2019, the Group's other sales, primarily consisted of sales from in-licensed products and contract manufacturing income from Sirton Pharmaceuticals S.p.A. ("**Sirton**") and other subsidiaries of the Group, increased to approximately RMB531.5 million, as compared to approximately RMB463.7 million for the year ended 31 December 2018, representing an increase of approximately RMB67.8 million, or approximately 14.6%. The increase was primarily attributable to the increased sales of in-licensed products and IV Iron Sucrose.

Cost of Sales

The Group's cost of sales increased from approximately RMB877.3 million for the year ended 31 December 2018 to approximately RMB925.3 million for the year ended 31 December 2019, which accounted for approximately 17.4% of the Group's total revenue for the same period. The increase in the Group's cost of sales was due to the increased sales volume for the year ended 31 December 2019, as compared to the corresponding period in 2018.

Gross Profit

For the year ended 31 December 2019, the Group's gross profit increased to approximately RMB4,392.7 million, as compared to approximately RMB3,706.6 million for the year ended 31 December 2018, representing an increase of approximately RMB686.1 million, or approximately 18.5%. The increase in the Group's gross profit was broadly in line with its revenue growth during the period. The Group's gross profit margin increased to approximately 82.6% for the year ended 31 December 2019 from approximately 80.9% for the corresponding period in 2018. The increase was mainly attributable to the sales growth of TPIAO, which had a higher gross profit margin than the Group's other businesses.

Other Income and Gains

The Group's other income and gains mainly comprised government grants, interest income, foreign exchange gain and other miscellaneous income. For the year ended 31 December 2019, the Group's other income and gains decreased to approximately RMB218.1 million, as compared to approximately RMB429.8 million for the year ended 31 December 2018, representing a decrease of approximately RMB211.7 million, or approximately 49.3%. The decrease was mainly attributable to the decrease in foreign exchange gains as well as non-recurring fair value gain upon reclassification of an equity investment in Ascentage Pharma Group International ("**Ascentage Cayman**").

Selling and Distribution Expenses

The Group's selling and distribution expenses primarily consisted of marketing and promotion expenses, staff costs, transportation expenses, consulting fees and other miscellaneous selling and distribution expenses. For the year ended 31 December 2019, the Group's selling and distribution expenses amounted to approximately RMB1,950.7 million, as compared to approximately RMB1,691.2 million for the year ended 31 December 2018, representing an increase of approximately RMB259.6 million, or approximately 15.3%. The increase was mainly attributable to the increased promotional activities. In terms of the percentage of revenue, the Group's selling and distribution expenses represented approximately 36.7% for the year ended 31 December 2019 as compared to approximately 36.9% for the year ended 31 December 2018.

Administrative Expenses

The Group's administrative expenses consisted of staff costs, professional fees, depreciation and amortization, property expenses, share-based compensation, and other miscellaneous administrative expenses. For the year ended 31 December 2019, the Group's administrative expenses amounted to approximately RMB676.0 million, as compared to approximately RMB316.8 million for the year ended 31 December 2018, representing an increase of approximately RMB359.3 million, or approximately 113.4%. The increase was mainly due to the one-off expenses of RMB346.1 million incurred in 2019 in relation to the option expenses associated with the options granted on 2 February 2017 and the expenses associated with the awarded shares under the ESOP by Sunshine Guojian. Had the effects of the one-off expenses been excluded, the administrative expenses for the year ended 31 December 2019 would have been approximately RMB329.9 million, as compared to approximately RMB299.3 million for the year ended 31 December 2018, representing an increase of approximately RMB30.6 million, or approximately 10.2%. The administrative expenses (excluding the aforementioned one-off expenses) as a percentage of revenue was approximately 6.2% for the year ended 31 December 2019, as compared to approximately 6.5% for the corresponding period in 2018.

R&D costs

The Group's R&D costs primarily consisted of staff costs, materials consumption, clinical trials costs, R&D expenses for new products at early stage, depreciation and amortisation, and other miscellaneous R&D expenses. For the year ended 31 December 2019, the Group's R&D costs amounted to approximately RMB526.6 million, as compared to approximately RMB362.7 million for the year ended 31 December 2018, representing an increase of approximately RMB163.9 million, or approximately 45.2%. The increase was mainly due to the increased investments in R&D activities and projects, which was in turn driven by the accelerated progress of the Group's product pipeline. The R&D costs as a percentage of revenue was approximately 9.9% for the year ended 31 December 2019, as compared to approximately 7.9% for the corresponding period in 2018.

Other Expenses

The Group's other expenses primarily consisted of donation expenses, provision for impairment of financial assets, and other miscellaneous expenses and losses. For the year ended 31 December 2019, the Group's other expenses amounted to approximately RMB114.0 million, as compared to approximately RMB123.7 million for the year ended 31 December 2018, representing a decrease of approximately RMB9.6 million, or approximately 7.8%. The decrease was mainly due to the decreased provision for impairment of financial assets, which was partially offset by the increased donation expenses in relation to the Group's products.

Finance Costs

For the year ended 31 December 2019, the Group's finance costs amounted to approximately RMB109.5 million, as compared to approximately RMB138.4 million for the year ended 31 December 2018, representing a decrease of approximately RMB28.9 million, or approximately 20.9%. The decrease was mainly due to the decrease in interest expenses with the repayment of bank borrowings. Excluding the non-cash interest expenses of the Euro-denominated zero-coupon convertible bonds (the "**Bonds**"), the finance cost decreased from approximately RMB65.6 million for the year ended 31 December 2018 to approximately RMB37.0 million for the year ended 31 December 2019, representing a decrease of approximately RMB28.7 million, or approximately 43.7%.

Income Tax Expense

For the year ended 31 December 2019, the Group's income tax expense amounted to approximately RMB242.8 million, as compared to approximately RMB218.3 million for the year ended 31 December 2018, representing an increase of approximately RMB24.5 million, or approximately 11.2%. The increase was mainly due to the increase of taxable income during the year ended 31 December 2019, as compared to the corresponding period in 2018. The effective tax rates for the year ended 31 December 2019 and the corresponding period in 2018 were 19.9% and 14.6%, respectively. The increase in the effective tax rate was mainly attributable to the increase in offshore losses for the year ended 31 December 2019, as compared to the year ended 31 December 2018.

EBITDA and Net Profit Attributable to Owners of the Parent

The EBITDA for the year ended 31 December 2019 decreased by approximately RMB306.4 million or approximately 16.2% to approximately RMB1,586.4 million, as compared to approximately RMB1,892.8 million for the year ended 31 December 2018. The normalized EBITDA is defined as the EBITDA for the period excluding, as applicable: (a) the interest expense incurred in relation to the Bonds in an aggregate principal amount of EUR300,000,000 due 2022; (b) the option expenses associated with the options granted on 2 February 2017; (c) the expenses associated with the awarded shares under the ESOP by Sunshine Guojian; and (d) the fair value gain upon reclassification of an equity investment in Ascentage Cayman. The Group's normalized EBITDA for the year ended 31 December 2019 increased by approximately RMB223.2 million or approximately 12.5% to approximately RMB2,005.0 million, as compared to approximately RMB1,781.8 million for the year ended 31 December 2018.

The net profit attributable to owners of the parent for the year ended 31 December 2019 was approximately RMB973.7 million, as compared to approximately RMB1,277.2 million for the year ended 31 December 2018, representing a decrease of approximately RMB303.5 million, or approximately 23.8%. The normalized net profit attributable to owners of the parent is defined as the profit attributable to owners of the parent for the period excluding, as applicable: (a) the interest expense incurred in relation to the Bonds in an aggregate principal amount of EUR300,000,000 due 2022; (b) the option expenses associated with options granted on 2 February 2017; (c) the expenses associated with the awarded shares under the ESOP by Sunshine Guojian; and (d) the fair value gain upon reclassification of an equity investment in Ascentage Cayman. The Group's normalized net profit attributable to owners of the parent for the year ended 31 December 2019 was approximately RMB1,392.3 million, as compared to approximately RMB1,166.1 million for the year ended 31 December 2018, representing an increase of approximately RMB226.2 million, or approximately 19.4%.

Earnings Per Share

The basic earnings per share for the year ended 31 December 2019 was approximately RMB0.38 as compared to approximately RMB0.50 for the year ended 31 December 2018, representing a decrease of approximately 24.0%. The calculation of the normalized basic earnings per share amount is based on the normalized net profit attributable to owners of the parent and the weighted average ordinary shares of the Company in issue during the Reporting Period, as adjusted to reflect the issue of ordinary shares during the Reporting Period. The normalized basic earnings per share for the year ended 31 December 2019 was approximately RMB0.55, as compared to approximately RMB0.46 for the year ended 31 December 2018, representing an increase of approximately 19.6%.

Financial Assets Measured at Fair Value

As at 31 December 2019, financial assets measured at fair value primarily comprised the investment in treasury or cash management products issued by certain banks, the investment in listed companies and the investments in private equity funds which focus on the healthcare industry.

LIQUIDITY, FINANCIAL AND CAPITAL RESOURCES

The Group's liquidity remained strong. For the year ended 31 December 2019, the Group's operating activities generated a net cash inflow of approximately RMB1,887.4 million, as compared to approximately RMB1,150.3 million for the year ended 31 December 2018, representing an increase of RMB737.1 million or approximately 64.1%. The increase was mainly attributable to the increased cash inflow from the sale of goods. As at 31 December 2019, the Group's cash and cash equivalents and pledged deposits were approximately RMB2,104.9 million.

Net Current Assets

As at 31 December 2019, the Group had net current assets of approximately RMB2,984.5 million, as compared to net current assets of approximately RMB2,782.0 million as at 31 December 2018. The current ratio of the Group increased from approximately 2.7 as at 31 December 2018 to approximately 2.9 as at 31 December 2019.

Funding and Treasury Policies, Borrowing and Pledge of Assets

The Group's finance department is responsible for the funding and treasury policies with regard to the overall business operation of the Group. The Company 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. The Group continues to seek improving the return of the equity and assets while maintaining a prudent funding and treasury policy.

As at 31 December 2019, the Group had an aggregate interest-bearing bank borrowings of approximately RMB497.2 million, as compared to approximately RMB995.4 million as at 31 December 2018. The decrease in bank borrowings primarily reflected the repayment of loans of RMB1,740.5 million, which was partially offset by the additional short-term bank loans of RMB1,230.0 million obtained in 2019. The short-term bank borrowings were obtained to replace long-term bank borrowings so as to lower interest expenses. Among the short-term deposits, none was pledged to secure bank loans as at 31 December 2019.

As at 31 December 2019, the Group had convertible bonds outstanding of approximately RMB2,304.8 million (calculated at the exchange rate EUR1=RMB7.8155, the prevailing market rate at 31 December 2019).

Gearing Ratio

The gearing ratio of the Group, which was calculated by dividing the total borrowings (excluding the Bonds) by the total equity, decreased to approximately 4.8% as at 31 December 2019 from approximately 11.2% as at 31 December 2018. The decrease was primarily due to repayment of loans.

Contingent Liabilities

As at 31 December 2019, the Group had no significant contingent liabilities.

Contractual Obligations

The Group's capital commitment amounted to approximately RMB1,822.0 million as at 31 December 2019, as compared to approximately RMB952.8 million as at 31 December 2018. The increase was due to an increase in capital expenditures for plant and machinery, which was driven by the expansion of the Group's production capabilities.

Foreign Exchange and Exchange Rate Risk

The Group mainly operates in Mainland China, with all material aspects of its regular business conducted in Renminbi other than: (1) the operations of Sirton; and (2) the Group's exports, which amounted to approximately RMB68.0 million, or approximately 1.3% of the Group's revenue, for the year ended 31 December 2019. Except for the operations of Sirton, the Group's exports, potential international deal-making expenditures (such as related to international licensing and acquisitions), foreign currency denominated bank deposits and the Euro-denominated Bonds, the Group believes that it does not have

any other material direct exposure to foreign exchange fluctuations. As at 31 December 2019, the Group's foreign currency denominated bank deposits primarily comprised: (1) approximately USD44.6 million (equivalent to approximately RMB311.0 million); (2) approximately HKD95.3 million (equivalent to approximately RMB85.4 million); and (3) approximately EUR15.8 million (equivalent to approximately RMB123.6 million). Other than discussed in this paragraph, the Group expects that the fluctuation of the Renminbi exchange rate will not have a material adverse effect on the operations of the Group in the foreseeable future.

Significant Investments Held

During the year ended 31 December 2019, the Group did not have any significant investments.

Future Plans for Material Investments or Capital Assets

The Group estimates that the total capital expenditure of the Group for the next three years will be in the range of RMB2,000 million to RMB2,500 million. These expected capital expenditures will primarily be incurred for the maintenance of the Group's existing facilities and the expansion of the Group's production capabilities. The Group expects to finance its capital expenditures through a combination of internally generated funds and bank borrowings.

EMPLOYEES AND EMOLUMENTS POLICY

As at 31 December 2019, the Group employed a total of 5,404 employees, as compared to a total of 5,047 employees as at 31 December 2018. The staff costs, including Directors' emoluments but excluding any contributions to pension scheme, were approximately RMB1,436.6 million for the year ended 31 December 2019, as compared to approximately RMB1,000.7 million for the corresponding period in 2018. The Group generally formulated its employees' remuneration package to include salary, bonus and allowance elements. The compensation programs were designed to remunerate the employees based on their performance, measured against specified objective criteria. The Group also provided the employees with welfare benefits in accordance with applicable regulations and the Group's internal policies. The Company has adopted a share option scheme and a share award scheme and other incentive initiatives such as cash awards for the purpose of providing incentives and rewards to eligible participants who contribute to the success of the Group's operations.

PRINCIPAL RISKS AND UNCERTAINTIES

The Group operates in a highly competitive environment, and it may not be able to compete effectively against current and future competitors.

The Group operates in a highly competitive environment. The Group may not be able to compete effectively against current and future competitors. The Group's products compete with other products or treatments for diseases for which the Group's products may be indicated. The biotechnology and pharmaceutical industries are characterized by rapid changes in technology, constant enhancement of industrial know-how and frequent emergence of new products. Many of the Group's competitors, including foreign pharmaceutical companies and large state-owned pharmaceutical companies, may have substantially greater clinical, research, regulatory, manufacturing, marketing, financial and human resources than the Group has.

If the Group's products are excluded or removed from the national medical insurance catalogue or provincial medical insurance catalogues, the Group's sales, profitability and business prospects could be adversely affected.

As at the date of this annual report, the Group's core products, TPIAO, Yisaipu, EPIAO and SEPO, as well as certain other products including Humulin, Byetta and Qiming Keli, are listed in the 2019 NRDL.

The selection of pharmaceutical products for listing in the national medical insurance catalogue or provincial medical insurance catalogues is based on a variety of factors, including clinical needs, use frequency, efficacy and price, many of which are outside of the Group's control. Moreover, the relevant PRC government authorities may also, from time to time, review and revise the scope of reimbursement for the products that are already listed in the national medical insurance catalogue or provincial medical insurance catalogues. There can be no assurance that any of the Group's products currently listed in the national medical insurance catalogue or provincial medical insurance catalogues will remain listed, or that changes in the scope of reimbursement will not negatively affect the Group's products. If any of the Group's products are removed from the national medical insurance catalogue or provincial medical insurance catalogues, or if the scope of reimbursement is reduced, demand for the Group's products may decrease and the Group's revenue and profitability could be adversely affected. Furthermore, if the Group is unable to list new products in the national medical insurance catalogue or provincial medical insurance catalogues, or add new indications to the Group's currently listed products, the Group's business prospects could be adversely affected.

If the Group is unable to win bids to sell the Group's products to PRC hospitals in the provincial tendering process, it may lose market share and the Group's revenue and profitability could be adversely affected.

In each province where the Group markets its products, it is required to participate in a government-sponsored competitive bidding process every year or every few years. During the provincial tendering process, the Group and its competitors submit pricing and other product information to local government agencies for selection, which usually is based on the bid price, clinical effectiveness and quality of each product and the reputation of the bidder. For each product category, the local government agencies will permit a limited number of products for sale in the relevant province or local district.

The Group may fail to win bids in a provincial tendering process due to various factors, including reduced demand for the relevant product, uncompetitive bidding price or local protectionism. The Group may also win bids at low prices that will limit the Group's profit margins. There can be no assurance that the Group's bids will enable it to win in the tendering process and maintain the Group's market share without compromising the Group's profitability. In addition, the Group may lose in the tendering process because the relevant product is perceived to be less clinically effective than competing products or the Group's services or other aspects of the Group's operations are perceived to be less competitive.

If the Group's employees, distributors or third-party promoters engage in corrupt practices or inappropriate promotion of the Group's products, the Group's reputation could be harmed and the Group could be exposed to regulatory investigations, cost and liabilities.

The Group does not fully control the interactions between its employees, distributors and third-party promoters with hospitals, medical institutions and doctors, and they may try to increase sales volumes of the Group's products through means that constitute violations of the PRC anti-corruption, anti-bribery and other related laws. If the Group's employees, distributors or third-party promoters engage in corruption or other improper conduct that results in violation of applicable anti-corruption, anti-bribery laws in the PRC or other jurisdictions, the Group's reputation could be harmed and the Group could be exposed to regulatory investigations and penalties, including being excluded from procurement by public hospitals and other public medical institutions in the PRC.

If the Group fails to develop and commercialize new pharmaceutical products, its business prospects could be adversely affected.

The Group's long-term competitiveness depends on its ability to enhance its existing products and to develop and commercialize new biotechnology and other pharmaceutical products through its research and development activities. The development process of pharmaceutical products in general, and biopharmaceuticals in particular, is time-consuming and costly, and there can be no assurance that the Group's research and development activities will enable it to successfully develop new pharmaceutical products. Since relatively few research and development programs in the pharmaceutical industry produce a commercially viable product, a product candidate that appears promising in the early phases of development may fail to reach the market for a number of reasons, such as:

- the failure to demonstrate safety and efficacy in preclinical and clinical trials;
- the failure to obtain approvals for its intended indications from relevant regulatory bodies, such as the NMPA;
- the Group's inability to manufacture and commercialize sufficient quantities of the product economically; and
- proprietary rights, such as patent rights, held by others related to the Group's product candidate and their refusal to sell or license such rights to the Group on reasonable terms, or at all.

New pharmaceutical products must be approved by the NMPA before they can be marketed and sold in China. The NMPA requires successful completion of clinical trials and demonstration of manufacturing capability before granting approval. Clinical trials are expensive and their results are uncertain. It often takes multiple years before a medicine can be ultimately approved by the NMPA. In addition, the NMPA and other regulatory authorities may apply new standards for safety, manufacturing, packaging, and distribution of future product candidates. Complying with such standards may be time-consuming and expensive and could result in delays in obtaining NMPA approval for the Group's product candidates, or possibly preclude the Group from obtaining NMPA approval. Furthermore, the Group's future products may not be effective or may prove to have undesirable or unintended side effects, toxicities or other characteristics that may preclude the Group from obtaining regulatory approval or prevent or limit their commercial use. Even if the Group do obtain regulatory approvals, the process may take longer than expected or desired, or such approvals may be subject to limitations on the indicated uses for which the Group may market the relevant product, therefore restricting its market size.

The Group has formed collaborative relationships with certain research institutes and companies to benefit from their expertise and resources in developing new and competitive products. However, there can be no assurance that the Group will be able to maintain such relationship or enter into new relationships. Any deterioration in the Group's existing relationships or failure to enter into new relationships with suitable research partners on commercially acceptable terms may have an adverse impact on the Group's ability to successfully develop new products, which in turn could adversely affect the Group's business, its results of operations and growth prospects.

The Group may pursue collaborations, licensing arrangements, partnerships, joint ventures, strategic alliances, acquisitions, or other strategic investments or arrangements, which may fail to produce anticipated benefits and adversely affect the Group's business.

The Group continually pursues opportunities for acquisitions of products, assets or technologies, collaboration, licensing, joint ventures, strategic alliances, or partnerships that the Group believes would be complementary to or promote its existing business. Proposing, negotiating, implementing and executing on these opportunities may be a lengthy and complex process. Other companies, including those with substantially greater financial, marketing, sales, technology, or other business resources, may compete with the Group for these opportunities or arrangements. The Group may not be able to identify or complete any such transactions or arrangements in a timely manner, on a cost-effective basis, on acceptable terms, or at all.

The Group has limited experience with respect to these business development activities. Management and integration of acquisition, licensing arrangement, collaboration, joint venture or other strategic arrangement may disrupt the Group's current operations, decrease the Group's profitability, result in significant expenses, or divert management resources that otherwise would be available for the Group's existing business. The Group may not realize the anticipated benefits of any such transaction or arrangement.

Furthermore, partners, collaborators or other parties to such transactions or arrangements may fail to fully perform their obligations or meet the Group's expectations or cooperate with the Group satisfactorily for various reasons, including risks or issues related to their business and operations. There may be conflicts or other collaboration failures and inefficiencies between the Group and the other parties.

Such transactions or arrangements may also require actions, consents, approvals, waivers, participation or involvement of various degrees from third parties, such as regulators, government authorities, creditors, licensors or licensees, related individuals, suppliers, distributors, shareholders or other stakeholders or interested parties. The Group may not obtain such required or desired actions, consent, approval, waiver, participation or involvement on a timely basis, on acceptable terms, or at all.

Directors and Senior Management

DIRECTORS

Executive Directors

Dr. LOU Jing, aged 57, was appointed as a Director on 5 September 2006 and was re-designated as an executive Director on 27 November 2014. He was appointed as the chairman of the Board on 1 April 2012. Dr. Lou is also the chief executive officer and president of the Company. He is responsible for the strategic development and planning, overall operational management and major decision making of the Group. He is a co-founder of the Group and joined Shenyang Sunshine Pharmaceutical Company Limited ("**Shenyang Sunshine**") as a director of R&D in September 1995.

Dr. Lou also holds the following positions with other members of the Group:

1) director and chairman of the board of Collected Mind Limited (集思有限公司, "**Collected Mind**");

2) director of Hongkong Sansheng;

3) director of Excel Partner Holdings Limited (特隆控股有限公司, "**Excel Partner**");

4) director of Ample Harvest Investments Limited (溢豐投資有限公司, "**Ample Harvest**");

5) director, chief executive officer and president of Shenyang Sunshine and chairman of the board of Shenyang Sunshine;

6) director and general manager of Liaoning Sunshine Bio-Pharmaceutical Company Limited (遼寧三生醫藥有限公司, "**Liaoning Sunshine**");

7) director and chairman of the board of Taizhou Huan Sheng Investment Management Company Limited (泰州環晟投資管理有限公司, "**Taizhou Huan Sheng Investment**");

8) executive director of Shenzhen Baishitong Technology Development Company Limited (深圳市百士通科技開發有限公司, "**Shenzhen Baishitong**");

9) chairman of the board of Shenzhen Sciprogen Bio-pharmaceutical Co., Ltd. ("**Sciprogen**");

10) chairman of the board of Guangdong Sciprogen Bio-pharmaceutical Technology Co., Ltd. (廣東賽保爾生物醫藥技術有限公司, "**Guangdong Sciprogen**");

11) chairman of the board of Guangdong Sunshine Pharmaceutical Co., Ltd. (廣東三生製藥有限公司, "**Guangdong Sunshine**");

12) director of Gains Prestige Limited (澤威有限公司, "**Gains Prestige**");

13) director of Strategic International Group Limited ("**Strategic International**");

14) director and chairman of the board of Sunshine Guojian; and

15) director and chairman of the board of Shanghai Xingsheng Pharmaceutical Company Limited ("**Xing Sheng**").

Dr. Lou has been highly active in pharmaceutical research and has made substantial contribution to the Group's R&D of pharmaceutical products. Dr. Lou was the leading scientist and principal investigator in the Group's successful development of EPIAO and TPIAO. He co-invented a "preparation process for recombinant human thrombopoietin" and a "method for improving the stability of polypeptides in human bodies and its application" in 2000 and 2001, respectively. He has published in a number of academic journals on microbiology and medicinal biotechnology. His research has been recognized with various awards. In 2006, he was awarded the "First Prize of Shenyang Science and Technology Progress Award" (瀋陽市科學技術進步一等獎) for his research on recombinant human thrombopoietin. In 2007, he was awarded the "Third Prize of Liaoning Province Scientific and Technological Achievements" (遼寧省科技成果轉化三等獎) for his contribution to the industrialization of production of recombinant human thrombopoietin. In 2017, he was awarded "Liaoning Province Outstanding Entrepreneur" and "Friendship Award of Liaoning Province". Dr. Lou obtained a Medical Doctor degree (M.D.) in clinical medicine from Shanghai Second Military Medical University in July 1985. He conducted post-doctoral research at the National Institutes of Health of the United States after obtaining a Ph.D. degree in molecular and cell biology from Fordham University in the United States in February 1994. He also obtained an Executive Master of Business Administration from China Europe International Business School (中歐國際工商學院) in September 2008.

Ms. SU Dongmei, aged 50, was appointed as a Director on 11 June 2012 and was re-designated as an executive Director on 27 November 2014. Ms. Su is also the Company's senior vice president and the general manager of Shenyang Sunshine. She is responsible for strategic direction of the Group. Ms. Su joined Shenyang Sunshine as a scientist of the research and development department in January 1993, and served as a director of the R&D department from 1997 to 2006. She subsequently served as the chief technology officer responsible for R&D and manufacturing process engineering of Shenyang Sunshine from 2006 to 2008. Ms. Su was promoted to vice president of Shenyang Sunshine in April 2008. Ms. Su served as a director of Shenyang Sunshine from August 2007 to June 2013, and was re-appointed on 18 July 2016. She also served as a director of Hongkong Sansheng from November 2009 to November 2014.

Ms. Su also holds the following positions with other members of the Group:

(i) senior vice president and general manager of Shenyang Sunshine;

(ii) supervisor of Liaoning Sunshine;

(iii) director of Sciprogen;

(iv) director of Guangdong Sciprogen;

(v) director of Guangdong Sunshine; and

(vi) director of Strategic International.

Ms. Su obtained a Bachelor's degree in Biochemistry from Jilin University (吉林大學) in July 1992 and a Master's and a Doctorate degree in Microbiology and Pharmacology from Shenyang Pharmaceutical University (瀋陽藥科大學) in June 2001 and July 2010, respectively. She has published in a number of academic journals on microbiology and medicinal biotechnology.

Non-executive Directors

Mr. HUANG Bin, aged 59, was first appointed as a Director on 5 September 2006 and ceased to be a Director on 29 May 2013. Mr. Huang was re-appointed as an executive Director on 27 November 2014, and was re-designated as a non-executive Director on 20 June 2019. Mr. Huang joined Shenyang Sunshine in 1993 as a manager of the human resources department.

Mr. Huang also holds the following positions (in a non-executive capacity) with other members of the Group:

(i) director and vice president of Shenyang Sunshine; and

(ii) director and general manager of Taizhou Huan Sheng Investment.

Mr. Huang received a diploma in Engineering from Northeast University (東北大學) in July 1987. He attended a one-year training program in business management in Tsinghua University (清華大學) from April 2000 to April 2001.

Mr. TANG Ke, aged 40, was appointed as a non-executive Director on 10 February 2020. He has more than 15 years of work experience in the investment sector. Mr. Tang joined CITIC Private Equity Funds Management Co., Ltd (中信產業投資基金管理有限公司, "**CITIC PE**") in 2013 and had held various positions, including Vice President and Managing Director, before he became in charge of the investment department of the healthcare sector at CITIC PE. Mr. Tang has substantial experience in corporate investment, strategic planning, capital operation and corporate management. Mr. Tang served as an Associate and Executive Director at the investment banking division of Goldman Sachs Gao Hua from 2008 to 2011 and later served as an Investment Manager at the Principal Investment Department of Goldman Sachs Group from 2012 to 2013.

He was also a director in BeiGene, Ltd. (a listed company on NASDAQ at the time when he was a director which has been dually listed on NASDAQ and the Stock Exchange since 2018) from 2014 to 2017 and Biosensors International Group, Ltd. (a company formerly listed on Singapore Exchange Securities Trading Limited which was subsequently delisted in 2016) from 2016 to 2018. Mr. Tang also serves as a director of Bluesail Medical Co., Ltd.* (藍帆醫療股份有限公司) (a company listed on the Shenzhen Stock Exchange with stock code 002382) and Shanghai Hanyu Medical Technology Co., Ltd.* (上海捍宇醫療科技有限公司), and as the chairman of the board of directors of Spectrum Dynamics Medical Group Limited, JW ICU Medical LTD.* (威海吉威重症醫療製品有限公司), a subsidiary of Biosensors International Pte Ltd., Beijing EverLife Healthcare Hospital Management Company Limited* (北京長生眾康醫院管理有限公司) and Acotec Scientific Co. Ltd* (北京先瑞達醫療科技有限公司), respectively.

Mr. Tang obtained his Bachelor of Arts from Southeast University and his Master of Business Administration from the Kellogg School of Management of the Northwestern University.

* for identification purposes only

Independent Non-executive Directors

Mr. PU Tianruo, aged 52, was appointed as an independent non-executive Director on 23 May 2015, with such appointment taking effect on 1 June 2015. He is responsible for participating in decision-making and advising on issues relating to the Company's significant events and corporate governance. Previously, he served as an independent Director and the audit committee chair of the Company from 1 September 2012 to 29 May 2013.

Mr. Pu has substantial experience in accounting and finance. He has served as an independent non-executive director of several companies, including Autohome Inc. (a company listed on the NYSE with symbol ATHM) since December 2016, and Renren Inc. (a company listed on the NYSE with symbol RENN) since December 2016, Kaixin Auto (a company listed on the NASDAQ with symbol KXIN), One Connect Financial Technology (a company listed on the NYSE with symbol OCFT) since December 2019, and Luckin Coffee (a company listed on the NASDAQ with symbol LK). Mr. Pu was previously the independent non-executive director of JMU Limited (a company listed on the NASDAQ with symbol JMU) and the chief financial officer of Zhaopin Ltd. (a company listed on the NYSE with symbol ZPIN). Mr. Pu obtained a Bachelor's degree in English from China Foreign Affairs University (外交學院) in July 1991, a Master's degree in Accounting from the University of Illinois, College of Business Administration in May 1996 and a Master of Business Administration degree from Northwestern University Kellogg School of Management in June 2000.

Mr. David Ross PARKINSON, aged 70, was appointed as an independent non-executive Director on 23 May 2015, with such appointment taking effect on 1 June 2015. He is responsible for participating in decision-making and advising on issues relating to the Company's significant events and corporate governance.

Mr. Parkinson has served as a director of ESSA Pharma Inc. (a company listed on the NASDAQ with symbol EPIX) since June 2015, and as its president and chief executive officer since January 2016. He also serves as a director of Tocagen, Inc. and a director of CTI BioPharma, Inc. He served as a director of Cerulean Pharma, Inc. (a company listed on the NASDAQ with symbol CERU) from October 2014 to July 2017, and of Threshold Pharmaceuticals, Inc. (a company listed on the NASDAQ with symbol THLD) from May 2010 to July 2017. He served as a venture advisor at New Enterprise Associates, a venture capital firm from 2007 to 2012. Mr. Parkinson served as the president and chief executive officer at Nodality, Inc., a biotechnology company focused on personalized medicine. Previously, he served as senior vice president and head of Oncology R&D at Biogen Idec, as vice president and head of the Oncology Therapeutic Area at Amgen Inc. (a company listed on the NASDAQ with symbol AMGN), and as vice president and head of global clinical oncology development at Novartis. Mr. Parkinson has led teams successfully developing a number of cancer drugs, including Gleevec, Femara, Zometa, and Vectibix. He served as a director of the American Association for Cancer Research (AACR) from 2006 to 2009, and Chairman of AACR's Finance Committee from 2001 to 2016. He also served on the National Cancer Policy Forum of the Institute of Medicine from 2005 to 2011. Mr. Parkinson has received multiple awards and honors, including the top innovator award from the Multiple Myeloma Research Foundation in 2012 and the Wiley Medal from the U.S. Food and Drug Administration in 1997. He delivered the 12th Andrew H. Weinberg Memorial Lecture at the Harvard University School of Medicine in 2008. Mr. Parkinson obtained a Doctor of Medicine degree (M.D.) at the University of Toronto Faculty of Medicine in 1974.

Dr. WONG Lap Yan, aged 49, was appointed as an independent non-executive Director on 8 October 2019. He is a Chartered Biologist and Fellow of the Royal Society of Biology and a Chartered Scientist of the Science Council of the United Kingdom. Dr. Wong has over 20 years of work experience with various highly respected healthcare and biopharmaceutical companies, genetic services providers and academia in biology, including conducting antibody cancer research in translational oncology at Genentech Inc. (formerly listed on NYSE: DNA and now a subsidiary of Roche), research in pharmacokinetics and drug metabolism at Amgen Inc. (listed on NASDAQ: AMGN) and pharmaceutical research at SRI International (a scientific research institute established by the trustees of Stanford University) in the United States. His research work has contributed to the discovery, research and development of cancer target therapy drugs, including Bevacizumab (Avastin) and Vemurafenib (Zelboraf), which are medication used to treat different types of cancers and specific eye diseases. He has published numerous medical research articles and abstracts in journals on different topics, including cancer and nutritional science, which have been cited extensively by peer scientists and researchers.

Dr. Wong has also served as a Postdoctoral Fellow at the Faculty of Medicine at The University of Hong Kong and as a chief executive officer of a biotechnology company in Hong Kong. Dr. Wong is now the Chief Scientific Officer and Principal Scientist of Alom Intelligence Limited that offers deep learning technology and analytical solutions relating to healthcare and financial data, and a director and founder of Cannan Biotech Limited that offers personal genetic technology consultancy services.

Dr. Wong obtained his Bachelor of Science in Human Biology from the University of Toronto, Canada and Doctor of Philosophy in Biological Sciences from The University of Hong Kong.

SENIOR MANAGEMENT

The Company senior management comprises the executive Directors and the following persons:

Dr. ZHU Zhenping (朱禎平), aged 55, had been the president of R&D and chief scientific officer of the Company from January 2017 to September 2019. Due to the proposed listing of Sunshine Guojian, Dr. Zhu was appointed as the president of R&D in Sunshine Guojian in June 2019, and resigned from his positions as the president of R&D and chief scientific officer of the Company in September 2019. Prior to joining the Company in January 2017, he served as the executive vice president of Global Biopharmaceuticals at Kadmon Corporation, and the president of Kadmon China from 2010 to 2016. Prior to joining Kadmon, Dr. Zhu was the vice president and the global head, Protein Sciences and Design, at Novartis, and was responsible for the discovery, design and selection of novel biologics medicines that address various human diseases from 2009 to 2010. Prior to Novartis, Dr. Zhu worked for over 12 years at ImClone Systems as Vice President of Antibody Technology and Immunology, and had led multiple teams responsible for the successful discovery and early development of several U.S. Food and Drug Administration-approved novel antibodies for various oncology indications, including cetuximab (Erbitux®), ramucirumab (Cyramza®), necitumumab (Portrazza®), and olaratumab (Latruvo®). Dr. Zhu is the inventor of both ramucirumab and necitumumab, and one of the major contributors to cetuximab and olaratumab. He earned his medical degree from Jiangxi Medical College in 1985. He received his Master of Science in Pharmacology from the Institute of Hematology, Chinese Academy of Medical Sciences (CAMS) and Peking Union Medical College (PUMC) in 1988, and his Ph.D. in Immunology and Pathology from Dalhousie University in 1993. Dr. Zhu performed his postdoctoral work in antibody

and protein engineering at Genentech Inc. from 1993 to 1996. From 1996 to 2006, Dr. Zhu held an adjunct professorship at the Institute of Hematology, CAMS & PUMC. Dr. Zhu has published over 190 peer-reviewed scientific papers, and is listed as the inventor or co-inventor of more than 50 U.S. and international patents and patent applications.

Mr. XIAO Weihong (肖衛紅), aged 51, had been the chief operating officer of the Company from March 2016 to September 2019. Due to the proposed listing of Sunshine Guojian, Mr. Xiao was appointed as the general manager of Sunshine Guojian in June 2019, and resigned from his position as the chief operating officer of the Company in September 2019. Prior to joining the Company in March 2016, Mr. Xiao served as the chief executive officer of Hisun-Pfizer Pharmaceutical Co. Ltd. (海正輝瑞製藥有限公司), from 2012 to 2015, where he oversaw the strategy and operations. From 2007 to 2012, Mr. Xiao served as a general manager of commercial and diversified business unit of Pfizer China. Mr. Xiao worked in Pfizer China's human resources department from 1999 to 2007 and served as the human resources director of Pfizer China from 2004 to 2007. Mr. Xiao graduated from the University of International Business & Economics with a Bachelor of Economics degree in 1991. He is currently a vice president of the Chinese Pharmaceutical Enterprises Association.

Mr. CHEN Yongfu (陳永富), aged 63, is a vice president of the Company, and has been in charge of administration and construction of the Group since 2018. Previously, he was also responsible for compliance and internal control. Due to the proposed listing of Sunshine Guojian, Mr. Chen was appointed as a non-executive director of Sunshine Guojian in June 2019. Mr. Chen has also served as a director of Hongkong Sansheng since November 2014. Mr. Chen had served as a financial manager of Shenyang Sunshine from March 2003 to November 2010. Mr. Chen obtained a Bachelor's degree in Engineering and Accounting from Liaoning University (遼寧大學) in July 1983.

Ms. LIU Yanli (劉彥麗), aged 39, had been the joint company secretary of the Company from April 2016 to October 2019, and was responsible for overseeing capital market, corporate governance, legal and public relation matters of the Group. Due to the proposed listing of Sunshine Guojian, Ms. Liu was appointed as the vice general manager and secretary to the board of directors of Sunshine Guojian in June 2019, and resigned from her position as the joint company secretary of the Company in September 2019 (with effect from October 2019). Ms. Liu has served as a director of Hongkong Sansheng since November 2014, and as the supervisor of Sciprogen since December 2014. She also served as the supervisor of Shenzhen Baishitong from December 2014 to September 2019, and as the supervisor of Guangdong Sciprogen from December 2014 to August 2019. She served as a director of Sirton from January 2015 to November 2018. Ms. Liu joined Shenyang Sunshine as an international drug registration representative in January 2007. Ms. Liu served as an assistant to the chief executive officer and a project manager of foreign drug registration of Shenyang Sunshine from 2008 to 2011. Ms. Liu was responsible for various roles in the Hong Kong initial public offering of the Company. Ms. Liu obtained a Bachelor's degree in Biochemistry and Master's degree in Chemistry with Entrepreneurship from the University of Nottingham in July 2004 and December 2006, respectively.

Mr. XU Yong (徐勇), aged 55, was appointed as a general manager and director of Sciprogen in 2015. He is also a director of Guangdong Sciprogen, Guangdong Sunshine and Gains Prestige. From March 2006 to December 2012, he served as a deputy general manager of Liaoning Nuokang Pharmaceutical Limited (遼寧諾康醫藥股份有限公司). Before that, Mr. Xu served as the deputy general manager of Beijing Zhongguan Venture Science and Technology Co., Ltd. (北京中關創業科技發展有限公司) from January 2002 to March 2006. From June 1995 to December 2001, he worked first as a deputy director and then as a director in the second general department of Hebei Provincial Government General Office. (河北省政府辦公廳綜合二處). Mr. Xu obtained a Bachelor's degree in Precision Machinery from Zhejiang University (浙江大學) in August 1988.

Mr. MA Xin (馬新), aged 53, is a vice president of the Company and Shenyang Sunshine. He is responsible for overseeing the human resources administration of the Group. Mr. Ma served as a director of Xing Sheng from April 2016 to April 2020, and as a director of Sunshine Guojian from April 2016 to August 2018. Before joining the Company in 2016, Mr. Ma worked in Hisun-Pfizer Pharmaceutical Co., Ltd. (海正輝瑞製藥有限公司) from November 2012 to December 2015, first as a senior director of the human resources department, and then as the vice president of the human resources department. From June 2007 to October 2009, he worked as a national training and sales effectiveness manager in Pfizer Investment Co., Ltd. (輝瑞投資有限公司), and served as an associated director of training from October 2009 to October 2012. From 2005 to 2007, Mr. Ma served as a national sales training manager (Oncology business unit) of Beijing Novartis Pharma Co., Ltd. (北京諾華製藥有限公司). Mr. Ma worked in GlaxoSmithKline (China) Investment Co., Ltd. (葛蘭素史克投資有限公司) as a sales training manager (Pharma, North China) from December 2001 to July 2005. Mr. Ma obtained a Bachelor of Science in Pharmacy from Tianjin Second Medical College (天津第二醫學院) in 1989.

Dr. ZHANG James Ji (張繼), aged 59, is a vice president of the Company. Dr. Zhang was appointed as a non-executive director of Sunshine Guojian in June 2019. He had been general manager of Sunshine Guojian from November 2016 to November 2018. Prior to joining Sunshine Guojian in November 2016, Dr. Zhang worked in various senior leadership roles with China Yuanda Group (中國遠大集團, "**Yuanda**") from 2008 to 2016, including as a vice president of Yuanda, the head of Yuanda Wuhan Pharmaceutical Research Institute, the chief science officer and an executive director on the board of directors of Huadong Pharmaceutical Company Limited (華東醫藥股份有限公司) (a company listed on the Shenzhen Stock Exchange with stock code 000963), and an executive director on the board of directors of China Grand Pharmaceutical and Healthcare Holdings Limited (a company listed on the Stock Exchange with stock code 00512). From 1993 to 2008, Dr. Zhang worked in Schering-Plough Pharmaceutical Research Institute (which is now part of Merck) as a senior scientist in the inflammation, infectious disease, and allergy and immunology areas. Dr. Zhang was selected as a member of the "Thousand Talents Program." He published many articles in leading scientific journals and is the co-inventor of a U.S. patent. Dr. Zhang received a Bachelor's degree in Microbiology in 1982, and a Master's degree in Virology in 1985, both from Wuhan University (武漢大學); and received a Ph.D. in Pharmacology and Molecular Biology from Chicago Medical School in 1992.

Report of Directors

The Directors are pleased to present their report together with the audited consolidated financial statements of the Group for the year ended 31 December 2019.

CORPORATE INFORMATION

The Company was incorporated in the Cayman Islands on 9 August 2006 as an exempted company with limited liability under the laws of the Cayman Islands. The Company's ordinary shares, par value of USD0.00001 each (the "**Shares**") were listed on the Main Board of the Stock Exchange on 11 June 2015 (the "**Listing Date**").

PRINCIPAL ACTIVITIES

The principal activity of the Company is investment holding and the Group is principally engaged in the development, production, marketing and sale of biopharmaceutical products in PRC. Analysis of the principal activities of the Group during the year ended 31 December 2019 is set out in the note 1 to the financial statements.

RESULTS

The results of the Group for the year ended 31 December 2019 are set out in the consolidated statement of profit or loss on page 83 of this annual report.

FINAL DIVIDEND

The Board did not recommend the payment of a final dividend for the year ended 31 December 2019 (2018: nil).

BUSINESS REVIEW

A review of the business of the Group, a discussion on the Group's future prospects and the principal risks and uncertainties and an analysis of the Group's performance during the year ended 31 December 2019 using financial key performance indicators are provided in the section headed "Management Discussion and Analysis" on pages 8 to 30. In addition, discussions on the Group's relationships with its key stakeholders and compliance with relevant laws and regulations which have a significant impact on the Group are located respectively in the paragraph headed "Relationship with Stakeholders" and the paragraph headed "Compliance with Laws and Regulations" on pages 55 to 56 of this annual report.

FINANCIAL SUMMARY

A summary of the Group's results, assets and liabilities for the last five financial years, as extracted from the audited financial statements and reclassified as appropriate, are set out on page 5 of this annual report. This summary does not form part of the audited consolidated financial statements.

MAJOR CUSTOMERS AND SUPPLIERS

Major Customers

For the year ended 31 December 2019, the Group's sales to its five largest customers accounted for 17.1% (2018: 18.1%) of the Group's total revenue and the Group's single largest customer accounted for 5.3% (2018: 5.7%) of the Group's total revenue.

Major Suppliers

For the year ended 31 December 2019, the Group's five largest suppliers accounted for 37.6% (2018: 38.7%) of the Group's total purchases and the Group's single largest supplier accounted for 14.2% (2018: 9.9%) of the Group's total purchases.

During the year ended 31 December 2019, none of the Directors or their close associates or the shareholders (which, to the best 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.

PROPERTY, PLANT AND EQUIPMENT

Details of movements in the property, plant and equipment of the Company and the Group during the year ended 31 December 2019 are set out in note 14 to the financial statements in this annual report.

SHARE CAPITAL

Details of movements in the share capital of the Company during the year ended 31 December 2019 are set out in note 34 to the financial statements in this annual report.

PRE-EMPTIVE RIGHTS

There are no provisions for pre-emptive rights under the Company's articles of association (the "**Articles of Association**") and there are no statutory pre-emptive rights under the laws of the Cayman Islands, being the jurisdiction in which the Company was established, which would oblige the Company to offer new shares on a pro-rata basis to existing shareholders.

EQUITY-LINKED AGREEMENTS

Share Option Scheme

Details of the share option scheme adopted by the Company in 2015 are set out in the section headed "POST-IPO SHARE OPTION SCHEME" in this Report of Directors.

Citic Options

On 4 March 2016, the Company, CITIC Hong Kong (Holdings) Limited (中信(香港集團)有限公司, "**CITIC Holdings**") and CITIC Pacific Limited (中信泰富有限公司, "**CITIC Pacific**") entered into an option deed (the "**Option Deed**"), pursuant to which, the Company agreed to issue to CITIC Pacific options carrying rights to subscribe for up to a total of 125,765,500 Shares of the Company at an exercise price of HKD9.10 per ordinary share, subject to certain exercise conditions (the "**CITIC Options**"). For details of the CITIC Options, please refer to the announcements of the Company dated 4 March 2016 and the circular of the Company dated 25 April 2016. Pursuant to the terms of the Option Deed, the CITIC Options shall expire within 36 months of the date of the signing of the Option Deed. Accordingly, the CITIC Options had expired on 4 March 2019. As at the date of expiry, no CITIC Options had been exercised pursuant to the Option Deed.

Except as disclosed above, the Company has not entered into any equity-linked agreements in 2019, nor did there subsist any equity-linked agreement entered into by the Company as at 31 December 2019.

RESERVES

Details of movements in the reserves of the Company and the Group during the year ended 31 December 2019 are set out on page 87 in the consolidated statement of changes in equity in this annual report.

DISTRIBUTABLE RESERVES

As at 31 December 2019, the Company's reserves available for distribution, calculated in accordance with the provisions of the Companies Laws of Cayman Islands, amounted to approximately RMB4,643.7 million (as at 31 December 2018: RMB4,689.1 million).

BANK LOANS AND OTHER BORROWINGS

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

DIRECTORS

The Directors of the Company during the year ended 31 December 2019 and up to the date of this annual report are:

Executive Directors:

Dr. LOU Jing *(Chairman & Chief Executive Officer)*	(appointed on 5 September 2006)
Ms. SU Dongmei	(appointed on 11 June 2012)
Mr. TAN Bo	(appointed on 29 May 2013, and resigned on 2 December 2019)

Non-executive Directors:

Mr. HUANG Bin	(appointed on 27 November 2014, and re-designated from executive Director on 20 June 2019)
Mr. TANG Ke	(appointed on 10 February 2020)
Mr. WANG Steven Dasong	(appointed on 30 June 2017, and resigned on 8 October 2019)
Mr. LIU Dong	(appointed on 27 November 2014, and resigned on 10 February 2020)

Independent Non-executive Directors:

Mr. PU Tianruo	(appointment effective on 1 June 2015)
Mr. David Ross PARKINSON	(appointment effective on 1 June 2015)
Dr. WONG Lap Yan	(appointed on 8 October 2019)
Mr. MA Jun	(appointment effective on 1 June 2015, and resigned on 20 June 2019)
Mr. WANG Rui	(appointed on 20 June 2019, and resigned on 8 October 2019)

In accordance with article 84(1) of the Articles of Association, one-third of the Directors for the time being (or if their number is not a multiple of three, the number nearest to but not less than one-third) will retire from office by rotation and will be eligible for re-election and re-appointment at every annual general meeting ("**AGM**"), provided that every Director shall be subject to retirement by rotation at least once every three years. In accordance with article 83(3) of the Articles of Association, any Director appointed by the Board either to fill a casual vacancy or as an addition to the Board will hold office until the first general meeting or the next following annual general meeting of the Company after his/her appointment.

Details of the Directors to be re-elected and elected at the AGM will be set out in the circular to the shareholders of the Company prior to its upcoming AGM.

DIRECTORS AND SENIOR MANAGEMENT

Biographical details of the Directors and senior management of the Company are set out on pages 31 to 37 of this annual report.

CONFIRMATION OF INDEPENDENCE OF INDEPENDENT NON-EXECUTIVE DIRECTORS

Each of the independent non-executive Directors has confirmed his/her independence pursuant to Rule 3.13 of the Rules Governing the Listing of Securities on the Stock Exchange (the "**Listing Rules**"). The Company considers all of the independent non-executive Directors to be independent in accordance with Rule 3.13 of the Listing Rules.

DIRECTORS' SERVICE CONTRACTS

Dr. LOU Jing, being one of the executive Directors, has entered into a service contract with the Company for an initial term of three years commencing from the date of his appointment and continue for a period of three years after or until the third AGM of the Company since the Listing Date (whichever is earlier), which shall be automatically renewed for successive periods of three years until terminated in accordance with the terms and conditions of the service contract or by either party giving to the other prior notice in writing. Ms. SU Dongmei, the other executive Director, has entered into a service contract with the Company for an extended term of three years commencing from 11 June 2018 until the date of the AGM of the Company in the year 2021 (or, in case there is no AGM in such year, until 20 June 2021), until termination in accordance with the terms and conditions of the service contract, or by either party giving to the other prior notice in writing.

Mr. HUANG Bin, one of the non-executive Directors, has entered into an appointment letter with the Company for a term commencing from 20 June 2019 until, hereafter, the date of the third upcoming AGM of the Company, which shall be automatically renewed for further three years, unless otherwise terminated in accordance with the terms and conditions of the appointment letter. Mr. TANG Ke, the other non-executive Director, has entered into an appointment letter with the Company for a term commencing from 10 February 2020 until, hereafter, the date of the third upcoming AGM of the Company, which shall be automatically renewed for further three years, unless otherwise terminated in accordance with the terms and conditions of the appointment letter.

Each of Mr. David Ross PARKINSON and Mr. PU Tianruo, two of the independent non-executive Directors, entered into an appointment letter with the Company on 21 May 2015. The appointment under the aforementioned letter has been renewed and extended until, hereafter, the date of the third upcoming AGM of the Company, which shall be automatically renewed for further three years, unless otherwise terminated in accordance with the terms and conditions of the appointment letter. Dr. WONG Lap Yan, the other independent non-executive Director, has entered into an appointment letter with the Company for a term of three years commencing from 8 October 2019, which shall be automatically renewed for further three years, unless terminated in accordance with the terms of the appointment letter.

Save as disclosed above, none of the Directors has a service contract which is not determinable by the Group within one year without payment of compensation (other than statutory compensation).

The Directors' service contracts and appointment letters may be renewed from time to time, and their terms of appointment are subject to re-election and retirement as and when required by the Articles of Association.

DIRECTORS' INTERESTS IN CONTRACTS OF SIGNIFICANCE

Other than those transactions disclosed in note 41 to the financial statements and in the section "Connected Transactions" below, no Director had a material interest, either directly or indirectly, in any transactions, arrangements and contracts of significance to the business of the Group to which the Company, or any of its subsidiaries or fellow subsidiaries was a party during the year ended 31 December 2019.

CONTROLLING SHAREHOLDERS' INTERESTS IN CONTRACTS

Save as disclosed in this annual report, at no time during the year had the Company or any of its subsidiaries entered into any contract of significance with the controlling shareholder (as defined in the Listing Rules) or any of its subsidiaries, nor had any contract of significance been entered into for the services provided by the controlling shareholder or any of its subsidiaries to the Company or any of its subsidiaries.

MANAGEMENT CONTRACTS

No contracts concerning the management and administration of the whole or any substantial part of the business of the Company were entered into or existed during the year ended 31 December 2019.

EMOLUMENT POLICY

A remuneration committee was set up for reviewing the Group's emolument policy and structure for all remuneration of the directors and senior management of the Group, having regard to the Group's operating results, individual performance of the directors and senior management and comparable market practices.

Details of the emoluments of the Directors and five highest paid individuals for the year ended 31 December 2019 are set out in notes 8 and 9 to the financial statements.

RETIREMENT AND EMPLOYEE BENEFITS SCHEME

Details of the retirement and employee benefits scheme of the Company are set out in note 10 and note 33 to the financial statements.

CHANGE TO INFORMATION IN RESPECT OF DIRECTORS

Save as disclosed in the section headed "Directors and Senior Management" in this annual report, there was no change to any of the information required to be disclosed in relation to any Director pursuant to paragraphs (a) to (e) and (g) of Rule 13.51(2) of the Listing Rules for the year ended 31 December 2019.

DIRECTORS' AND CHIEF EXECUTIVE'S INTERESTS AND SHORT POSITIONS IN SHARES, UNDERLYING SHARES AND DEBENTURES

As at 31 December 2019, the interests and short positions of the Directors and the chief executives of the Company in the shares, underlying shares and debentures of the Company or any of its associated corporations (within the meaning of Part XV of the Securities and Futures Ordinance (the "**SFO**") which had been notified to the Company and the Stock Exchange pursuant to Divisions 7 and 8 of Part XV of the SFO (including interests and short positions which they were taken or deemed to have taken under such provisions of the SFO), or which were 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 for Securities Transactions by Directors of Listed Issuers (the "**Model Code**") as set out in Appendix 10 to the Listing Rules were as follows:

(i) Interests in the Company

Name	Position	Nature of Interest	Number of Shares held	Approximate percentage of all Shares in Issue[1]
LOU Jing[2] (婁競)	Executive Director	Beneficial owner	660,000[L]	0.03%
		Beneficiary of a trust	48,528,842[L]	1.91%
		Other	599,367,030[L]	23.60%
			Total: 648,555,872[L]	*25.53%
SU Dongmei[3] (蘇冬梅)	Executive Director	Interest in controlled corporation	24,384,630[L]	0.96%
		Beneficial owner	660,000[L]	0.03%
			Total: 25,044,630[L]	0.99%
Huang Bin[4] (黃斌)	Non-Executive Director	Interest in controlled corporation	32,197,350[L]	1.27%

Notes:

(L): denotes long position

* Figures shown as total may not be an arithmetic aggregation of the figures being added up due to rounding adjustment.

(1) The calculation is based on the total number of 2,539,974,132 Shares in issue as at 31 December 2019.

(2) LOU Jing was granted 660,000 share options by the Company on 2 February 2017, representing 660,000 Shares upon full exercise. LOU Jing was a beneficiary under an unnamed trust which was interested in 41,746,000 Shares that was held on trust for LOU Jing and in another 6,782,842 Shares held by it, and therefore LOU Jing was deemed to be interested in all such Shares. On 27 December 2019, LOU Jing entered into a financial instrument involving the potential delivery of 582,832 Shares, which was subsequently redeemed on 7 February 2020 without any delivery of Shares.

On 18 March 2020, Decade Sunshine Limited, a company that is controlled by LOU Jing, entered into an agreement that involved the delivery of 122,592,477 Shares, representing approximately 4.83% of the total issued share capital of the Company, to one of the investment funds of Hillhouse Capital Advisors, Ltd., an existing shareholder of the Company. The disposal was completed on 31 March 2020. For details, please refer to the Company's announcement dated 19 March 2020.

(3) SU Dongmei directly holds the entire issued share capital of Joint Palace Group Limited ("**JPG**") and therefore, was deemed to be interested in the same number of the Shares in which JPG was interested (i.e. 24,384,630 Shares); and, SU Dongmei was granted 660,000 share options by the Company, representing 660,000 Shares upon full exercise.

(4) HUANG Bin directly holds the entire issued share capital of Known Virtue International Limited ("**KVI**") and therefore, was deemed to be interested in the same number of the Shares in which KVI was interested (i.e., 32,197,350 Shares).

(ii) Interests in Associated Corporations

Name	Position	Associated Corporation	Nature of Interest	Number of Securities	Approximate Percentage of Outstanding Share Capital of the Associated Corporation[1]
LOU Jing (婁競)	Executive Director	Sunshine Guojian	Interest in controlled corporation	25,160,657[(L)(1)]	4.54%
SU Dongmei (蘇冬梅)	Executive Director	Sunshine Guojian	Others[2]	200,000[(L)(2)]	0.03%

Notes:

(L): denotes long position.

(1) The shares were allotted by Sunshine Guojian to Achieve Well International Limited, a company wholly-owned by Dr. LOU Jing, under the ESOP adopted by Sunshine Guojian as announced on 2 July 2019 by the Company, for purposes of holding the awarded shares granted to Dr. LOU Jing.

(2) An ultimate beneficial owner of an interest in a fund (the "**Fund**") that is used for holding shares awarded under the ESOP adopted by Sunshine Guojian as announced on 2 July 2019 by the Company, which directly holds the awarded shares for the ultimate benefit of Ms. SU Dongmei, being one of the grantees of the awarded shares that have been allotted to the Fund by Sunshine Guojian.

Save as disclosed above, as at 31 December 2019, none of the Directors or the chief executives of the Company had or was deemed to have any interest or short position in the shares, underlying shares or debentures of the Company or its associated corporations (within the meaning of Part XV of the SFO) that was required to be notified to the Company and the Stock Exchange pursuant to Divisions 7 and 8 of Part XV of the SFO (including interests and short positions which they were taken or deemed to have taken under such provisions of the SFO), or required to be recorded in the register required to be kept under Section 352 of the SFO, or as otherwise notified to the Company and the Stock Exchange pursuant to the Model Code.

DIRECTORS' RIGHTS TO ACQUIRE SHARES OR DEBENTURES

Other than disclosed under the heading "Directors' and Chief Executive's Interests and Short Positions in Shares, Underlying Shares and Debentures", at no time during the Reporting Period was the Company or any of its subsidiaries or holding company or any subsidiary of the Company's holding company a party to any arrangement that would enable the Directors to acquire benefits by means of acquisition of shares in, or debentures of, the Company or any other body corporate, and none of the Directors or any of their spouses or children under the age of 18 were granted any right to subscribe for the equity or debt securities of the Company or any other body corporate or had exercised any such right.

SUBSTANTIAL SHAREHOLDERS' INTERESTS AND SHORT POSITIONS IN SHARES AND UNDERLYING SHARES

As at 31 December 2019, to the best knowledge of the Directors, the following persons (not being a Director or chief executives of the Company) had interests or short positions in the shares or underlying shares which fall to be disclosed to the Company under the provisions of Divisions 2 and 3 of Part XV of the SFO as recorded in the register required to be kept by the Company pursuant to section 336 of the SFO:

Name of Shareholder	Nature of Interest	Number of Shares held	Approximate percentage of all Shares in Issue[1]
Decade Sunshine Limited ("**DSL**")[2]	Beneficial owner	599,367,030[L]	23.60%
Century Sunshine Limited ("**CSL**")[2]	Interest in a controlled corporation	599,367,030[L]	23.60%
XING Lily[3]	Interest in a controlled corporation[2]	599,367,030[L]	23.60%
	Interest of spouse[3]	49,188,842[L]	1.94%
		Total: 648,555,872[L]	25.53%
Lambda International Limited[2]	Interest in a controlled corporation	599,367,030[L]	23.60%
TMF (Cayman) Ltd.[4]	Trustee	708,759,020[L]	27.90%
CS Sunshine Investment Limited[5]	Beneficial owner	472,212,360[L]	18.59%
CPEChina Fund, L.P.[5]	Interest in a controlled corporation	472,212,360[L]	18.59%
CITIC PE Associates, L.P.[5]	Interest in a controlled corporation	472,212,360[L]	18.59%
CITIC PE Funds Limited[5]	Interest in a controlled corporation	472,212,360[L]	18.59%
CITICPE Holdings Limited[5]	Interest in a controlled corporation	472,212,360[L]	18.59%
CLSA Global Investment Management Limited[5]	Interest in a controlled corporation	472,212,360[L]	18.59%
CITIC Securities International Company Limited[5]	Interest in a controlled corporation	472,212,360[L]	18.59%
CITIC Securities Company Limited[5]	Interest in a controlled corporation	472,212,360[L]	18.59%

Name of Shareholder	Nature of Interest	Number of Shares held	Approximate percentage of all Shares in Issue[1]
JPMorgan Chase & Co.	Interest in a controlled corporation	26,897,995[L]	1.06%
		18,530,973[S]	0.73%
	Investment manager	7,043,147[L]	0.28%
	Person having a security interest in shares	29,392,862[L]	1.16%
	Approved lending agent	86,579,264[L]&[P]	3.41%
		Total: 149,913,268[L]	5.90%
		18,530,973[S]	0.73%
		86,579,264[P]	3.41%

Notes:

(L): denotes long position

(S): denotes short position

(P): denotes lending pool

(1) The calculation is based on the total number of 2,539,974,132 Shares in issue as at 31 December 2019.

(2) DSL was wholly-owned by CSL and therefore CSL was deemed to be interested in 599,367,030 Shares held by DSL; further, 42.60% and 35.65% of CSL were respectively controlled by XING Lily and Lambda International Limited, who were therefore deemed to be interested in such 599,367,030 Shares.

(3) XING Lily's spouse, LOU Jing, was interested in 49,188,142 Shares and therefore XING Lily was deemed to be interested in the same number of Shares.

(4) TMF (Cayman) Ltd. was the trustee with respect to four unnamed trusts, which respectively were interested in 599,367,030, 43,148,980, 18,297,000, and 47,946,010 Shares, and therefore TMF (Cayman) Ltd. was deemed to be interested in all such Shares.

(5) CS Sunshine Investment Limited was wholly-owned by CPEChina Fund, L.P. The general partner of CPEChina Fund, L.P. was CITIC PE Associates, L.P., an exempted limited partnership registered under the laws of the Cayman Islands whose general partner was CITIC PE Funds Limited, an exempted company incorporated in the Cayman Islands with limited liability. CITICPE Holdings Limited exercised 100% control over CITIC PE Funds Limited. 35% of CITICPE Holdings Limited was controlled by CLSA Global Investment Management Limited, which therefore is deemed to be interested in the Shares in which CITICPE Holdings Limited was interested. CITIC Securities International Company Limited exercised 100% control over CLSA Global Investment Management Limited. CITIC Securities Company Limited exercised 100% control over CITIC Securities International Company Limited.

Save as disclosed above, as at 31 December 2019, the Directors were not aware of any persons (who were not Directors or chief executives of the Company) who had an interest or short position in the shares or underlying shares of the Company which would fall to be disclosed under Divisions 2 and 3 of Part XV of the SFO, or which would be required, pursuant to Section 336 of the SFO, to be entered in the register referred to therein.

POST-IPO SHARE OPTION SCHEME

Pursuant to a written resolution passed by the then sole shareholder of the Company on 23 May 2015, the Company adopted a share option scheme pursuant to Chapter 17 of the Listing Rules (the "**Scheme**"). The details of the Scheme were disclosed in the Company's prospectus dated 1 June 2015 in the section headed "Statutory and General Information — 5. Post-IPO Share Option Scheme" in Appendix IV. Under the Scheme, the Company was authorised to issue up to 242,439,857 ordinary shares (subject to possible adjustments), which represented approximately 9.54% of the issued shares as at 31 December 2019. The purpose of the Scheme is to provide selected participants with the opportunity to acquire proprietary interests in the Company and to encourage selected participants to work towards enhancing the value of the Company and its shares for the benefit of the Company and its shareholders as a whole.

Unless approved by the shareholders in accordance with the terms of the Scheme, the total number of shares issued and to be issued upon exercise of the options granted and to be granted under the Scheme and any other share option scheme(s) of the Company to each selected participant (including both exercised and outstanding options) in any 12 month period shall not exceed 1% of the total number of shares in issue. An option may be exercised in accordance with the terms of the Scheme at any time during a period to be determined and notified by the Directors to each grantee, which period may commence on a day after the date upon which the offer for the grant of options is made but shall end in any event not later than 10 years from the date of grant of the option subject to the provisions for early termination under the Scheme. A nominal consideration of RMB1.00 is payable upon acceptance of the grant of an option. For details, please refer to Appendix IV to the Company's prospectus dated 1 June 2015.

The Scheme will continue to be in effect for a term of ten years unless terminated sooner, and has a remaining term of approximately 5 years as at the date of this annual report. On 28 June 2016, the Company amended the Scheme to include nominees and/or trustees of employee benefit trusts set up for the employees of the members of the Group as participants eligible to participate in the Scheme.

The following share options were outstanding under the Scheme as of 31 December 2019:

	NUMBER OF SHARE OPTIONS										
NAME OR CATEGORY OF PARTICIPANT	AS AT 1 JANUARY 2019	GRANTED DURING THE YEAR	EXERCISED DURING THE YEAR	FORFEITED/ CANCELLED DURING THE YEAR	EXPIRED DURING THE YEAR	AS AT 31 DECEMBER 2019	DATE OF GRANT OF SHARE OPTIONS	EXERCISE PERIOD OF SHARE OPTIONS	EXERCISE PRICE OF SHARE OPTIONS *(HKD PER SHARE)*	PRICE OF THE COMPANY'S LISTED SHARES IMMEDIATELY BEFORE THE GRANT DATE OF OPTIONS *(HKD PER SHARE)*	THE WEIGHTED AVERAGE CLOSING PRICE OF THE COMPANY'S LISTED SHARES IMMEDIATELY BEFORE THE EXERCISE DATES *(HKD PER SHARE)*
The Empire Trust*	20,000,000	0	1,063,500	660,000	–	18,276,500	2 February 2017	From 2 August 2018 to 2 February 2027**	7.62	7.37	13.42
	20,000,000	0	1,063,500	660,000	–	18,276,500					

* The Empire Trust is a trust established by the Company for beneficiaries who are employees of the Company and its subsidiaries and affiliates, and any other persons as nominated from time to time by the advisory committee of The Empire Trust that is established with the authority of the Board.

** Share options granted are subject to vesting conditions.

Please refer to note 35 to the financial statements for the accounting policy adopted for share options.

PURCHASE, SALE OR REDEMPTION OF LISTED SECURITIES

During the year ended 31 December 2019, the Company had repurchased a total of 5,000,000 ordinary shares of the Company on the Stock Exchange at an aggregate cash consideration of HKD45,348,633.90 (including expenses). Subsequently, on 27 and 28 February 2020, the Company further repurchased a total of 1,493,500 ordinary shares of the Company on the Stock Exchange at an aggregate cash consideration of HKD12,505,955 (excluding expenses of HKD28,663.45). All the shares repurchased by the Company during the year ended 31 December 2019 and on 27 and 28 February 2020 have been cancelled by the Company by the date of this annual report. Save as the aforesaid repurchases of shares, there was no purchase, sale and redemption of any listed securities of the Company by the Company or any of its subsidiaries for the year ended 31 December 2019 and for the period thereafter up to the date of this annual report.

The financial position of the Company is solid and healthy. The Board believes the share repurchases and subsequent cancellation of the repurchased Shares can enhance the value of the Shares thereby improving the return to shareholders of the Company. In addition, the share repurchases reflect the confidence of the Company in its business development and the long-term prospects of the industry. The Board believes that the share repurchases are in the interests of the Company and its shareholders as a whole.

Details of shares repurchased during the year ended 31 December 2019 are set out as follows:

Date of repurchases	Number of Shares purchased on the Stock Exchange	Price paid per Share		Aggregate consideration paid
		Highest	Lowest	
3 January 2019	5,000,000	HKD9.20	HKD8.89	HKD45,348,633.90
Total	**5,000,000**			**HKD45,348,633.90**

Save as the aforesaid repurchases of shares, there was no purchase, sale and redemption of any listed securities of the Company by the Company or any of its subsidiaries for the year ended 31 December 2019.

On 16 April 2020, the Company repurchased an aggregate principal amount of EUR5,000,000 in the face value of the Bonds (as defined above) issued by Strategic International Group Limited, a wholly-owned subsidiary of the Company, for an aggregate purchase price of EUR5,255,000 (including agent fee). For details, please refer to the Company's announcement dated 20 April 2020.

DISCLOSURE PURSUANT TO RULES 13.18 AND 13.21 OF THE LISTING RULES

On 22 February 2016, Hongkong Sansheng entered into a Hong Kong dollar equivalent RMB2,200,000,000 term loan facility (the "**Loan Facility**") with Ping An Bank Company Limited (平安銀行股份有限公司). The funds from the Loan Facility were used for acquiring further equity interests in Sunshine Guojian. The details of the Loan Facility are set out in the announcement of the Company dated 22 February 2016. The Loan Facility was duly paid off, with no default in respect of such facility through the life of the Loan Facility.

Save as disclosed above, the Directors are not aware of any other circumstances which would give rise to a disclosure obligation pursuant to the requirements under Rules 13.18 and 13.21 of the Listing Rules as at 31 December 2019.

CONVERTIBLE BONDS

On 12 July 2017, the Group, through Strategic International, a direct wholly-owned subsidiary of the Company, conducted an international offering of Euro-denominated zero-coupon convertible bonds, or the Bonds (as defined above), in an aggregate principal amount of EUR300,000,000 due 2022, which is unconditionally and irrevocably guaranteed by the Company. The issue of the Bonds was completed on 21 July 2017. The listing of and permission to deal in the Bonds became effective on 24 July 2017. The information regarding the Bonds is summarized in note 32 to the financial statements and the Company's announcements dated 12 July 2017, 13 July 2017 and 21 July 2017.

The Bonds constitute direct, unconditional, unsubordinated and (subject to the provision relating to the negative pledge in respect thereof) unsecured obligations of Strategic International and shall rank pari passu and without any preference or priority among themselves. The successful issue of the Bonds represents an opportunity for 3SBio to improve the liquidity position of the Group, to reduce the financing costs of the Group and to raise further working capital of the Group.

Use of Proceeds of the Bonds

The net proceeds of approximately EUR295,898,164 represents a net issue price of approximately HKD14.04 per conversion share based on the initial conversion price of HKD14.28 per conversion share. As disclosed in the announcement of the Company dated 12 July 2017 in relation to the proposed issue of the Bonds (the "**Bonds Announcement**"), the net proceeds from the Bonds were proposed to be used for repaying the loans of the Group, future merger and acquisitions, R&D, purchase of operation facilities and other general corporate purposes. As of 31 December 2019, RMB1,823,115,000 of the proceeds of the Bonds were allocated or applied to repaying the loans of the Group, merger and acquisitions, purchase of operation facilities and other general corporate purposes.

It is estimated that the remaining balance of the proceeds of the Bonds, approximately RMB467,345,000, will be allocated or applied in accordance with the proposed uses as disclosed in the Bonds Announcement and is expected to be fully utilized in one to three years.

Conversion Price and Shares to be Issued upon Full Conversion

As at 31 December 2019, the Group had convertible bonds outstanding of approximately RMB2,304.8 million (calculated at the exchange rate EUR1=RMB7.8155, the prevailing market rate at 31 December 2019). The initial conversion price of the Bonds was HKD14.28 per conversion share, which represents (i) a premium of approximately 40% over the closing price of HKD10.20 per Share as quoted on the Stock Exchange on 12 July 2017 (being the trading day on which the terms of the issue of the Bonds were fixed) and (ii) a premium of approximately 38.69% over the average closing price of approximately HKD10.296 as quoted on the Stock Exchange for the five consecutive trading days up to and including 12 July 2017. Assuming full conversion of the Bonds based on such initial conversion price, the total number of shares issued by the Company would be 2,728,337,577 Shares as at 31 December 2019. The Company has a general mandate sufficient to cover the shares issued upon full conversion of the Bonds.

The following table summaries the potential effects on the shareholding structure of the Company as a result of the full conversion of the Bonds:

	As at 31 December 2019		Assuming the Bonds are fully converted at the initial Conversion Price	
Name of Shareholders	Number of Shares	Approximate % of total issued Shares	Number of Shares	Approximate % of the enlarged issued Shares
Decade Sunshine Limited	599,367,030	23.60%	599,367,030	21.97%
CS Sunshine Investment Limited	472,212,360	18.59%	472,212,360	17.31%
Hero Grand Management Limited[1]	47,946,010	1.89%	47,946,010	1.76%
Directors and Chief Executive[2]	171,084,881	6.74%	171,084,881	6.27%
Other public shareholders	1,249,363,851	49.19%	1,249,363,851	45.79%
Bondholders	—	—	188,363,445	6.90%
Total	**2,539,974,132**	**100.00%**	**2,728,337,577**	**100.00%**

Notes:

(1) Hero Grand Management Limited ("**Hero Grand**") is owned by an unnamed trust that is owned as to 100% by TMF (Cayman) Ltd. as the trustee, and Dr. LOU Jing (Chairman of the Board) is the settlor and a beneficiary of the trust. As at 31 December 2019, Hero Grand held approximately 1.89% of the total share capital of the Company, of which 1.64% was held on trust for Dr. LOU Jing and 0.24% was held by itself.

(2) The Directors and chief executive (other than Dr. LOU Jing) held approximately 6.74% of the total share capital of the Company in aggregate as at 31 December 2019.

(3) The percentages are subject to rounding difference, and figures shown as totals may not be an arithmetic aggregation of the figures preceding them, if any.

CONNECTED TRANSACTIONS

Grant of Awarded Shares by Sunshine Guojian to Connected Grantees

As announced on 2 July 2019, as part of the Group's initiatives to incentivize the performance of its directors, senior management and employees, the shareholders of Sunshine Guojian, an indirect non-wholly owned subsidiary of the Company, (1) approved the adoption of the ESOP; and (2) resolved to increase the total issued share capital of Sunshine Guojian by 44,367,221 shares, representing not more than 8% of the enlarged issued share capital of Sunshine Guojian, for the purpose of allotting 29,672,221 shares (the "**Awarded Shares**") to Dr. Lou Jing, Ms. Su Dongmei and three other directors/supervisors of the Company's subsidiaries, including Sunshine Guojian (the "**Connected Grantees**") on 19 June 2019.

The grant of the Awarded Shares to the Connected Grantees constituted a connected transaction under Chapter 14A of the Listing Rules. As all applicable percentage ratios were more than 0.1% but less than 5%, the grant of the Awarded Shares to the Connected Grantees was subject to the reporting and announcement requirements but was exempt from the shareholders' approval requirement under the Listing Rules.

For further details of the ESOP and the grant of the Awarded Shares, please refer to the announcement of the Company dated 2 July 2019.

Connected transaction in relation to the Facility Agreement with Medical Recovery

On 17 July 2018, Strategic International, a direct wholly-owned subsidiary of the Company, entered into a facility agreement (the "**Facility Agreement**") with Medical Recovery Limited ("**Medical Recovery**"), a controlling shareholder of the Company. Pursuant to the Facility Agreement, Strategic International agreed to provide a loan (the "**Loan**") to Medical Recovery in the principal amount of USD30,000,000 with an interest rate of 4% per annum. In connection with the Facility Agreement, a debenture was also made between Medical Recovery as chargor and Strategic International as chargee, pursuant to which all assets of Medical Recovery were charged to Strategic International. The Facility Agreement was subject to a final maturity date (the "**Final Maturity Date**") of 12 months after the date of the Facility Agreement or an extended date as agreed by Strategic International and Medical Recovery. On 16 July 2019, Strategic International and Medical Recovery agreed to extend the Final Maturity Date to 17 July 2020.

Since Medical Recovery is one of the controlling shareholders of the Company, the provision of the Loan under the Facility Agreement constituted a connected transaction of the Company under Chapter 14A of the Listing Rules. As the highest applicable percentage ratio in respect of the provision of the Loan under the Facility Agreement was more than 0.1% but less than 5%, the Facility Agreement and the transactions contemplated thereunder were subject to the reporting and announcement requirements but were exempt from the independent shareholders' approval requirements under the Listing Rules.

The purpose of the Loan is for Medical Recovery to purchase the issued ordinary shares of the Company for employee retention and incentives purposes. The Company considered it an effective and efficient way to motivate and incentivize its employees, which is beneficial to the sustainable development of the Group. Additionally, the Board considered that the Group had surplus cash resources and the entering into of the Facility Agreement can put such resources to more efficient use and to generate better returns.

For further details of the Facility Agreement, please refer to the announcements of the Company dated 17 July 2018 and 17 July 2019.

Note 41 to the Financial Statements

In respect of the Company's related party transactions disclosed in note 41 to the financial statements prepared in accordance with International Financial Reporting Standards, to the extent that they constitute connected transactions of the Company for the purpose of the Listing Rules that apply to it, the Company confirms that it has complied with the relevant requirements under the Listing Rules (if applicable).

Save as disclosed above, the related party transactions of the Company set out in note 41 to the financial statements prepared in accordance with International Financial Reporting Standards do not constitute connected transactions of the Company under the Listing Rules.

DIRECTORS' INTEREST IN COMPETING BUSINESS

Save as disclosed in this annual report, as at 31 December 2019, none of the Directors or their respective associates had engaged in or had any interest in any business which competes or is likely to compete, either directly or indirectly, with the businesses of the Group.

DONATIONS

The Group supports various medical charity projects. Please see Section 7.1 "Extending Accessibility to Medicines and Medical Services" in "2019 Environmental, Social and Governance Report of 3SBio Inc.".

LEGAL PROCEEDINGS

For the year ended 31 December 2019, the Company was not engaged in any litigation or arbitration of material importance and no litigation or claim of material importance is known to the Directors to be pending or threatened against the Company.

On 9 March 2020, the Company commenced legal proceedings against a prospective candidate in relation to a dispute over his potential engagement by the Company. For details, please refer to the Company's announcement dated 9 March 2020.

ENVIRONMENTAL PROTECTION

The Group is subject to national and local environmental laws and regulations of the PRC. The Group has established detailed internal rules regarding environmental protection. The Group tests effluent water to ensure compliance with national emission standards. Solid waste is sorted for proper disposal. Hazardous waste is sent to qualified third parties for treatment. When a new construction project is proposed, the Group conducts comprehensive analysis and testing on the environmental issues involved in the manufacturing processes. The Group's production team and in-house legal department are primarily responsible for ensuring compliance with applicable environmental rules and regulations. All of the Group's properties, plants and equipment meet the standards required for compliance with applicable environmental rules and regulations, and the Group believes it has maintained a good relationship with the communities surrounding the Group's production facilities.

To the best knowledge of the Group, during the year ended 31 December 2019, there were no material breaches of national and local environmental laws and regulations of the PRC.

RELATIONSHIP WITH STAKEHOLDERS

The Group recognizes that various stakeholders including employees, medical experts, distributors, and other business associates are key to Group's success. The Group strives to achieve corporate sustainability through engaging, collaborating, and cultivating strong relationship with them.

The Group believes that it is vital to attract, recruit and retain quality employees. To maintain the quality, knowledge and skill levels of Group's workforce, the Group provides the employees with periodic training, including introductory training for new employees, technical training, professional and management training, and health and safety training. The Group believes that it maintains a good relationship with its employees and the Group did not experience any significant labour disputes or any difficulty in recruiting staff for its operations.

The Group conducts academic marketing activities to establish and maintain relationships with key opinion leaders in the national medical system, as well as the department heads and senior physicians in Group's target hospitals, particularly Grade III hospitals. The Group provides these experts with detailed information on its products and helps them make independent comparisons among competing products in the market. The Group also maintains long-term cooperative relationships with national academic associations, such as the Chinese Society of Nephrology (中華腎臟病學會) and the Chinese Society of Clinical Oncology (中國臨床腫瘤學會). The Group believes that its relationships with medical experts help to raise Group's profile, enhance awareness of Group's products in the medical community and among patients, and provide it with valuable clinical data to improve Group's products, all of which help the Group more effectively market and sell its products.

A significant amount of Group's sales is attributable to a limited number of distributors. The Group selects the distributors based on their qualifications, reputation, market coverage and sales experience. The Group generally has long term business relationship with its large distributors.

COMPLIANCE WITH LAWS AND REGULATIONS

The Group recognises the importance of compliance with laws and regulatory requirements. The Group has been allocating corporate and staff resources to ensure ongoing compliance with rules and regulations, including retaining external counsels and advisors. During the year ended 31 December 2019, the Group has complied, to the best of its knowledge, with all relevant rules and regulations that have a significant impact on it.

To the best knowledge of the Group, during the year ended 31 December 2019, there were no material breaches of the Group's internal rules or PRC laws and regulations relating to the promotion and distribution of the Group's pharmaceutical products by its employees, distributors, sub-distributors or third-party promoters.

PERMITTED INDEMINTY PROVISION

The Articles of Association provides that every Director of the Company shall be indemnified and secured harmless out of the assets and profits of the Company from and against all actions, costs, charges, losses, damages and expenses which they or any of them may incur as a result of any act or failure to act in the execution of their duty, or supposed duty, and in their respective offices or trusts provided that this indemnity shall not extend to any matter in respect of any fraud or dishonesty.

The Company has arranged appropriate insurance coverage in respect of potential legal actions against its Directors and senior management.

POST BALANCE SHEET EVENTS

For material post-balance sheet events concerning the Group, please refer to note 46 to the financial statements.

AUDIT COMMITTEE

The audit committee of the Company (the "**Audit Committee**") has, together with the management and external auditor of the Company (the "**Auditor**"), reviewed the accounting principles and policies adopted by the Group and the consolidated financial statements for the year ended 31 December 2019. The Audit Committee has also reviewed the effectiveness of the risk management and internal control systems of the Company and considers them to be effective and adequate.

CORPORATE GOVERNANCE

The Company is committed to maintaining high standards of corporate governance practices. Information on the corporate governance practices adopted by the Company is set out in the Corporate Governance Report on pages 58 to 74 of this annual report.

CLOSURE OF REGISTER OF SHAREHOLDERS

The AGM of the Company is scheduled to be held on 19 June 2020. For determining the entitlement to attend and vote at the AGM, the register of shareholders of the Company will be closed from 16 June 2020 to 19 June 2020, both days inclusive, during which period no transfer of shares of the Company will be registered. In order to be eligible to attend and vote at the AGM, all transfer of shares of the Company, accompanied by the relevant share certificates, must be lodged with the Company's Hong Kong share registrar, Computershare Hong Kong Investor Services Limited, at Shops 1712–1716, 17th Floor, Hopewell Centre, 183 Queen's Road East, Wanchai, Hong Kong, for registration not later than 4:30 p.m. on 15 June 2020.

PROFESSIONAL TAX ADVICE RECOMMENDED

If the shareholders are unsure about the taxation implications of purchasing, holding, disposing of, dealing in or exercising of any rights (including entitlements to any relief of taxation) in relation to the Shares, they are advised to consult their professional advisers.

SUFFICIENCY OF PUBLIC FLOAT

Based on information publicly available to the Company and to the best knowledge of the Directors, at least 25% of the Company's total issued shares, the prescribed minimum percentage of public float approved by the Stock Exchange and permitted under the Listing Rules, was held by the public at all times during the year ended 31 December 2019 and as of the date of this annual report.

AUDITOR

Ernst & Young was appointed as the Auditor for the year ended 31 December 2019.

Ernst & Young shall retire at the forthcoming AGM and, being eligible, will offer itself for re-appointment. A resolution for the re-appointment of Ernst & Young as Auditor will be proposed at the AGM.

On behalf of the Board
Dr. LOU Jing
Chairman

Shenyang, the PRC
30 March 2020

Corporate Governance Report

The Board is pleased to present the corporate governance report of the Company for the year ended 31 December 2019.

CORPORATE GOVERNANCE PRACTICES

The Group is committed to maintaining high standards of corporate governance to safeguard the interests of the shareholders and to enhance corporate value and accountability. The Company has adopted the Corporate Governance Code (the "**CG Code**") as set out in Appendix 14 to the Listing Rules as its own code of corporate governance.

Save as disclosed in this annual report, the Company has complied with all applicable code provisions under the CG Code throughout the year ended 31 December 2019. The Company will continue to review and monitor its corporate governance practices to ensure compliance with the CG Code.

THE BOARD

Responsibilities

The Board is responsible for the overall leadership of the Group, oversees the Group's strategic decisions and monitors business and performance. The Board has delegated the authority and responsibility for day-to-day management and operation of the Group to the senior management of the Group. To oversee particular aspects of the Company's affairs, the Board has established three Board committees including the Audit Committee, the remuneration committee (the "**Remuneration Committee**") and the nomination committee (the "**Nomination Committee**") (together, the "**Board Committees**"). The Board has delegated to the Board Committees responsibilities as set out in their respective terms of reference.

All Directors have carried out duties in good faith and in compliance with applicable laws and regulations, and have acted in the interests of the Company and the Shareholders at all times.

The Company has arranged appropriate liability insurance in respect of legal action against the Directors. The insurance coverage will be reviewed on an annual basis.

Board Composition

As at the date of this annual report, the Board comprises two executive Directors, two non-executive Directors and three independent non-executive Directors as follows:

Executive Directors:
Dr. LOU Jing *(Chairman & Chief Executive Officer)*
Ms. SU Dongmei

Non-executive Directors:
Mr. HUANG Bin
Mr. TANG Ke

Independent Non-executive Directors:
Mr. PU Tianruo
Mr. David Ross PARKINSON
Dr. WONG Lap Yan

The biographies of the Directors are set out under the section headed "Directors and Senior Management" of this annual report.

During the year ended 31 December 2019 and up to the date of this annual report, the Board has at all times met the requirements under Rules 3.10(1) and 3.10(2) of the Listing Rules relating to the appointment of at least three independent non-executive Directors with at least one independent non-executive Director possessing appropriate professional qualifications or accounting or related financial management expertise.

The Company has also complied with Rule 3.10A of the Listing Rules relating to the appointment of independent non-executive Directors representing at least one-third of the Board.

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. Therefore, the Company has adopted a Board diversity policy to set out the approach to diversity on the Board. As provided in the Board diversity policy, the nomination committee will review annually the structure, size and composition of the Board and where appropriate, make recommendations on changes to the Board to complement the Company's corporate strategy. In relation to reviewing and assessing the Board composition, the nomination committee will consider a number of aspects, including but not limited to gender, age, cultural and educational background, professional qualifications, skills, knowledge, and industry and regional experience. The nomination committee will discuss, and where necessary, agree on the measurable objectives for achieving diversity on the Board and recommend them to the Board for adoption. The Company aims to maintain an appropriate balance of diversity perspectives of the Board that are relevant to the Company's business growth. The nomination committee will review the Board diversity policy as appropriate and recommend revisions, if any, to the Board for consideration and approval.

As each of the independent non-executive Directors has confirmed his independence pursuant to Rule 3.13 of the Listing Rules, the Company considers all of them to be independent.

None of the Directors has any personal relationship (including financial, business, family or other material or relevant relationship) with any other Director and chief executive.

All Directors, including 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. Independent non-executive Directors are invited to serve on the Audit Committee, the Remuneration Committee and the Nomination Committee.

As regards the CG Code provision requiring Directors to disclose the number and nature of offices held in public companies or organisations and other significant commitments as well as the identity of the public companies or organisations and the time involved to the issuer, Directors have agreed to disclose their commitments and any subsequent change to the Company in a timely manner.

Induction and Continuous Professional Development

Each newly appointed Director is provided with necessary induction and information to ensure that he/she has a proper understanding of the Company's operations and businesses as well as his/her responsibilities under relevant statues, laws, rules and regulations. The Directors are also provided with regular updates on the Company's performance, position and prospects to enable the Board as a whole and each Director to discharge their duties.

Directors are encouraged to participate in continuous professional development to develop and refresh their knowledge and skills. The company secretaries of the Company have from time to time updated and provided written training materials relating to the roles, functions and duties of a Director.

A summary of training received by the Directors throughout the year ended 31 December 2019 is as follows:

Name of Directors	Nature of Continuous Professional Development Programmes
Executive Directors	
Dr. LOU Jing	A and B
Mr. TAN Bo (resigned on 2 December 2019)	B
Ms. SU Dongmei	B
Non-executive Directors	
Mr. HUANG Bin (re-designated from executive Director on 20 June 2019)	B
Mr. TANG Ke (*appointed on 10 February 2020)	(*not applicable)
Mr. WANG Steven Dasong (resigned on 8 October 2019)	B
Mr. LIU Dong (resigned on 10 February 2020)	B
Independent Non-executive Directors	
Mr. PU Tianruo	B
Mr. David Ross PARKINSON	B
Dr. WONG Lap Yan (appointed on 8 October 2019)	B
Mr. MA Jun (resigned on 20 June 2019)	B
Mr. WANG Rui (appointed on 20 June 2019, and resigned on 8 October 2019)	B

Notes:

A: Attending seminars and/or meetings and/or forums and/or briefings

B: Reading materials relevant to corporate governance, director's duties and responsibilities, listing rules and other relevant ordinances

C: Giving talks in the seminars and/or meetings and/or forums

D: Attending training relevant to the Company's business conducted by lawyers

Separation of the Roles of Chairman and Chief Executive Officer

Under code provision A.2.1 of the CG Code, the roles of chairman and chief executive officer should be separate and performed by different individuals.

Dr. LOU Jing, the chairman of the Board, was also appointed as the chief executive officer of the Company. The Board believes that vesting the roles of both chairman and chief executive officer in the same person has the benefit of ensuring consistent leadership within the Group and enabling more effective and efficient overall strategic planning for the Group. The Board considers that the balance of power and authority for the present arrangement will not be impaired and this structure will enable the Company to make and implement decisions promptly and effectively. The Board will from time to time review and consider splitting the roles of chairman of the Board and the chief executive officer of the Company at an appropriate time, taking into account the circumstances of the Group as a whole.

Appointment and Re-election of Directors

Dr. LOU Jing, one of the executive Directors, has entered into a service contract with the Company for an initial term of three years commencing from the date of his appointment and continue for a period of three years after or until the third AGM of the Company since the Listing Date (whichever is earlier), which shall be automatically renewed for successive periods of three years until terminated in accordance with the terms and conditions of the service contract or by either party giving to the other prior notice in writing. Ms. SU Dongmei, the other executive Director, has entered into a service contract with the Company for an extended term of three years commencing from 11 June 2018 until the date of the AGM of the Company in the year 2021 (or, in case there is no AGM in such year, until 20 June 2021), until termination in accordance with the terms and conditions of the service contract, or by either party giving to the other prior notice in writing.

Mr. HUANG Bin, one of the non-executive Directors, has entered into an appointment letter with the Company for a term commencing from 20 June 2019 until, hereafter, the date of the third upcoming AGM of the Company, which shall be automatically renewed for further three years, unless otherwise terminated in accordance with the terms and conditions of the appointment letter. Mr. TANG Ke, the other non-executive Director, has entered into an appointment letter with the Company for a term commencing from 10 February 2020 until, hereafter, the date of the third upcoming AGM of the Company, which shall be automatically renewed for further three years, unless otherwise terminated in accordance with the terms and conditions of the appointment letter.

Each of Mr. David Ross PARKINSON and Mr. PU Tianruo, two of the independent non-executive Directors, entered into an appointment letter with the Company on 23 May 2015. The appointment under the aforementioned letter has been renewed and extended until, hereafter, the date of the third upcoming AGM of the Company, which shall be automatically renewed for a further three years, unless otherwise terminated in accordance with the terms and conditions of the appointment letter. Dr. WONG Lap Yan, the other independent non-executive Director, has entered into an appointment letter with the Company for a term of three years commencing from 8 October 2019, which shall be automatically renewed for further three years, unless terminated in accordance with the terms of the appointment letter.

Saved as disclosed above, none of the Directors has a service contract which is not determinable by the Group within one year without payment of compensation (other than statutory compensation).

In accordance with the Articles of Association, all Directors are subject to retirement by rotation at least once every three years and any new Director appointed to fill a casual vacancy shall submit himself for re-election by the shareholders at the first general meeting of the Company after appointment and new Directors appointed as an addition to the Board shall submit himself for re-election by the shareholders at the next following AGM of the Company after appointment.

The procedures and process of appointment, re-election and removal of Directors are set out in the Articles of Association. The Nomination Committee is responsible for reviewing the Board composition and making recommendations to the Board on the appointment or re-election of Directors and succession planning for Directors.

Board Meetings

The Company adopts the practice of holding Board meetings regularly, at least four times a year, and at approximately quarterly intervals. Notices of not less than fourteen days have been given for all regular Board meetings to provide all Directors with an opportunity to attend and include matters in the agenda for a regular meeting. In 2019, four regular board meetings were held.

For other Board and Board Committee meetings, reasonable notices have been generally given. The agenda and accompanying board papers have been dispatched to the Directors or Board Committee members at least three days before the meetings to ensure that they have sufficient time to review the papers and are adequately prepared for the meetings. When Directors or Board Committee members are unable to attend a meeting, they will be advised of the matters to be discussed and given an opportunity to make their views known to the Chairman prior to the meeting. Minutes of meetings are kept by the Company with copies circulated to all Directors for information and records.

Minutes of the Board meetings and Board Committee meetings are recorded in sufficient detail about the matters considered by the Board and the Board Committees and the decisions reached, including any concerns raised by the Directors. Draft minutes of each Board meeting and Board Committee meeting are sent to the Directors for comments within a reasonable time after the date on which the meeting is held. Minutes of the Board meetings are open for inspection by Directors.

During the year ended 31 December 2019, four board meetings and one annual general meeting were held and the attendance of each Director at these meetings is set out in the table below:

Directors	Attended/Eligible to attend the Board meetings	Attended/Eligible to attend the general meeting(s)
Executive Directors		
Dr. LOU Jing	4/4	1/1
Mr. TAN Bo (resigned on 2 December 2019)	4/4	1/1
Ms. SU Dongmei	4/4	1/1
Non-executive Directors		
Mr. HUANG Bin (re-designated from executive Director on 20 June 2019)	4/4	1/1
Mr. TANG Ke (*appointed on 10 February 2020)	(*not applicable)	(*not applicable)
Mr. WANG Steven Dasong (resigned on 8 October 2019)	4/4	1/1
Mr. LIU Dong (resigned on 10 February 2020)	4/4	1/1
Independent Non-executive Directors		
Mr. PU Tianruo	4/4	1/1
Mr. David Ross PARKINSON	4/4	1/1
Dr. WONG Lap Yan (appointed on 8 October 2019)	0/0	0/0
Mr. MA Jun (resigned on 20 June 2019)	1/1	1/1
Mr. WANG Rui (appointed on 20 June 2019, and resigned on 8 October 2019)	3/3	1/1

Model Code for Securities Transactions

The Company has adopted the Model Code as set out in Appendix 10 to the Listing Rules as its own code of conduct regarding Directors' securities transactions. Having made specific enquiry with the Directors, all Directors confirmed that they have complied with the required standard as set out in the Model Code during the year ended 31 December 2019.

Code provision A.6.4 of the CG Code stipulates that the Company must establish guidelines no less exacting than the Model Code for relevant employees in respect of their dealings in the Company's securities. To comply with the CG Code, the Company has adopted a set of guidelines no less exacting than the Model Code for relevant employees in respect of their dealings in the Company's securities prior to the Listing Date.

Delegation by the Board

The Board reserves for its decision all major matters of the Company, including: approval and monitoring of all policy matters, overall strategies and budgets, internal control and risk management systems, material transactions (in particular those that may involve conflict of interests), financial information, appointment of Directors and other significant financial and operational matters. Directors could have recourse to seek independent professional advice in performing their duties at the Company's expense and are encouraged to access and to consult with the Company's senior management independently.

The daily management, administration and operation of the Group are delegated to the senior management. The delegated functions and responsibilities are periodically reviewed by the Board. Approval has to be obtained from the Board prior to any significant transactions entered into by the management.

Corporate Governance Function

The Board recognizes that corporate governance should be the collective responsibility of the Directors which includes:

(a) developing and reviewing the Company's policies and practices on corporate governance;

(b) reviewing and monitoring the training and continuous professional development of Directors and senior management of the Company;

(c) reviewing and monitoring the Company's policies and practices on compliance with legal and regulatory requirements;

(d) developing, reviewing and monitoring the code of conduct and compliance manual (if any) applicable to employees and directors; and

(e) reviewing the Company's compliance with the CG Code and disclosure in the Corporate Governance Report.

Long-Term Corporate Performance and Strategy

The Company makes long-term financial performance as a corporate governance objective. The mission of the Company is to provide better care for patients through innovation and excellence in its core and related therapeutic areas. The Company aims to strengthen its leadership position in the PRC biotechnology industry and to expand its international business in the next few years.

BOARD COMMITTEES

Audit Committee

The Audit Committee currently comprises three members, including a non-executive director, namely Mr. HUANG Bin, and two independent non-executive Directors, namely, Mr. PU Tianruo (*Chairman*) and Dr. WONG Lap Yan.

The principal duties of the Audit Committee include the following:

1. reviewing the relationship with the Auditor by reference to the work performed by the Auditor, their fees and terms of engagement, and making recommendations to the Board on the appointment, re-appointment and removal of the Auditor;

2. reviewing the financial statements and reports and considering any significant or unusual items raised by the Company's staff responsible for the accounting and financial reporting function or the Auditor before submission to the Board; and

3. reviewing the adequacy and effectiveness of the Company's financial reporting system, internal control and risk management systems and associated procedures, including the adequacy of the resources, staff qualifications and experience, training programmes and budget of the Company's accounting and financial reporting function.

The written terms of reference of the Audit Committee are available on the websites of the Stock Exchange and the Company.

During the year ended 31 December 2019, three meetings of the Audit Committee were held to discuss and consider the following matters:

- final results of the Company and its subsidiaries for the fiscal year as well as the audit report prepared by the Auditor relating to accounting issues and major findings in the course of audit;

- interim results of the Company and its subsidiaries for the six-month period ended 30 June 2019; and

- the financial reporting system, compliance procedures, internal control (including the adequacy of resources, staff qualifications and experience, training programmes and budget of the Company's accounting and financial reporting function) and risk management systems and processes, and the re-appointment of the Auditor, with respect to which the Board had not deviated from any recommendation given by the Audit Committee on the selection, appointment, resignation or dismissal of the Auditor.

Attendance of each Audit Committee member is set out in the table below:

Directors	Attended/Eligible to attend
Mr. PU Tianruo (*Chairman*)	3/3
Mr. HUANG Bin (became a member on 20 June 2019)	2/2
Dr. WONG Lap Yan (appointed on 8 October 2019)	1/1
Mr. WANG Steven Dasong (ceased to be a member from 20 June 2019)	1/1
Mr. MA Jun (resigned on 20 June 2019)	1/1
Mr. WANG Rui (became a member on 20 June 2019 and resigned on 8 October 2019)	1/1

Nomination Committee

The Nomination Committee currently comprises three members, including an executive Director, Dr. LOU Jing (*Chairman*), and two independent non-executive Directors, namely, Mr. PU Tianruo and Dr. WONG Lap Yan.

The principal duties of the Nomination Committee include the following:

1. reviewing the structure, size and composition (including the skills, knowledge and experience) of the Board at least annually and making recommendations on any proposed changes to the Board to complement the Company's corporate strategy;

2. developing the criteria for identifying and assessing the qualifications of and evaluating candidates for directorship;

3. identifying individuals suitably qualified to become Board members and selecting or making recommendations to the Board on the selection of individuals nominated for directorships;

4. assessing the independence of independent non-executive Directors;

5. making recommendations to the Board on the appointment or re-appointment of Directors and the succession planning for Directors, in particular the chairman and the chief executive officer; and

6. developing a policy concerning diversity of Board members, and disclosing the policy or a summary of the policy in the corporate governance report.

The written terms of reference of the Nomination Committee are available on the websites of the Stock Exchange and the Company.

The nomination policy of Directors of the Company sets as one of its objectives to ensure the Board has a balance of skills, experience and diversity of perspectives appropriate to the requirements of the Company's business. For a summary of the Company's Board diversity policy, please refer to the relevant paragraph in the "Board Composition" section of this Corporate Governance Report.

Pursuant to these policies, in assessing and selecting candidates, the Board and the Nomination Committee should consider various factors including integrity, age, gender, skills, knowledge, experience, expertise, professional and educational qualifications, background, the board's composition and diversity, availability of service to the Company, expected contribution, independence, conflicts of interest, and any other relevant factors.

The Nomination Committee identifies or selects candidates pursuant to the criteria as set out above. The Nomination Committee then makes recommendation to the Board including the terms and conditions of the appointment. The Board deliberates and decides on the appointment based upon the recommendation of the Nomination Committee. All appointments of director should be confirmed by a service contract or letter of appointment (as the case may be) setting out the key terms and conditions. As applicable, the Board shall make recommendation to shareholders in respect of the proposed election or re-election of director at a general meeting.

During the year ended 31 December 2019, one meeting of the Nomination Committee was held. All three then incumbent members of the Nomination Committee (i.e. Dr. LOU Jing, Mr. PU Tianruo and Dr. WONG Lap Yan) attended the meeting.

Remuneration Committee

The Remuneration Committee currently comprises three members, including two independent non-executive Directors, namely, Dr. WONG Lap Yan (*Chairman*) and Mr. PU Tianruo, and a non-executive Director, namely Mr. TANG Ke.

The principal duties of the Remuneration Committee include the following:

1. making recommendations to the Board on the Company's policy and structure for the remuneration of the Directors and senior management and on the establishment of a formal and transparent procedure for developing remuneration policies;

2. reviewing and approving the management's remuneration proposals with reference to the corporate goals and objectives determined by the Board;

3. making recommendations to the Board on the remuneration packages of executive directors and senior management;

4. making recommendations to the Board on the remuneration of non-executive Directors;

5. considering factors such as the level of remuneration paid by comparable companies, the time commitment and responsibilities of directors and senior management, and the employment conditions of the Company and its subsidiaries and consolidated affiliated entities;

6. ensuring that no Director or any of his/her associates is involved in deciding his or her own remuneration; and

7. reviewing and approving compensation payments and arrangements to directors and senior management for loss or termination of their office or appointment, or dismissal or removal for misconduct and assessing whether the proposed payments or arrangements are fair, reasonable, consistent with the relevant contractual terms, or otherwise appropriate.

The written terms of reference of the Remuneration Committee are available on the websites of the Stock Exchange and the Company.

During the year ended 31 December 2019, three meetings of the Remuneration Committee were held. Attendance of each Remuneration Committee member is set out in the table below:

Directors	Attended/Eligible to attend
Dr. WONG Lap Yan (Chairman, appointed on 8 October 2019)	1/1
Mr. PU Tianruo	3/3
Mr. TANG Ke (appointed on 10 February 2020)	*Not applicable
Mr. MA Jun (resigned as Chairman on 20 June 2019)	1/1
Mr. WANG Rui (appointed Chairman on 20 June 2019 and resigned on 8 October 2019)	1/1
Mr. LIU Dong (resigned on 10 February 2020)	3/3

Remuneration of Directors and Senior Management

The Company has established a formal and transparent procedure for formulating policies on remuneration of Directors and senior management of the Group. Details of the remuneration by band of the members of the Board and senior management of the Company, whose biographies are set out on pages 31 to 37 of this annual report, for the year ended 31 December 2019 are set out below:

Remuneration band	Number of individual
Nil to RMB5,000,000	9
RMB5,000,001 to RMB10,000,000	3
RMB10,000,001 to RMB15,000,000	0
RMB15,000,001 to RMB20,000,000	0
RMB20,000,001 to RMB25,000,000	0
RMB25,000,001 to RMB30,000,000	2
Above RMB30,000,000	1

DIRECTORS' RESPONSIBILITIES FOR FINANCIAL REPORTING IN RESPECT OF FINANCIAL STATEMENTS

The Directors acknowledge their responsibility for preparing the financial statements for the year ended 31 December 2019 which give a true and fair view of the affairs of the Company and the Group and of the Group's results and cash flows.

The management has provided to the Board such explanation and information as are necessary to enable the Board to carry out an informed assessment of the Company's financial statements, which are put to the Board for approval. The Company provides all members of the Board with quarterly updates on Company's performance, positions and prospects.

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

The statement by the Auditor regarding their reporting responsibilities on the consolidated financial statements of the Company is set out in the Independent Auditor's Report on pages 80 to 82 of this annual report.

RISK MANAGEMENT AND INTERNAL CONTROL

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

The Group's risk management and internal control systems provide a comprehensive and organized structure with clearly defined scopes of responsibilities, authorities and procedures. The Group has a designated risk management and internal control team which is responsible for identifying and monitoring the Group's risks and internal control issues and reports directly to the Board of any findings and follow-up actions. Each department of the Group is also required to adhere strictly to the Group's internal control procedures and report to the risk management and internal control team of any risks or internal control issues.

The Group conducts self-assessment each year to confirm that all departments and the Group have properly complied with the risk management and internal control policy.

The internal audit department is responsible for independent review of the adequacy and effectiveness of risk management and internal control systems. During the year under review, the internal audit department reviewed important issues such as the relevant strategic management, major operational and financial reporting procedure adequacy of resources, staff qualifications and experiences, regulatory compliance, and provided its findings and recommendations to the Audit Committee for improvement.

Any internal control defects identified by the internal audit department will be communicated to the department in question with advice for correction and remediation. Before the end of year, the status will be reviewed. The compliance department will also assist in the correction and remediation. Any unresolved control defects at the end of the year will be informed to the management. For the year ended 31 December 2019, no material internal control defect was detected.

The Audit Committee reviews the Company's material controls, including financial, operational and compliance controls, and risk management and internal control systems at least annually. During the year ended 31 December 2019, the Audit Committee conducted a review of the effectiveness of the risk management and internal control systems of the Group, including the above-mentioned material controls. The review has covered various aspects of the Group's risk management and internal control systems. In the review, the Audit Committee reviewed the report from the management and the findings and recommendations from the internal audit department. The review results were reported to the Board. The Board is satisfied that such systems are effective and adequate.

The Group has also adopted an information disclosure policy which has set out comprehensive guidelines in respect of handling and dissemination of inside information. The Board is entrusted with the responsibility for monitoring and implementing the procedural requirements in the information disclosure policy. Release of inside information shall be led by the Board. Unless duly authorized, all staff members of the Company shall not disseminate inside information relating to the Group to any external parties and shall not respond to media report or market speculation which may materially affect the trading price or volume of the Shares.

AUDITOR'S REMUNERATION

Ernst & Young was appointed as the Auditor for the annual audit of the Group and other audit services for the year ended 31 December 2019.

The remuneration for the services provided by Ernst & Young to the Group for the year ended 31 December 2019 was as follows:

Type of Services	Amount (RMB'000)
Audit services	7,144
Review services	2,223
Total	9,367

COMPANY SECRETARY

The company secretary of the Company is responsible for advising the Board on corporate governance matters and ensuring that the Board policies and procedures, as well as the applicable laws, rules and regulations are followed.

In order to uphold good corporate governance and ensure compliance with the Listing Rules and applicable Hong Kong laws, the Company engages Ms. LEUNG Suet Wing ("**Ms. LEUNG**"), a manager of TMF Hong Kong Limited (a company secretarial service provider), as the company secretary.

Effective on 8 October 2019, Ms. LIU Yanli ("**Ms. LIU**") resigned as a joint company secretary of the Company due to her other business engagement and roles within the Group. Upon Ms. Liu's resignation as a joint company secretary, Ms. Leung became the sole company secretary of the Company. The primary corporate contact person at the Company is Ms. SU Dongmei.

For the year ended 31 December 2019, each of Ms. LEUNG and Ms. LIU has undertaken not less than 15 hours of relevant professional training in compliance with rule 3.29 of the Listing Rules.

COMMUNICATION WITH SHAREHOLDERS AND INVESTOR RELATIONS

The Company considers that effective communication with the shareholders is essential for enhancing investor relations and understanding of the Group's business, performance and strategies. The Company also recognizes the importance of timely and non-selective disclosure of information, which will enable shareholders and investors to make the informed investment decisions.

The AGM of the Company provides opportunity for the shareholders to communicate directly with the Directors. The chairman of the Board and the chairmen of the Board Committees of the Company will attend the AGM to answer shareholders' questions. The Auditor will also attend the AGM to answer questions about the conduct of the audit, the preparation and content of the Auditors' report, the accounting policies and auditor independence.

To promote effective communication, the Company adopts a shareholders' communication policy which aims at establishing a two-way relationship and communication between the Company and the shareholders and maintaining such relationship and communication on the websites of the Stock Exchange at www.hkexnews.hk and of the Company at www.3sbio.com, where up-to-date information on the Company's business operations and developments, financial information, corporate governance practices and other information is available for public access.

DIVIDEND POLICY

The Board shall consider various factors before declaring or recommending dividends, including the Company's actual and expected financial performance; retained earnings and distributable reserves of the Company and each of the members of the Group; the Group's working capital requirements, capital expenditure requirements and future expansion plans; the Group's liquidity position; general economic conditions, business cycle of the Group's business and other internal or external factors that may have an impact on the business or financial performance and position of the Company; and other factors that the Board deems relevant.

The payment of dividend is also subject to compliance with applicable laws and regulations including the laws of Cayman Islands and the Company's Memorandum and Articles of Association.

As a holding company, the Company is dependent upon the receipt of cash distributions from its PRC subsidiaries to fund any dividend payments. The ability of these subsidiaries to make dividend and other payments to the Company is restricted by their constitutional documents and to the laws of and regulations of the PRC.

SHAREHOLDERS' RIGHTS

To safeguard shareholders' interests and rights, a separate resolution will be proposed for each issue at general meetings, including the election of individual Directors.

All resolutions put forward at general meetings will be voted by poll pursuant to the Listing Rules and poll results will be posted on the websites of the Company and the Stock Exchange in a timely manner after each general meeting.

Convening of extraordinary general meeting and putting forward proposals

Shareholders do not generally have a right to propose new resolutions at general meetings. Shareholders who wish to propose a resolution may request the Company to convene an extraordinary general meeting following the procedures as set out below.

Any one or more members holding as at the date of deposit of the requisition not less than one-tenth of the paid-up capital of the Company carrying the right of voting at general meetings of the Company shall at all times have the right, by written requisition to the Board or the secretary of the Company, to require an extraordinary general meeting of the Company to be called by the Board for the transaction of any business specified in such requisition; and such meeting shall be held within two months after the deposit of such requisition. If within 21 days of such deposit, the Board fails to proceed to convene such meeting, the requisitionist(s) himself (themselves) may do so in the same manner, and all reasonable expenses incurred by the requisitionist(s) as a result of the failure of the Board shall be reimbursed to the requisitionist(s) by the Company.

As regards proposing a person for election as a Director, the procedures are available on the website of the Company.

Enquiries to the Board

Shareholders who intend to put forward their enquiries about the Company to the Board could send their enquiries to the principal place of business in Hong Kong of the Company at 31/F, Tower Two, Times Square, 1 Matheson Street, Causeway Bay, Hong Kong (email address: ir@3sbio.com).

CHANGE IN CONSTITUTIONAL DOCUMENTS

There was no change in the Memorandum and Articles of Association of the Company for the year ended 31 December 2019.

Independent Auditor's Report

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To the shareholders of 3SBio Inc.
(Incorporated in the Cayman Islands as an exempted company with limited liability)

Opinion

We have audited the consolidated financial statements of 3SBio Inc. (the "**Company**") and its subsidiaries (the "**Group**") set out on pages 83 to 212, which comprise the consolidated statement of financial position as at 31 December 2019, and the consolidated statement of profit or loss, the consolidated statement of comprehensive income, the consolidated statement of changes in equity and the consolidated statement of cash flows for the year then ended, and notes to consolidated the 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 31 December 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 ("**IASB**") and have been properly prepared in compliance with disclosure requirements of the Hong Kong Companies Ordinance.

Basis for opinion

We conducted our audit in accordance with International Standards on Auditing ("**ISAs**") issued by the International Auditing and Assurance Standards Board ("**IAASB**"). 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 Hong Kong Institute of Certified Public Accountants' *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.

To the shareholders of 3SBio Inc.
(Incorporated in the Cayman Islands as an exempted company with limited liability)

Key audit matters

Key audit matters are those matters that, in our professional judgement, 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. For each matter below, our description of how our audit addressed the matter is provided in that context.

We have fulfilled the responsibilities described in the *Auditor's responsibilities for the audit of the consolidated financial statements* section of our report, including in relation to these matters. Accordingly, our audit included the performance of procedures designed to respond to our assessment of the risks of material misstatement of the consolidated financial statements. The results of our audit procedures, including the procedures performed to address the matters below, provide the basis for our audit opinion on the accompanying consolidated financial statements.

To the shareholders of 3SBio Inc.

(Incorporated in the Cayman Islands as an exempted company with limited liability)

Key audit matters (continued)

Key audit matter	How our audit addressed the key audit matter
Impairment of other intangible assets with indefinite life	
As at 31 December 2019, other intangible assets with indefinite lives amounted to RMB151,764,000. In accordance with IAS 36 *Impairment of Assets*, intangible assets with indefinite useful lives are tested for impairment annually either individually or at the cash-generating unit level. The impairment reviews performed by the Group contained a number of significant judgements and estimates including growth rate, royalty rate and discount rates. Changes in these assumptions might lead to a change in the carrying value of intangible assets. The Group's disclosures on other intangible assets with indefinite lives are included in note 17 to the financial statements.	Our audit procedures included, among others, a review of the models and the assumptions applied by management in assessing the forecasted revenue growth and profit margins. We evaluated management's sensitivity analyses to ascertain the impact of reasonably possible changes to key assumptions on the available headroom. We also reviewed the Group's disclosures of the assumptions applied in assessing the impairment of those intangible assets. We involved internal valuation experts to assess key assumptions in valuation models including growth rate, royalty rate and discount rates.

To the shareholders of 3SBio Inc.

(Incorporated in the Cayman Islands as an exempted company with limited liability)

Key audit matters (continued)

Key audit matter	How our audit addressed the key audit matter
Impairment of goodwill	
As at 31 December 2019, the carrying amount of goodwill was RMB4,145,896,000. In accordance with IAS 36 *Impairment of Assets*, the Group is required to test goodwill for impairment annually. Management performs the impairment assessment using a value in use calculation based on the discounted cash flow method. This assessment is complex and judgemental and is based on assumptions, such as forecasted revenue growth rate, profit margins and the discount rates, which are affected by expected future market or economic conditions, particularly in Mainland China. The Group's disclosures on goodwill are included in note 16 to the financial statements.	Our audit procedures included, among others, a review of the assumptions with actual results of prior periods applied by management in assessing the forecasted revenue growth rate, profit margins and discount rates. We evaluated management's identification of CGU and impairment model used by the Group. We also reviewed the Group's disclosures of those assumptions to which the outcome of the impairment test was most sensitive and which had the most significant effect on the determination of the recoverable amount of goodwill. We involved internal valuation experts in benchmarking key assumptions in valuation models including expected perpetual rates and discount rates.

To the shareholders of 3SBio Inc.
(Incorporated in the Cayman Islands as an exempted company with limited liability)

Other information included in the Annual Report

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

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

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

Responsibilities of the directors 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 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 of the Company either intend to liquidate the Group or to cease operations or have no realistic alternative but to do so.

The directors of the Company are assisted by the Audit Committee in discharging their responsibilities for overseeing the Group's financial reporting process.

To the shareholders of 3SBio Inc.
(Incorporated in the Cayman Islands as an exempted company with limited liability)

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. Our report is made solely to you, as a body, and for no other purpose. We do not assume responsibility towards or accept liability to any other person for the contents of this report.

Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with ISAs will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these consolidated financial statements.

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

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

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

To the shareholders of 3SBio Inc.

(Incorporated in the Cayman Islands as an exempted company with limited liability)

Auditor's responsibilities for the audit of the consolidated financial statements (continued)

- 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.

To the shareholders of 3SBio Inc.
(Incorporated in the Cayman Islands as an exempted company with limited liability)

Auditor's responsibilities for the audit of the consolidated financial statements (continued)

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

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

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

The engagement partner on the audit resulting in this independent auditor's report is Tong Ka Yan, Augustine.

Ernst & Young
Certified Public Accountants
Hong Kong
30 March 2020

Consolidated Statement of Profit or Loss

Year ended 31 December 2019

	Notes	2019 RMB'000	2018 RMB'000
REVENUE	5	**5,318,091**	4,583,869
Cost of sales	6	**(925,347)**	(877,255)
Gross profit		**4,392,744**	3,706,614
Other income and gains	5	**218,107**	429,810
Selling and distribution expenses		**(1,950,733)**	(1,691,167)
Administrative expenses		**(676,009)**	(316,751)
Research and development costs		**(526,565)**	(362,706)
Other expenses	6	**(114,024)**	(123,662)
Finance costs	7	**(109,476)**	(138,382)
Share of profits and losses of:			
A joint venture	18	**4,970**	—
Associates	19	**(16,001)**	(8,245)
PROFIT BEFORE TAX		**1,223,013**	1,495,511
Income tax expense	11	**(242,785)**	(218,265)
PROFIT FOR THE YEAR		**980,228**	1,277,246
Attributable to:			
Owners of the parent		**973,717**	1,277,167
Non-controlling interests		**6,511**	79
		980,228	1,277,246
EARNINGS PER SHARE ATTRIBUTABLE TO ORDINARY EQUITY HOLDERS OF THE PARENT			
— Basic (RMB)	13	**0.38**	0.50
— Diluted (RMB)	13	**0.38**	0.49

Consolidated Statement of Comprehensive Income

Year ended 31 December 2019

	2019 RMB'000	2018 RMB'000
PROFIT FOR THE YEAR	**980,228**	1,277,246
OTHER COMPREHENSIVE INCOME		
Other comprehensive income that may be reclassified to profit or loss in subsequent periods:		
Exchange differences:		
Exchange differences on translation of foreign operations	**27,732**	93,539
Net other comprehensive income that may be reclassified to profit or loss in subsequent periods	**27,732**	93,539
Other comprehensive (loss)/income that will not be reclassified to profit or loss in subsequent periods:		
Equity investments designated at fair value through other comprehensive income:		
Changes in fair value	**(2,801)**	16,740
Income tax effect	**3,660**	(6,394)
Net other comprehensive income that will not be reclassified to profit or loss in subsequent periods	**859**	10,346
OTHER COMPREHENSIVE INCOME FOR THE YEAR, NET OF TAX	**28,591**	103,885
TOTAL COMPREHENSIVE INCOME FOR THE YEAR	**1,008,819**	1,381,131
Attributable to:		
Owners of the parent	**1,002,308**	1,381,052
Non-controlling interests	**6,511**	79
	1,008,819	1,381,131

Consolidated Statement of Financial Position

31 December 2019

	Notes	2019 RMB'000	2018 RMB'000
NON-CURRENT ASSETS			
Property, plant and equipment	14	**1,988,793**	1,791,961
Right-of-use assets	15(b)	**335,936**	—
Prepaid land lease payments	15(a)	**—**	326,457
Goodwill	16	**4,145,896**	4,089,064
Other intangible assets	17	**2,165,139**	2,298,735
Investment in a joint venture	18	**7,470**	2,500
Investments in associates	19	**593,414**	385,850
Equity investments designated at fair value through other comprehensive income	20	**676,989**	313,246
Long-term receivables	21	**6,555**	28,758
Prepayments, other receivables and other assets	25	**163,909**	81,149
Deferred tax assets	22	**129,024**	84,402
Total non-current assets		**10,213,125**	9,402,122
CURRENT ASSETS			
Inventories	23	**528,473**	384,609
Trade and notes receivables	24	**1,018,265**	1,483,885
Prepayments, other receivables and other assets	25	**472,360**	693,997
Equity investments designated at fair value through other comprehensive income	20	**—**	32,872
Financial assets at fair value through profit or loss	26	**472,163**	35,260
Derivative financial instrument		**—**	16
Pledged deposits	27	**22,073**	14,289
Cash and cash equivalents	27	**2,082,847**	1,792,605
Total current assets		**4,596,181**	4,437,533
CURRENT LIABILITIES			
Trade and bills payables	28	**149,763**	112,915
Other payables and accruals	29	**913,990**	845,725
Deferred income	30	**37,217**	35,887
Interest-bearing bank and other borrowings	31	**483,957**	570,328
Lease liabilities	15(c)	**5,467**	—
Tax payable		**21,335**	90,686
Total current liabilities		**1,611,729**	1,655,541
NET CURRENT ASSETS		**2,984,452**	2,781,992
TOTAL ASSETS LESS CURRENT LIABILITIES		**13,197,577**	12,184,114

Consolidated Statement of Financial Position (continued)

31 December 2019

	Notes	2019 RMB'000	2018 RMB'000
NON-CURRENT LIABILITIES			
Interest-bearing bank and other borrowings	31	**13,286**	425,022
Lease liabilities	15(c)	**3,964**	—
Convertible bonds	32	**2,304,750**	2,299,321
Deferred income	30	**242,314**	275,337
Deferred tax liabilities	22	**268,077**	270,761
Other non-current liabilities		**5,867**	6,303
Total non-current liabilities		**2,838,258**	3,276,744
Net assets		**10,359,319**	8,907,370
EQUITY			
Equity attributable to owners of the parent			
Share capital	34	**155**	156
Treasury shares	34	**—**	(40,586)
Share premium	34	**4,307,795**	4,376,056
Other reserves		**5,317,091**	4,278,807
		9,625,041	8,614,433
Non-controlling interests		**734,278**	292,937
Total equity		**10,359,319**	8,907,370

Consolidated Statement of Changes in Equity

Year ended 31 December 2019

	Attributable to owners of the parent											
	Share capital RMB'000 (note 34)	Treasury shares RMB'000 (note 34)	Share premium RMB'000 (note 34)	Contributed surplus* RMB'000 (note 35)	Equity component of convertible bonds* RMB'000 (note 32)	Statutory surplus reserves* RMB'000 (note 36)	Retained earnings* RMB'000	Available-for-sale investment revaluation/ Fair value reserve* RMB'000	Exchange fluctuation reserve* RMB'000	Total RMB'000	Non-controlling interests RMB'000	Total equity RMB'000
At 31 December 2017	156	–	4,372,460	195,788	47,133	307,794	2,443,925	(4,393)	33,925	7,396,788	232,858	7,629,646
Effect of adoption of IFRS 9	–	–	–	–	–	–	–	–	–	–	–	–
Effect of adoption of IFRS 15	–	–	–	–	–	–	–	–	–	–	–	–
At 1 January 2018	156	–	4,372,460	195,788	47,133	307,794	2,443,925	(4,393)	33,925	7,396,788	232,858	7,629,646
Profit for the year	–	–	–	–	–	–	1,277,167	–	–	1,277,167	79	1,277,246
Other comprehensive income for the year:												
Change in fair value of equity investments at fair value through other comprehensive income, net of tax	–	–	–	–	–	–	–	10,346	–	10,346	–	10,346
Exchange differences related to foreign operations	–	–	–	–	–	–	–	–	93,539	93,539	–	93,539
Total comprehensive income for the year	–	–	–	–	–	–	1,277,167	10,346	93,539	1,381,052	79	1,381,131
Transfer to statutory reserves	–	–	–	–	–	129,939	(129,939)	–	–	–	–	–
Shares repurchased	–	(40,586)	–	–	–	–	–	–	–	(40,586)	–	(40,586)
Equity-settled share option arrangements (note 35)	–	–	–	17,487	–	–	–	–	–	17,487	–	17,487
Capital injection from a non-controlling shareholder	–	–	–	–	–	–	–	–	–	–	60,000	60,000
2017 final dividends	–	–	–	–	–	–	(140,308)	–	–	(140,308)	–	(140,308)
Transfer to retained profits	–	–	–	–	–	–	5,796	(5,796)	–	–	–	–
Shares issued upon exercise of warrants	–	–	3,596	(3,596)	–	–	–	–	–	–	–	–
At 31 December 2018	156	(40,586)	4,376,056	209,679	47,133	437,733	3,456,641	157	127,464	8,614,433	292,937	8,907,370

Consolidated Statement of Changes in Equity

Year ended 31 December 2019

	Attributable to owners of the parent											
	Share capital RMB'000 (note 34)	Treasury shares RMB'000 (note 34)	Share premium RMB'000 (note 34)	Contributed surplus* RMB'000 (note 35)	Equity component of convertible bonds* RMB'000 (note 32)	Statutory surplus reserves* RMB'000 (note 36)	Retained earnings* RMB'000	Fair value reserve* RMB'000	Exchange fluctuation reserve* RMB'000	Total RMB'000	Non-controlling interests RMB'000	Total equity RMB'000
At 31 December 2018	156	(40,586)	4,376,056	209,679	47,133	437,733	3,456,641	157	127,464	8,614,433	292,937	8,907,370
Effect of adoption of IFRS 16	–	–	–	–	–	–	–	–	–	–	–	–
At 1 January 2019 (restated)	156	(40,586)	4,376,056	209,679	47,133	437,733	3,456,641	157	127,464	8,614,433	292,937	8,907,370
Profit for the year	–	–	–	–	–	–	973,717	–	–	973,717	6,511	980,228
Other comprehensive income for the year:												
Change in fair value of equity investments at fair value through other comprehensive income, net of tax	–	–	–	–	–	–	–	895	–	895	–	895
Exchange differences related to foreign operations	–	–	–	–	–	–	–	–	27,732	27,732	–	27,732
Total comprehensive income for the year							973,717	895	27,732	1,002,344	6,511	1,008,856
Transfer to statutory reserves	–	–	–	–	–	142,807	(142,807)	–	–	–	–	–
Shares repurchased	–	(38,180)	–	–	–	–	–	–	–	(38,180)	–	(38,180)
Shares cancelled	(1)	78,766	(78,765)	–	–	–	–	–	–	–	–	–
Equity-settled share option arrangements (note 35)	–	–	–	11,001	–	–	–	–	–	11,001	–	11,001
Shares issued upon exercise of share option (Note 35)	–	–	10,504	(3,369)	–	–	–	–	–	7,135	–	7,135
The expenses associated with the shares awarded under the employee share ownership plan (Note 35)	–	–	–	335,110	–	–	–	–	–	335,110	–	335,110
Shares issued upon exercise of the shares awarded under the employee share ownership plan (Note 35)	–	–	–	(306,802)	–	–	–	–	–	(306,802)	351,169	44,367
Capital injection from a non-controlling shareholder	–	–	–	–	–	–	–	–	–	–	100,000	100,000
Dividends paid by a subsidiary	–	–	–	–	–	–	–	–	–	–	(16,339)	(16,339)
At 31 December 2019	155	–	4,307,795	245,619	47,133	580,540	4,287,551	1,052	155,196	9,625,041	734,278	10,359,319

* These reserve accounts comprised the consolidated other reserves of approximately RMB5,305,572,000 (2018: RMB4,278,807,000) in the consolidated statement of financial position.

Consolidated Statement of Cash Flows

Year ended 31 December 2019

	Notes	2019 RMB'000	2018 RMB'000
CASH FLOWS FROM OPERATING ACTIVITIES			
Profit before tax		**1,223,013**	1,495,511
Adjustments for:			
Finance costs	7	**109,476**	138,382
Share of profits and losses of a joint venture and associates	18,19	**11,031**	8,245
Fair value loss on a derivative financial instrument	6	**—**	1,323
Interest income	5	**(83,858)**	(64,771)
Foreign exchange differences	5	**(47,622)**	(83,786)
Charge of share-based compensation costs	35	**346,111**	17,487
Depreciation	6	**185,608**	165,248
Amortisation of other intangible assets	6	**135,068**	148,016
Depreciation of right-of-use assets (2018: amortisation of land lease payments)	6	**13,292**	8,480
Amortisation of long-term deferred expenditures	6	**3,780**	1,958
Recognition of deferred income	30	**(44,436)**	(43,291)
(Reversal of provision)/provision for impairment of trade receivables	6	**(12,078)**	36,622
Provision for impairment of prepayments, other receivables and other assets	6	**25,717**	23,299
Provision for impairment of long term receivables	6	**28,170**	8,095
Reversal of provision for impairment of inventories	23	**1,507**	(507)
Loss on disposal of items of property, plant and equipment	6	**3,367**	10,054
Gain on reclassification from an investment in an associate to an equity investment designated at fair value through other comprehensive income	5	**—**	(201,324)
Loss on disposal of a derivative financial instrument		**86**	—
Payment of service fee in relation to non-operation activities		**—**	(12,346)
		1,898,232	1,656,695
Increase in inventories		**(124,854)**	(35,724)
(Increase)/decrease in pledged deposits		**(9,752)**	15
Decrease/(increase) in trade and notes receivables		**453,884**	(264,464)
(Increase)/decrease in prepayments, other receivables and other assets		**(65,900)**	2,561
Increase/(decrease) in trade and bills payables		**37,035**	(51,811)
Increase in other payables and accruals		**54,068**	106,317
Cash generated from operations		**2,242,713**	1,413,589
Income tax paid		**(355,329)**	(263,338)
Net cash flows from operating activities		**1,887,384**	1,150,251

Consolidated Statement of Cash Flows (continued)

Year ended 31 December 2019

	Notes	2019 RMB'000	2018 RMB'000
CASH FLOWS FROM INVESTING ACTIVITIES			
Interest received		**68,282**	63,714
Purchases of items of property, plant and equipment		**(471,401)**	(247,320)
Purchase of financial assets at fair value through profit or loss		**(11,005,103)**	(2,489,510)
Purchase of equity investments designated at fair value through other comprehensive income		**(326,199)**	(67,469)
Proceeds from disposal of financial assets at fair value through profit or loss		**10,568,200**	3,126,004
Proceeds from disposal of equity investments designated at fair value through other comprehensive income		**—**	42,946
Addition to land lease prepayment	15	**—**	(28,959)
Advance of a loan to a related party		**(32,200)**	(230,742)
Advance of a loan to a third party		**(20,000)**	(9,608)
Repayment of loans from a related party		**30,100**	—
Repayment of loans from third parties		**285,785**	—
Payment for an investment in a joint venture	18	**—**	(2,500)
Payment for investments in associates		**(218,734)**	(386,774)
Disposal of a subsidiary		**(256)**	—
Addition to other intangible assets		**(14,852)**	(186,117)
Proceeds from disposal of items of property, plant and equipment		**2,020**	3,098
Received fund from government grants		**641**	7,325
Net cash flows used in investing activities		**(1,133,717)**	(405,912)
CASH FLOWS FROM FINANCING ACTIVITIES			
Proceeds from issue of shares		**7,135**	—
Received capital injection from non-controlling shareholders		**144,367**	60,000
Decrease/(increase) in pledged deposits		**1,968**	(2,459)
Repayments of bank borrowings		**(1,740,529)**	(1,588,192)
Acquisition of treasury shares		**(38,181)**	(40,586)
Proceeds from bank borrowings		**1,230,007**	399,340
Principal portion of lease payments		**(4,592)**	—
Dividend paid		**(16,339)**	(150,813)
Interest paid		**(38,236)**	(66,968)
Net cash flows used in financing activities		**(454,400)**	(1,389,678)
NET INCREASE/(DECREASE) IN CASH AND CASH EQUIVALENTS		**299,267**	(645,339)
Cash and cash equivalents at beginning of the year		**1,792,605**	2,398,621
Effect of foreign exchange rate changes on cash, net		**(9,025)**	39,323
CASH AND CASH EQUIVALENTS AT END OF THE YEAR		**2,082,847**	1,792,605
ANALYSIS OF BALANCES OF CASH AND CASH EQUIVALENTS			
Cash and bank balances	27	**2,082,142**	1,791,104
Restricted cash	27	**705**	1,501
Cash and cash equivalents as stated in the consolidated statement of financial position and the consolidated statement of cash flows		**2,082,847**	1,792,605

1. Corporate and group information

3SBio Inc. (the "**Company**") was incorporated in the Cayman Islands as an exempted company with limited liability under the Cayman Islands Companies Laws on 9 August 2006. The registered office address of the Company is Cricket Square, Hutchins Drive, P.O. Box 2681, Grand Cayman, KY1-1111, Cayman Islands. The Company's shares were listed on the Main Board of The Stock Exchange of Hong Kong Limited (the "**Stock Exchange**") on 11 June 2015.

The Company is an investment holding company. During the year, the subsidiaries of the Company were principally engaged in the development, production, marketing and sale of biopharmaceutical products in the mainland area ("**Mainland China**") of the People's Republic of China (the "**PRC**").

Information about subsidiaries

Particulars of the Company's principal subsidiaries are as follows:

Company name	Place and date of incorporation/ registration and place of operations	Nominal value of issued ordinary/ registered share capital	Percentage of equity attributable to the Company		Principal activities
			Direct	Indirect	
Collected Mind Limited ("**Collected Mind**") (集思有限公司)	British Virgin Islands* 3 May 2006	United States Dollar ("**USD**") 1	100%	–	Investment holding
Hongkong Sansheng Medical Limited ("**Hongkong Sansheng**") (香港三生醫藥有限公司)	Hong Kong 3 November 2009	Hong Kong Dollar ("**HKD**") 2	–	100%	Trading and investment holding
Shenyang Sunshine Pharmaceutical Co., Ltd. ("**Shenyang Sunshine**") (瀋陽三生製藥有限責任公司)	PRC/Mainland China* 3 January 1993	Renminbi ("**RMB**") 2,500,000,000	–	100%	Manufacture and sale of biopharmaceutical drugs and research and development
Liaoning Sunshine Bio-Pharmaceutical Company Ltd. ("**Liaoning Sunshine**") (遼寧三生醫藥有限公司)	PRC/Mainland China* 1 February 2000	RMB15,000,000	–	100%	Distribution and sale of pharmaceutical drugs

1. Corporate and group information (continued)

Information about subsidiaries (continued)

Company name	Place and date of incorporation/ registration and place of operations	Nominal value of issued ordinary/ registered share capital	Percentage of equity attributable to the Company		Principal activities
			Direct	Indirect	
Taizhou Huan Sheng Investment Management Company Ltd. (泰州環晟投資管理有限公司)	PRC/Mainland China* 29 December 2010	RMB1,000,000	–	100%	Project management and consultation
Taizhou Huan Sheng Healthcare Industry Investment Centre LLP ("**Taizhou Centre**") (泰州環晟健康產業投資中心)	PRC/Mainland China* 30 May 2011	RMB250,000,000	–	80%	Investment holding
Excel Partner Holdings Limited ("**Excel Partner**") (特隆控股有限公司)	Hong Kong* 8 July 2010	HKD1	–	100%	Investment holding
Sirton Pharmaceuticals S.p.A. ("**Sirton**")	Italy 22 November 2010	Euro ("**EUR**") 300,000	–	100%	Manufacture and sale of pharmaceutical drugs and research and development
Ample Harvest Investments Limited ("**Ample Harvest**") (溢豐投資有限公司)	British Virgin Islands* 2 January 2003	USD10	–	100%	Investment holding
Shenzhen Baishitong Technology Development Company Limited ("**Shenzhen Baishitong**") (深圳市百士通科技開發有限公司)	PRC/Mainland China* 8 March 2002	RMB500,000	–	100%	Investment holding

1. Corporate and group information (continued)

Information about subsidiaries (continued)

Company name	Place and date of incorporation/ registration and place of operations	Nominal value of issued ordinary/ registered share capital	Percentage of equity attributable to the Company		Principal activities
			Direct	Indirect	
Shenzhen Sciprogen Bio-pharmaceutical Co., Ltd. ("**Sciprogen**") (深圳賽保爾生物藥業有限公司)	PRC/Mainland China* 22 March 1999	RMB160,000,000	–	100%	Manufacture and sale of pharmaceutical drugs and research and development
Guangdong Sciprogen Bio-pharmaceutical Technology Co., Ltd. ("**Guangdong Sciprogen**") (廣東賽保爾生物醫藥技術有限公司)	PRC/Mainland China* 30 June 2011	RMB10,000,000	–	100%	Manufacture and sale of pharmaceutical drugs and research and development
Shanghai Anran Bio-technology Co., Ltd. ("**Shanghai Anran**") (上海安冉生物科技有限公司)	PRC/Mainland China* 21 December 2016	RMB10,000,000	–	100%	Research and development of bio-technology and drugs and sale of chemical products
Zhejiang Wansheng Pharmaceutical Co., Ltd. ("**Zhejiang Wansheng**") (浙江萬晟藥業有限公司)	PRC/Mainland China* 27 October 1997	RMB56,500,000	–	100%	Manufacture and sale of pharmaceutical drugs and research and development
Gains Prestige Limited ("**Gains Prestige**") (澤威有限公司)	British Virgin Islands* 2 September 2014	HKD8	100%	–	Investment holding

1. Corporate and group information (continued)

Information about subsidiaries (continued)

Company name	Place and date of incorporation/ registration and place of operations	Nominal value of issued ordinary/ registered share capital	Percentage of equity attributable to the Company		Principal activities
			Direct	Indirect	
Full Gain Limited ("**Full Gain**") (富健藥業有限公司)	Hong Kong* 6 October 2014	HKD1	–	100%	Investment holding
Shanghai Xingsheng Pharmaceutical Company Limited ("**Xing Sheng**") (上海興生藥業有限公司)	PRC/Mainland China* 23 December 1998	RMB410,000,000	–	96.25%	Investment holding
Sunshine Guojian Pharmaceutical (Shanghai) Co., Ltd. ("**Sunshine Guojian**") (三生國健藥業(上海)股份有限公司)	PRC/Mainland China 25 January 2002	RMB554,590,271	–	88.52%	Manufacture and sale of biopharmaceutical drugs and research and development
National Engineering Research Center of Antibody Medicine ("**NERC**") (上海抗體藥物國家工程研究中心有限公司)	PRC/Mainland China 15 January 2009	RMB260,000,000	–	61.54%	Manufacture and sale of biopharmaceutical drugs and research and development

1. Corporate and group information (continued)

Information about subsidiaries (continued)

Company name	Place and date of incorporation/ registration and place of operations	Nominal value of issued ordinary/ registered share capital	Percentage of equity attributable to the Company		Principal activities
			Direct	Indirect	
Cn-Gen Mab Co., Ltd. ("**Cn-Gen Mab**") (中健抗體有限公司)	Hong Kong 19 September 2012	HKD1,000,000	–	100%	Distribution and sale of pharmaceutical drugs
Sunshine Guojian Pharmaceutical (Suzhou) Co., Ltd. (三生國健藥業(蘇州)有限公司)	PRC/Mainland China* 25 November 2013	RMB150,000,000	–	100%	Manufacture and sale of biopharmaceutical drugs and research and development
Shanghai Shengguo Pharmaceutical Development Co., Ltd. (上海晟國醫藥發展有限公司)	PRC/Mainland China* 29 January 2014	RMB100,000,000	–	100%	Technology services
Shanghai Hongshang Investment Co., Ltd. ("**Shanghai Hongshang**") (上海翃熵投資諮詢有限公司)	PRC/Mainland China* 5 November 2015	RMB1,034,100,000	–	100%	Investment holding
Guangdong Sunshine Pharmaceutical Co., Ltd ("**Guangdong Sunshine**") (廣東三生製藥有限公司)	PRC/Mainland China* 7 December 2016	RMB40,000,000	–	100%	Manufacture and sale of biopharmaceutical drugs and research and development

1. Corporate and group information (continued)

Information about subsidiaries (continued)

Company name	Place and date of incorporation/ registration and place of operations	Nominal value of issued ordinary/ registered share capital	Percentage of equity attributable to the Company		Principal activities
			Direct	Indirect	
Strategic International Group Limited ("**Strategic International**")	British Virgin Islands* 14 June 2017	EUR50,000	100%	–	Investment holding
Grand Path Holdings Limited ("**Grand Path Holdings**")	Hong Kong 13 May 2010	HKD16,000	100%	–	Investment holding
NMV Desen Biotech Co., Ltd. ("**Desen Biotech**") (北方藥穀德生(瀋陽)生物科技有限責任公司)	PRC/Mainland China* 26 February 2018	RMB3,830,000,000	–	90.34%	Manufacture and sale of biopharmaceutical drugs and research and development

* Not audited by Ernst & Young, Hong Kong or another member firm of the Ernst & Young global network.

The English names of these companies registered in the PRC represent the best effort made by the management of the Company to directly translate their Chinese names as these companies do not register any official English names.

The above table lists the subsidiaries of the Company which, in the opinion of the directors, principally affected the results for the year or formed a substantial portion of the net assets of the Company and its subsidiaries (together, the "**Group**"). To give details of other subsidiaries would, in the opinion of the directors, result in particulars of excessive length.

2.1 Basis of preparation

These financial statements have been prepared in accordance with International Financial Reporting Standards ("**IFRSs**") (which include all International Financial Reporting Standards, International Accounting Standards ("**IASs**") and Interpretations) issued by the International Accounting Standards Board ("**IASB**"), accounting principles generally accepted in Hong Kong and the disclosure requirements of the Hong Kong Companies Ordinance. They have been prepared under the historical cost convention, except for a derivative financial instrument, equity investments and certain financial assets which have been measured at fair value. These financial statements are presented in RMB and all values are rounded to the nearest thousand except when otherwise indicated.

Basis of consolidation

The consolidated financial statements include the financial statements of the Company and its subsidiaries (collectively referred to as the "**Group**") for the year ended 31 December 2019. A subsidiary is an entity (including a structured entity), directly or indirectly, controlled by the Company. Control is achieved when the Group is exposed, or has rights, to variable returns from its involvement with the investee and has the ability to affect those returns through its power over the investee (i.e., existing rights that give the Group the current ability to direct the relevant activities of the investee).

When the Company has, directly or indirectly, less than a majority of the voting or similar rights of an investee, the Group considers all relevant facts and circumstances in assessing whether it has power over an investee, including:

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

(b) rights arising from other contractual arrangements; and

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

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

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

2.1 Basis of preparation (continued)

Basis of consolidation (continued)

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

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

2.2 Changes in accounting policies and disclosures

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

Amendments to IFRS 9	*Prepayment Features with Negative Compensation*
IFRS 16	*Leases*
Amendments to IAS 19	*Plan Amendment, Curtailment or Settlement*
Amendments to IAS 28	*Long-term interests in Associates and Joint Ventures*
IFRIC 23	*Uncertainly over Income Tax Treatments*
Annual Improvements to IFRSs 2015–2017 Cycle	Amendments to IFRS 3, IFRS 11, IAS12 and IAS 23

Except for the amendments to IFRS 9 and IAS 19, and *Annual Improvements to IFRSs 2015–2017 Cycle*, which are not relevant to the preparation of the Group's financial statements, the nature and the impact of the new and revised IFRSs are described below:

(a) IFRS 16 replaces IAS 17 *Leases*, IFRIC 4 *Determining whether an Arrangement contains a Lease*, SIC 15 *Operating Leases — Incentives* and SIC 27 *Evaluating the Substance of Transactions Involving the Legal Form of a Lease*. The standard sets out the principles for the recognition, measurement, presentation and disclosure of leases and requires lessees to account for all leases under a single on-balance sheet model to recognise and measure right-of-use assets and lease liabilities, except for certain recognition exemptions. Lessor accounting under IFRS 16 is substantially unchanged from IAS 17. Lessors continue to classify leases as either operating or finance leases using similar principles as in IAS 17.

2.2 Changes in accounting policies and disclosures (continued)

(a) (continued)

The Group has adopted IFRS 16 using the modified retrospective method with the date of initial application of 1 January 2019. Under this method, the standard has been applied retrospectively with the cumulative effect of initial adoption recognised as an adjustment to the opening balance of retained profits at 1 January 2019, and the comparative information for 2018 was not restated and continues to be reported under IAS 17 and related interpretations.

New definition of a lease

Under IFRS 16, a contract is, or contains, a lease if the contract conveys a right to control the use of an identified asset for a period of time in exchange for consideration. Control is conveyed where the customer has both the right to obtain substantially all of the economic benefits from use of the identified asset and the right to direct the use of the identified asset. The Group elected to use the transition practical expedient allowing the standard to be applied only to contracts that were previously identified as leases applying IAS 17 and IFRIC 4 at the date of initial application. Contracts that were not identified as leases under IAS 17 and IFRIC 4 were not reassessed. Therefore, the definition of a lease under IFRS 16 has been applied only to contracts entered into or changed on or after 1 January 2019.

As a lessee — Leases previously classified as operating leases

Nature of the effect of adoption of IFRS 16

The Group has lease contracts for certain buildings. As a lessee, the Group previously classified leases as operating leases based on the assessment of whether the lease transferred substantially all the rewards and risks of ownership of assets to the Group. Under IFRS 16, the Group applies a single approach to recognise and measure right-of-use assets and lease liabilities for all leases, except for two elective exemptions for leases of low-value assets (elected on a lease-by-lease basis) and leases with a lease term of 12 months or less ("**short-term leases**") (elected by class of underlying asset). Instead of recognising rental expenses under operating leases on a straight-line basis over the lease term commencing from 1 January 2019, the Group recognises depreciation (and impairment, if any) of the right-of-use assets and interest accrued on the outstanding lease liabilities (as finance costs).

Impact on transition

Lease liabilities at 1 January 2019 were recognised based on the present value of the remaining lease payments, discounted using the incremental borrowing rate at 1 January 2019 and included in interest-bearing bank and other borrowings. The right-of-use assets were measured at the amount of the lease liability, adjusted by the amount of any prepaid or accrued lease payments relating to the lease recognised in the statement of financial position immediately before 1 January 2019.

2.2 Changes in accounting policies and disclosures (continued)

(a) (continued)

As a lessee — Leases previously classified as operating leases (continued)

Impact on transition (continued)

All these assets were assessed for any impairment based on IAS 36 on that date. The Group elected to present the right-of-use assets separately in the statement of financial position.

The Group has used the following elective practical expedients when applying IFRS 16 at 1 January 2019:

- Applying the short-term lease exemptions to leases with a lease term that ends within 12 months from the date of initial application

Financial impact at 1 January 2019

The impacts arising from the adoption of IFRS 16 as at 1 January 2019 are as follows:

	Increase/ (decrease) RMB'000
Assets	
Increase in right-of-use assets	**343,448**
Increase in deferred tax assets	**1,237**
Decrease in prepaid land lease payments	**(335,205)**
Increase in total assets	**9,480**
Liabilities	
Increase in lease liabilities (including current and non-current portion)	**8,243**
Increase in deferred liabilities	**1,237**
Increase in total liabilities	**9,480**

2.2 Changes in accounting policies and disclosures (continued)

(a) (continued)

Financial impact at 1 January 2019 (continued)

The lease liabilities as at 1 January 2019 reconciled to the operating lease commitments as at 31 December 2018 are as follows:

	RMB'000
Operating lease commitments as at 31 December 2018	11,851
Less: Commitments relating to short-term leases and those leases with a remaining term ended on or before 31 December 2019	(2,346)
	9,505
Weighted average incremental borrowing rate as at 1 January 2019	4.35%
Discounted operating lease commitments at 1 January 2019	8,243
Lease liabilities as at 1 January 2019	8,243

(b) Amendments to IAS 28 clarify that the scope exclusion of IFRS 9 only includes interests in an associate or joint venture to which the equity method is applied and does not include long-term interests that in substance form part of the net investment in the associate or joint venture, to which the equity method has not been applied. Therefore, an entity applies IFRS 9, rather than IAS 28, including the impairment requirements under IFRS 9, in accounting for such long-term interests. IAS 28 is then applied to the net investment, which includes the long-term interests, only in the context of recognising losses of an associate or joint venture and impairment of the net investment in the associate or joint venture. The Group assessed its business model for its long-term interests in associates and joint ventures upon adoption of the amendments on 1 January 2019 and concluded that the long-term interests in associates and joint ventures continued to be measured at amortised cost in accordance with IFRS 9. Accordingly, the amendments did not have any impact on the financial position or performance of the Group.

(c) IFRIC 23 addresses the accounting for income taxes (current and deferred) when tax treatments involve uncertainty that affects the application of IAS 12 (often referred to as "**uncertain tax positions**"). The interpretation does not apply to taxes or levies outside the scope of IAS 12, nor does it specifically include requirements relating to interest and penalties associated with uncertain tax treatments. The interpretation specifically addresses (i) whether an entity considers uncertain tax treatments separately; (ii) the assumptions an entity makes about the examination of tax treatments by taxation authorities; (iii) how an entity determines taxable profits or tax losses, tax bases, unused tax losses, unused tax credits and tax rates; and (iv) how an entity considers changes in facts and circumstances. The Group has assessed its tax position and determined that it is probable that it will be accepted by the tax authorities. Accordingly, the interpretation did not have any impact on the financial position or performance of the Group.

2.3 Issued but not yet effective international financial reporting standards

The Group has not applied the following new and revised IFRSs, that have been issued but are not yet effective, in these financial statements.

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

1 Effective for annual periods beginning on or after 1 January 2020
2 Effective for annual periods beginning on or after 1 January 2021
3 Effective for annual periods beginning on or after 1 January 2022
4 No mandatory effective date yet determined but available for adoption

Further information about those IFRSs that are expected to be applicable to the Group is described below.

Amendments to IFRS 3 clarify and provide additional guidance on the definition of a business. The amendments clarify that for an integrated set of activities and assets to be considered a business, it must include, at a minimum, an input and a substantive process that together significantly contribute to the ability to create output. A business can exist without including all of the inputs and processes needed to create outputs. The amendments remove the assessment of whether market participants are capable of acquiring the business and continue to produce outputs. Instead, the focus is on whether acquired inputs and acquired substantive processes together significantly contribute to the ability to create outputs. The amendments have also narrowed the definition of outputs to focus on goods or services provided to customers, investment income or other income from ordinary activities. Furthermore, the amendments provide guidance to assess whether an acquired process is substantive and introduce an optional fair value concentration test to permit a simplified assessment of whether an acquired set of activities and assets is not a business. The Group expects to adopt the amendments prospectively from 1 January 2020. Since the amendments apply prospectively to transactions or other events that occur on or after the date of first application, the Group will not be affected by these amendments on the date of transition.

2.3 Issued but not yet effective international financial reporting standards (continued)

Amendments to IFRS 9, IAS 39 and IFRS 7 address the effects of interbank offered rate reform on financial reporting. The amendments provide temporary reliefs which enable hedge accounting to continue during the period of uncertainty before the replacement of an existing interest rate benchmark. In addition, the amendments require companies to provide additional information to investors about their hedging relationships which are directly affected by these uncertainties. The amendments are effective for annual periods beginning on or after 1 January 2020. Early application is permitted. The amendments are not expected to have any significant impact on the Group's financial statements.

Amendments to IFRS 10 and IAS 28 address an inconsistency between the requirements in IFRS 10 and in IAS 28 in dealing with the sale or contribution of assets between an investor and its associate or joint venture. The amendments require a full recognition of a gain or loss when the sale or contribution of assets between an investor and its associate or joint venture constitutes a business. For a transaction involving assets that do not constitute a business, a gain or loss resulting from the transaction is recognised in the investor's profit or loss only to the extent of the unrelated investor's interest in that associate or joint venture. The amendments are to be applied prospectively. The previous mandatory effective date of amendments to IFRS 10 and IAS 28 was removed by the IASB in December 2015 and a new mandatory effective date will be determined after the completion of a broader Amendments to IAS 1 and IAS 8 provide a new definition of material. The new definition states that information is material if omitting, misstating or obscuring it could reasonably be expected to influence decisions that the primary users of general purpose financial statements make on the basis of those financial statements. The amendments clarify that materiality will depend on the nature or magnitude of information. A misstatement of information is material if it could reasonably be expected to influence decisions made by the primary users. The Group expects to adopt the amendments prospectively from 1 January 2020. The amendments are not expected to have any significant impact on the Group's financial statements.

The amendments to IAS 1 clarify the meaning of a right to defer settlement and that a right to defer must exist at the end of the reporting period. The amendments also clarify that the classification is unaffected by the likelihood that an entity will exercise its deferral right and only if an embedded derivative in a convertible liability is itself an equity instrument would the terms of a liability not impact its classification. The amendments to IAS 1 are required to be applied for annual periods beginning on or after 1 January 2022 and must be applied retrospectively. The amendments are not expected to have any significant impact on the Group's financial statements.

2.4 Summary of significant accounting policies

Investments in associates and joint ventures

An associate is an entity in which the Group has a long term interest of generally not less than 20% of the equity voting rights and over which it is in a position to exercise 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.

A joint venture is a type of joint arrangement whereby the parties that have joint control of the arrangement have rights to the net assets of the joint venture. Joint control is the contractually agreed sharing of control of an arrangement, which exists only when decisions about the relevant activities require the unanimous consent of the parties sharing control.

The Group's investments in associates and joint ventures are stated in the consolidated statement of financial position at the Group's share of net assets under the equity method of accounting, less any impairment losses. Adjustments are made to bring into line any dissimilar accounting policies that may exist.

The Group's share of the post-acquisition results and other comprehensive income of associates and joint ventures is included in the consolidated statement of profit or loss and consolidated other comprehensive income, respectively. In addition, when there has been a change recognised directly in the equity of the associate or joint venture, the Group recognises its share of any changes, when applicable, in the consolidated statement of changes in equity. Unrealised gains and losses resulting from transactions between the Group and its associates or joint ventures are eliminated to the extent of the Group's investments in the associates or joint ventures, except where unrealised losses provide evidence of an impairment of the assets transferred. Goodwill arising from the acquisition of associates or joint ventures is included as part of the Group's investments in associates or joint ventures.

If an investment in an associate becomes an investment in a joint venture or vice versa, the retained interest is not remeasured. Instead, the investment continues to be accounted for under the equity method. In all other cases, upon loss of significant influence over the associate or joint control over the joint venture, the Group measures and recognises any retained investment at its fair value. Any difference between the carrying amount of the associate or joint venture upon loss of significant influence or joint control and the fair value of the retained investment and proceeds from disposal is recognised in profit or loss.

When an investment in an associate or a joint venture is classified as held for sale, it is accounted for in accordance with IFRS 5 *Non-current Assets Held for Sale and Discontinued Operations.*

2.4 Summary of significant accounting policies (continued)

Business combinations and goodwill

Business combinations are accounted for using the acquisition method. The consideration transferred is measured at the acquisition date fair value which is the sum of the acquisition date fair values of assets transferred by the Group, liabilities assumed by the Group to the former owners of the acquiree and the equity interests issued by the Group in exchange for control of the acquiree. For each business combination, the Group elects whether to measure the non-controlling interests in the acquiree that are present ownership interests and entitle their holders to a proportionate share of net assets in the event of liquidation at fair value or at the proportionate share of the acquiree's identifiable net assets. All other components of non-controlling interests are measured at fair value. Acquisition-related costs are expensed as incurred.

When the Group acquires a business, it assesses the financial assets and liabilities assumed for appropriate classification and designation in accordance with the contractual terms, economic circumstances and pertinent conditions as at the acquisition date. This includes the separation of embedded derivatives in host contracts of the acquiree.

If the business combination is achieved in stages, the previously held equity interest is remeasured at its acquisition date fair value and any resulting gain or loss is recognised in profit or loss.

Any contingent consideration to be transferred by the acquirer is recognised at fair value at the acquisition date. Contingent consideration classified as an asset or liability is measured at fair value with changes in fair value recognised in profit or loss. Contingent consideration that is classified as equity is not remeasured and subsequent settlement is accounted for within equity.

Goodwill is initially measured at cost, being the excess of the aggregate of the consideration transferred, the amount recognised for non-controlling interests and any fair value of the Group's previously held equity interests in the acquiree over the identifiable net assets acquired and liabilities assumed. If the sum of this consideration and other items is lower than the fair value of the net assets acquired, the difference is, after reassessment, recognised in profit or loss as a gain on bargain purchase.

After initial recognition, goodwill is measured at cost less any accumulated impairment losses. Goodwill is tested for impairment annually or more frequently if events or changes in circumstances indicate that the carrying value may be impaired. The Group performs its annual impairment test of goodwill as at 31 December. For the purpose of impairment testing, goodwill acquired in a business combination is, from the acquisition date, allocated to each of the Group's cash-generating units, or groups of cash-generating units, that are expected to benefit from the synergies of the combination, irrespective of whether other assets or liabilities of the Group are assigned to those units or groups of units.

2.4 Summary of significant accounting policies (continued)

Business combinations and goodwill (continued)

Impairment is determined by assessing the recoverable amount of the cash-generating unit (group of cash-generating units) to which the goodwill relates. Where the recoverable amount of the cash-generating unit (group of cash-generating units) is less than the carrying amount, an impairment loss is recognised. An impairment loss recognised for goodwill is not reversed in a subsequent period.

Where goodwill has been allocated to a cash-generating unit (or group of cash-generating units) and part of the operation within that unit is disposed of, the goodwill associated with the operation disposed of is included in the carrying amount of the operation when determining the gain or loss on the disposal. Goodwill disposed of in these circumstances is measured based on the relative value of the operation disposed of and the portion of the cash-generating unit retained.

Fair value measurement

The Group measures its derivative financial instruments and equity investments at fair value at the end of each reporting period. Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. The fair value measurement is based on the presumption that the transaction to sell the asset or transfer the liability takes place either in the principal market for the asset or liability, or in the absence of a principal market, in the most advantageous market for the asset or liability. The principal or the most advantageous market must be accessible by the Group. The fair value of an asset or a liability is measured using the assumptions that market participants would use when pricing the asset or liability, assuming that market participants act in their economic best interest.

A fair value measurement of a non-financial asset takes into account a market participant's ability to generate economic benefits by using the asset in its highest and best use or by selling it to another market participant that would use the asset in its highest and best use.

The Group uses valuation techniques that are appropriate in the circumstances and for which sufficient data are available to measure fair value, maximising the use of relevant observable inputs and minimising the use of unobservable inputs.

2.4 Summary of significant accounting policies (continued)

Fair value measurement (continued)

All assets and liabilities for which fair value is measured or disclosed in the financial statements are categorised within the fair value hierarchy, described as follows, based on the lowest level input that is significant to the fair value measurement as a whole:

Level 1 — based on quoted prices (unadjusted) in active markets for identical assets or liabilities

Level 2 — based on valuation techniques for which the lowest level input that is significant to the fair value measurement is observable, either directly or indirectly

Level 3 — based on valuation techniques for which the lowest level input that is significant to the fair value measurement is unobservable

For assets and liabilities that are recognised in the financial statements on a recurring basis, the Group determines whether transfers have occurred between levels in the hierarchy by reassessing categorisation (based on the lowest level input that is significant to the fair value measurement as a whole) at the end of each reporting period.

Impairment of non-financial assets

Where an indication of impairment exists, or when annual impairment testing for an asset is required (other than inventories, contact assets, deferred tax assets, financial assets, investment properties and non-current assets/ a disposal group classified as held for sale), the asset's recoverable amount is estimated. An asset's recoverable amount is the higher of the asset's or cash-generating unit's value in use and its fair value less costs of disposal, and is determined for an individual asset, unless the asset does not generate cash inflows that are largely independent of those from other assets or groups of assets, in which case the recoverable amount is determined for the cash-generating unit to which the asset belongs.

An impairment loss is recognised only if the carrying amount of an asset exceeds its recoverable amount. In assessing value in use, the estimated future cash flows are discounted to their present value using a pre-tax discount rate that reflects current market assessments of the time value of money and the risks specific to the asset. An impairment loss is charged to the statement of profit or loss in the period in which it arises in those expense categories consistent with the function of the impaired asset.

2.4 Summary of significant accounting policies (continued)

Impairment of non-financial assets (continued)

An assessment is made at the end of each reporting period as to whether there is an indication that previously recognised impairment losses may no longer exist or may have decreased. If such an indication exists, the recoverable amount is estimated. A previously recognised impairment loss of an asset other than goodwill is reversed only if there has been a change in the estimates used to determine the recoverable amount of that asset, but not to an amount higher than the carrying amount that would have been determined (net of any depreciation/amortisation) had no impairment loss been recognised for the asset in prior years. A reversal of such an impairment loss is credited to the statement of profit or loss in the period in which it arises, unless the asset is carried at a revalued amount, in which case the reversal of the impairment loss is accounted for in accordance with the relevant accounting policy for that revalued asset.

Related parties

A party is considered to be related to the Group if:

(a) the party is a person or a close member of that person's family and that person

  (i) has control or joint control over the Group;

  (ii) has significant influence over the Group; or

  (iii) is a member of the key management personnel of the Group or of a parent of the Group;

  or

(b) the party is an entity where any of the following conditions applies:

  (i) the entity and the Group are members of the same group;

  (ii) one entity is an associate or joint venture of the other entity (or of a parent, subsidiary or fellow subsidiary of the other entity);

  (iii) the entity and the Group are joint ventures of the same third party;

  (iv) one entity is a joint venture of a third entity and the other entity is an associate of the third entity;

2.4 Summary of significant accounting policies (continued)

Related parties (continued)

(v) the entity is a post-employment benefit plan for the benefit of employees of either the Group or an entity related to the Group; and the sponsoring employers of the post-employment benefit plan;

(vi) the entity is controlled or jointly controlled by a person identified in (a);

(vii) a person identified in (a)(i) has significant influence over the entity or is a member of the key management personnel of the entity (or of a parent of the entity); and

(viii) the entity, or any member of a group of which it is a part, provides key management personnel services to the Group or to the parent of the Group.

Property, plant and equipment and depreciation

Property, plant and equipment, other than construction in progress, are stated at cost less accumulated depreciation and any impairment losses. When an item of property, plant and equipment is classified as held for sale or when it is part of a disposal group classified as held for sale, it is not depreciated and is accounted for in accordance with IFRS 5, as further explained in the accounting policy for "Non-current assets and disposal groups held for sale". The cost of an item of property, plant and equipment comprises its purchase price and any directly attributable costs of bringing the asset to its working condition and location for its intended use.

Expenditure incurred after items of property, plant and equipment have been put into operation, such as repairs and maintenance, is normally charged to the statement of profit or loss in the period in which it is incurred. In situations where the recognition criteria are satisfied, the expenditure for a major inspection is capitalised in the carrying amount of the asset as a replacement. Where significant parts of property, plant and equipment are required to be replaced at intervals, the Group recognises such parts as individual assets with specific useful lives and depreciates them accordingly.

Depreciation is calculated on the straight-line basis to write off the cost of each item of property, plant and equipment to its residual value over its estimated useful life. The estimated useful lives used for this purpose are as follows:

Buildings	10 to 45 years
Plant and machinery	5 to 12 years
Furniture and fixtures	3 to 12 years
Motor vehicles	4 to 10 years

2.4 Summary of significant accounting policies (continued)

Property, plant and equipment and depreciation (continued)

Where parts of an item of property, plant and equipment have different useful lives, the cost of that item is allocated on a reasonable basis among the parts and each part is depreciated separately. Residual values, useful lives and the depreciation method are reviewed, and adjusted if appropriate, at least at each financial year end.

An item of property, plant and equipment including any significant part initially recognised is derecognised upon disposal or when no future economic benefits are expected from its use or disposal. Any gain or loss on disposal or retirement recognised in the statement of profit or loss in the year the asset is derecognised is the difference between the net sales proceeds and the carrying amount of the relevant asset.

Construction in progress represents a building under construction, which is stated at cost less any impairment losses, and is not depreciated. Cost comprises the direct costs of construction and capitalised borrowing costs on related borrowed funds during the period of construction. Construction in progress is reclassified to the appropriate category of property, plant and equipment when completed and ready for use.

Non-current assets and disposal groups held for sale

Non-current assets and disposal groups are classified as held for sale if their carrying amounts will be recovered principally through a sales transaction rather than through continuing use. For this to be the case, the asset or disposal group must be available for immediate sale in its present condition subject only to terms that are usual and customary for the sale of such assets or disposal groups and its sale must be highly probable. All assets and liabilities of a subsidiary classified as a disposal group are reclassified as held for sale regardless of whether the Group retains a non-controlling interest in its former subsidiary after the sale.

Non-current assets and disposal groups (other than investment properties and financial assets) classified as held for sale are measured at the lower of their carrying amounts and fair values less costs to sell. Property, plant and equipment and intangible assets classified as held for sale are not depreciated or amortised.

Intangible assets (other than goodwill)

Intangible assets acquired separately are measured on initial recognition at cost. The cost of intangible assets acquired in a business combination is the fair value at the date of acquisition. The useful lives of intangible assets are assessed to be either finite or indefinite. Intangible assets with finite lives are subsequently amortised over the useful economic life and assessed for impairment whenever there is an indication that the intangible asset may be impaired. The amortisation period and the amortisation method for an intangible asset with a finite useful life are reviewed at least at each financial year end.

2.4 Summary of significant accounting policies (continued)

Intangible assets (other than goodwill) (continued)

Intangible assets with indefinite useful lives are tested for impairment annually either individually or at the cash-generating unit level. Such intangible assets are not amortised. The useful life of an intangible asset with an indefinite life is reviewed annually to determine whether the indefinite life assessment continues to be supportable. If not, the change in the useful life assessment from indefinite to finite is accounted for on a prospective basis.

Intangible assets are stated at cost less any impairment losses and are amortised on the straight-line basis over their estimated useful lives. The principal estimated useful lives of intangible assets are as follows:

Exclusive distribution right	5 to 25 years
Intellectual Property ("**IP**") rights	14 to 25 years
Patents and technology know-how	5 to 20 years
Others	1 to 10 years
In Progress Research and Development ("**IPR&D**")	Indefinite useful life

Research and development costs

All research costs are charged to the consolidated statement of profit or loss as incurred.

Expenditure incurred on projects to develop new products is capitalised and deferred only when the Group can demonstrate the technical feasibility of completing the intangible asset so that it will be available for use or sale, its intention to complete and its ability to use or sell the asset, how the asset will generate future economic benefits, the availability of resources to complete the project and the ability to measure reliably the expenditure during the development. Product development expenditure which does not meet these criteria is expensed when incurred.

Deferred development costs are stated at cost less any impairment losses and are amortised using the straight-line basis over the commercial lives of the underlying products, commencing from the date when the products are put into commercial production.

Leases (applicable from 1 January 2019)

The Group assesses at contract inception whether a contract is, or contains, a lease. A contract is, or contains, a lease if the contract conveys the right to control the use of an identified asset for a period of time in exchange for consideration.

2.4 Summary of significant accounting policies (continued)

Leases (applicable from 1 January 2019) (continued)

Group as a lessee

The Group applies a single recognition and measurement approach for all leases, except for short-term leases and leases of low-value assets. The Group recognises lease liabilities to make lease payments and right-of-use assets representing the right to use the underlying assets.

(a) Right-of-use assets

Right-of-use assets are recognised at the commencement date of the lease (that is the date the underlying asset is available for use). Right-of-use assets are measured at cost, less any accumulated depreciation and any impairment losses, and adjusted for any remeasurement of lease liabilities. The cost of right-of-use assets includes the amount of lease liabilities recognised, initial direct costs incurred, and lease payments made at or before the commencement date less any lease incentives received. Right-of-use assets are depreciated on a straight-line basis over the shorter of the lease terms and the estimated useful lives of the assets as follows:

Leasehold land	30 to 50 years
Buildings	1 to 4 years

If ownership of the leased asset transfers to the Group by the end of the lease term or the cost reflects the exercise of a purchase option, depreciation is calculated using the estimated useful life of the asset.

(b) Lease liabilities

Lease liabilities are recognised at the commencement date of the lease at the present value of lease payments to be made over the lease term. The lease payments include fixed payments (including in-substance fixed payments) less any lease incentives receivable, variable lease payments that depend on an index or a rate, and amounts expected to be paid under residual value guarantees. The lease payments also include the exercise price of a purchase option reasonably certain to be exercised by the Group and payments of penalties for termination of a lease, if the lease term reflects the Group exercising the option to terminate. The variable lease payments that do not depend on an index or a rate are recognised as an expense in the period in which the event or condition that triggers the payment occurs.

In calculating the present value of lease payments, the Group uses its incremental borrowing rate at the lease commencement date because the interest rate implicit in the lease is not readily determinable. After the commencement date, the amount of lease liabilities is increased to reflect the accretion of interest and reduced for the lease payments made. In addition, the carrying amount of lease liabilities is remeasured if there is a modification, a change in the lease term, a change in lease payments (e.g., a change to future lease payments resulting from a change in an index or rate) or a change in assessment of an option to purchase the underlying asset.

2.4 Summary of significant accounting policies (continued)

Leases (applicable from 1 January 2019) (continued)

(c) Short-term leases and leases of low-value assets

The Group applies the short-term lease recognition exemption to its short-term leases of certain buildings and vehicles (that is those leases that have a lease term of 12 months or less from the commencement date and do not contain a purchase option). It also applies the recognition exemption for leases of low-value assets to leases of office buildings that are considered to be of low value. Lease payments on short-term leases and leases of low-value assets are recognised as an expense on a straight-line basis over the lease term.

Group as a lessor

When the Group acts as a lessor, it classifies at lease inception (or when there is a lease modification) each of its leases as either an operating lease or a finance lease.

Leases in which the Group does not transfer substantially all the risks and rewards incidental to ownership of an asset are classified as operating leases. When a contract contains lease and non-lease components, the Group allocates the consideration in the contract to each component on a relative stand-alone selling price basis. Rental income is accounted for on a straight-line basis over the lease terms and is included in revenue in the statement of profit or loss due to its operating nature. Initial direct costs incurred in negotiating and arranging an operating lease are added to the carrying amount of the leased asset and recognised over the lease term on the same basis as rental income. Contingent rents are recognised as revenue in the period in which they are earned.

Leases that transfer substantially all the risks and rewards incidental to ownership of an underlying assets to the lessee, are accounted for as finance leases.

Leases (applicable before 1 January 2019)

Leases that transfer substantially all the rewards and risks of ownership of assets to the Group, other than legal title, are accounted for as finance leases. At the inception of a finance lease, the cost of the leased asset is capitalised at the present value of the minimum lease payments and recorded together with the obligation, excluding the interest element, to reflect the purchase and financing. Assets held under capitalised finance leases, including prepaid land lease payments under finance leases, are included in property, plant and equipment, and depreciated over the shorter of the lease terms and the estimated useful lives of the assets. The finance costs of such leases are charged to the statement of profit or loss so as to provide a constant periodic rate of charge over the lease terms.

Assets acquired through hire purchase contracts of a financing nature are accounted for as finance leases, but are depreciated over their estimated useful lives.

2.4 Summary of significant accounting policies (continued)

Leases (applicable before 1 January 2019) (continued)

Leases where substantially all the rewards and risks of ownership of assets remain with the lessor are accounted for as operating leases. Where the Group is the lessor, assets leased by the Group under operating leases are included in non-current assets, and rentals receivable under the operating leases are credited to the statement of profit or loss on the straight-line basis over the lease terms. Where the Group is the lessee, rentals payable under operating leases net of any incentives received from the lessor are charged to the statement of profit or loss on the straight-line basis over the lease terms.

Prepaid land lease payments under operating leases are initially stated at cost and subsequently recognised on the straight-line basis over the lease terms. When the lease payments cannot be allocated reliably between the land and buildings elements, the entire lease payments are included in the cost of the land and buildings as a finance lease in property, plant and equipment.

Investments and other financial assets

Initial recognition and measurement

Financial assets are classified, at initial recognition, as subsequently measured at amortised cost, fair value through other comprehensive income, and fair value through profit or loss.

The classification of financial assets at initial recognition depends on the financial asset's contractual cash flow characteristics and the Group's business model for managing them. With the exception of trade receivables that do not contain a significant financing component or for which the Group has applied the practical expedient of not adjusting the effect of a significant financing component, the Group initially measures a financial asset at its fair value, plus in the case of a financial asset not at fair value through profit or loss, transaction costs. Trade receivables that do not contain a significant financing component or for which the Group has applied the practical expedient are measured at the transaction price determined under IFRS 15 in accordance with the policies set out for "Revenue recognition" below.

In order for a financial asset to be classified and measured at amortised cost or fair value through other comprehensive income, it needs to give rise to cash flows that are solely payments of principal and interest ("**SPPI**") on the principal amount outstanding. Financial assets with cash flows that are not SPPI are classified and measured at fair value through profit or loss, irrespective of the business model.

The Group's business model for managing financial assets refers to how it manages its financial assets in order to generate cash flows. The business model determines whether cash flows will result from collecting contractual cash flows, selling the financial assets, or both. Financial assets classified and measured at amortised cost are held within a business model with the objective to hold financial assets in order to collect contractual cash flows, while financial assets classified and measured at fair value through other comprehensive income are held within a business model with the objective of both holding to collect contractual cash flows and selling. Financial assets which are not held within the aforementioned business models are classified and measured at fair value through profit or loss.

2.4 Summary of significant accounting policies (continued)

Investments and other financial assets (continued)

Initial recognition and measurement (continued)

All regular way purchases and sales of financial assets are recognised on the trade date, that is, the date that the Group commits to purchase or sell the asset. Regular way purchases or sales are purchases or sales of financial assets that require delivery of assets within the period generally established by regulation or convention in the marketplace.

Subsequent measurement

The subsequent measurement of financial assets depends on their classification as follows:

Financial assets at amortised cost (debt instruments)

Financial assets at amortised cost are subsequently measured using the effective interest method and are subject to impairment. Gains and losses are recognised in the statement of profit or loss when the asset is derecognised, modified or impaired.

Financial assets at fair value through other comprehensive income (debt instruments)

For debt investments at fair value through other comprehensive income, interest income, foreign exchange revaluation and impairment losses or reversals are recognised in the statement of profit or loss and computed in the same manner as for financial assets measured at amortised cost. The remaining fair value changes are recognised in other comprehensive income. Upon derecognition, the cumulative fair value change recognised in other comprehensive income is recycled to the statement of profit or loss.

Financial assets designated at fair value through other comprehensive income (equity investments)

Upon initial recognition, the Group can elect to classify irrevocably its equity investments as equity investments designated at fair value through other comprehensive income when they meet the definition of equity under IAS 32 *Financial Instruments*: Presentation and are not held for trading. The classification is determined on an instrument-by-instrument basis.

Gains and losses on these financial assets are never recycled to the statement of profit or loss. Dividends are recognised as other income in the statement of profit or loss when the right of payment has been established, it is probable that the economic benefits associated with the dividend will flow to the Group and the amount of the dividend can be measured reliably, except when the Group benefits from such proceeds as a recovery of part of the cost of the financial asset, in which case, such gains are recorded in other comprehensive income. Equity investments designated at fair value through other comprehensive income are not subject to impairment assessment.

2.4 Summary of significant accounting policies (continued)

Investments and other financial assets (continued)

Subsequent measurement (continued)

Financial assets at fair value through profit or loss

Financial assets at fair value through profit or loss are carried in the statement of financial position at fair value with net changes in fair value recognised in the statement of profit or loss.

This category includes derivative instruments and other unlisted investments. Dividends on equity investments classified as financial assets at fair value profit or loss are also recognised as other income in the statement of profit or loss when the right of payment has been established, it is probable that the economic benefits associated with the dividend will flow to the Group and the amount of the dividend can be measured reliably.

A derivative embedded in a hybrid contract, with a financial liability or non-financial host, is separated from the host and accounted for as a separate derivative if the economic characteristics and risks are not closely related to the host; a separate instrument with the same terms as the embedded derivative would meet the definition of a derivative; and the hybrid contract is not measured at fair value through profit or loss. Embedded derivatives are measured at fair value with changes in fair value recognised in the statement of profit or loss. Reassessment only occurs if there is either a change in the terms of the contract that significantly modifies the cash flows that would otherwise be required or a reclassification of a financial asset out of the fair value through profit or loss category.

A derivative embedded within a hybrid contract containing a financial asset host is not accounted for separately. The financial asset host together with the embedded derivative is required to be classified in its entirety as a financial asset at fair value through profit or loss.

Derecognition of financial assets

A financial asset (or, where applicable, a part of a financial asset or part of a group of similar financial assets) is primarily derecognised (i.e., removed from the Group's consolidated statement of financial position) when:

- the rights to receive cash flows from the asset have expired; or
- the Group has transferred its rights to receive cash flows from the asset or has assumed an obligation to pay the received cash flows in full without material delay to a third party under a "pass-through" arrangement; and either (a) the Group has transferred substantially all the risks and rewards of the asset, or (b) the Group has neither transferred nor retained substantially all the risks and rewards of the asset, but has transferred control of the asset.

2.4 Summary of significant accounting policies (continued)

Derecognition of financial assets (continued)

When the Group has transferred its rights to receive cash flows from an asset or has entered into a pass-through arrangement, it evaluates if, and to what extent, it has retained the risk and rewards of ownership of the asset. When it has neither transferred nor retained substantially all the risks and rewards of the asset nor transferred control of the asset, the Group continues to recognise the transferred asset to the extent of the Group's continuing involvement. In that case, the Group also recognises an associated liability. The transferred asset and the associated liability are measured on a basis that reflects the rights and obligations that the Group has retained.

Continuing involvement that takes the form of a guarantee over the transferred asset is measured at the lower of the original carrying amount of the asset and the maximum amount of consideration that the Group could be required to repay.

Impairment of financial assets

The Group recognises an allowance for expected credit losses ("**ECLs**") for all debt instruments not held at fair value through profit or loss. ECLs are based on the difference between the contractual cash flows due in accordance with the contract and all the cash flows that the Group expects to receive, discounted at an approximation of the original effective interest rate. The expected cash flows will include cash flows from the sale of collateral held or other credit enhancements that are integral to the contractual terms.

General approach

ECLs are recognised in two stages. For credit exposures for which there has not been a significant increase in credit risk since initial recognition, ECLs are provided for credit losses that result from default events that are possible within the next 12 months (a 12-month ECL). For those credit exposures for which there has been a significant increase in credit risk since initial recognition, a loss allowance is required for credit losses expected over the remaining life of the exposure, irrespective of the timing of the default (a lifetime ECL).

At each reporting date, the Group assesses whether the credit risk on a financial instrument has increased significantly since initial recognition. When making the assessment, the Group compares the risk of a default occurring on the financial instrument as at the reporting date with the risk of a default occurring on the financial instrument as at the date of initial recognition and considers reasonable and supportable information that is available without undue cost or effort, including historical and forward-looking information.

For debt investments at fair value through other comprehensive income, the Group applies the low credit risk simplification. At each reporting date, the Group evaluates whether the debt investments are considered to have low credit risk using all reasonable and supportable information that is available without undue cost or effort. In making that evaluation, the Group reassesses the external credit ratings of the debt investments. In addition, the Group considers that there has been a significant increase in credit risk when contractual payments are more than 30 days past due.

2.4 Summary of significant accounting policies (continued)

Impairment of financial assets (continued)

General approach (continued)

The Group considers a financial asset in default when contractual payments are 90 days past due. However, in certain cases, the Group may also consider a financial asset to be in default when internal or external information indicates that the Group is unlikely to receive the outstanding contractual amounts in full before taking into account any credit enhancements held by the Group. A financial asset is written off when there is no reasonable expectation of recovering the contractual cash flows.

Financial assets at amortised cost are subject to impairment under the general approach and they are classified within the following stages for measurement of ECLs except for trade receivables, financial assets included in prepayments, other receivables and other assets and long-term receivables which apply the simplified approach as detailed below.

Stage 1 — Financial instruments for which credit risk has not increased significantly since initial recognition and for which the loss allowance is measured at an amount equal to 12-month ECLs

Stage 2 — Financial instruments for which credit risk has increased significantly since initial recognition but that are not credit-impaired financial assets and for which the loss allowance is measured at an amount equal to lifetime ECLs

Stage 3 — Financial assets that are credit-impaired at the reporting date (but that are not purchased or originated credit-impaired) and for which the loss allowance is measured at an amount equal to lifetime ECLs

Simplified approach

For trade receivables and certain financial assets included in prepayments, other receivables and other assets and long-term receivables that do not contain a significant financing component or when the Group applies the practical expedient of not adjusting the effect of a significant financing component, the Group applies the simplified approach in calculating ECLs. Under the simplified approach, the Group does not track changes in credit risk, but instead recognises a loss allowance based on lifetime ECLs at each reporting date. The Group has established a provision matrix that is based on its historical credit loss experience, adjusted for forward-looking factors specific to the debtors and the economic environment.

2.4 Summary of significant accounting policies (continued)

Impairment of financial assets (continued)

Simplified approach (continued)

For trade receivables and certain financial assets included in prepayments, other receivables and other assets and long-term receivables that contain a significant financing component and lease receivables, the Group chooses as its accounting policy to adopt the simplified approach in calculating ECLs with policies as described above.

Financial liabilities

Initial recognition and measurement

Financial liabilities are classified, at initial recognition, as financial liabilities at fair value through profit or loss, loans and borrowings, payables, or as derivatives designated as hedging instruments in an effective hedge, as appropriate.

All financial liabilities are recognised initially at fair value and, in the case of loans and borrowings and payables, net of directly attributable transaction costs.

The Group's financial liabilities include trade and bills payables, financial liabilities included in other payables and accruals, interest-bearing bank and other borrowings and lease liabilities.

Subsequent measurement

The subsequent measurement of financial liabilities depends on their classification as follows:

Financial liabilities at amortised cost (loans and borrowings)

After initial recognition, interest-bearing loans and borrowings are subsequently measured at amortised cost, using the effective interest rate method unless the effect of discounting would be immaterial, in which case they are stated at cost. Gains and losses are recognised in the statement of profit or loss when the liabilities are derecognised as well as through the effective interest rate amortisation process.

Amortised cost is calculated by taking into account any discount or premium on acquisition and fees or costs that are an integral part of the effective interest rate. The effective interest rate amortisation is included in finance costs in the statement of profit or loss.

2.4 Summary of significant accounting policies (continued)

Financial liabilities (continued)

Subsequent measurement (continued)

Financial guarantee contracts

Financial guarantee contracts issued by the Group are those contracts that require a payment to be made to reimburse the holder for a loss it incurs because the specified debtor fails to make a payment when due in accordance with the terms of a debt instrument. A financial guarantee contract is recognised initially as a liability at its fair value, adjusted for transaction costs that are directly attributable to the issuance of the guarantee. Subsequent to initial recognition, the Group measures the financial guarantee contracts at the higher of: (i) the ECL allowance determined in accordance with the policy as set out in "Impairment of financial assets"; and (ii) the amount initially recognised less, when appropriate, the cumulative amount of income recognised.

Convertible bonds

The component of convertible bonds that exhibits characteristics of a liability is recognised as a liability in the statement of financial position, net of transaction costs. On issuance of convertible bonds, the fair value of the liability component is determined using a market rate for an equivalent non-convertible bond; and this amount is carried as a long term liability on the amortised cost basis until extinguished on conversion or redemption. The remainder of the proceeds is allocated to the conversion option that is recognised and included in shareholders' equity, net of transaction costs. The carrying amount of the conversion option is not remeasured in subsequent years. Transaction costs are apportioned between the liability and equity components of the convertible bonds based on the allocation of proceeds to the liability and equity components when the instruments are first recognised.

Derecognition of financial liabilities

A financial liability is derecognised when the obligation under the liability is discharged or cancelled, or expires.

When an existing financial liability is replaced by another from the same lender on substantially different terms, or the terms of an existing liability are substantially modified, such an exchange or modification is treated as a derecognition of the original liability and a recognition of a new liability, and the difference between the respective carrying amounts is recognised in the statement of profit or loss.

Offsetting of financial instruments

Financial assets and financial liabilities are offset and the net amount is reported in the statement of financial position if there is a currently enforceable legal right to offset the recognised amounts and there is an intention to settle on a net basis, or to realise the assets and settle the liabilities simultaneously.

2.4 Summary of significant accounting policies (continued)

Treasury shares

Own equity instruments which are reacquired and held by the Company or the Group (treasury shares) are recognised directly in equity at cost. No gain or loss is recognised in the statement of profit or loss on the purchase, sale, issue or cancellation of the Group's own equity instruments.

Inventories

Inventories are stated at the lower of cost and net realisable value. Cost is determined on a weighted average basis and, in the case of work in progress and finished goods, comprises direct materials, direct labour and an appropriate proportion of overheads. Net realisable value is based on estimated selling prices less any estimated costs to be incurred to completion and disposal.

Cash and cash equivalents

For the purpose of the consolidated statement of cash flows, cash and cash equivalents comprise cash on hand and demand deposits, and short term highly liquid investments that are readily convertible into known amounts of cash, are subject to an insignificant risk of changes in value, and have a short maturity of generally within three months when acquired, less bank overdrafts which are repayable on demand and form an integral part of the Group's cash management.

For the purpose of the consolidated statement of financial position, cash and cash equivalents comprise cash on hand and at banks, including term deposits, and assets similar in nature to cash, which are not restricted as to use.

Provisions

A provision is recognised when a present obligation (legal or constructive) has arisen as a result of a past event and it is probable that a future outflow of resources will be required to settle the obligation, provided that a reliable estimate can be made of the amount of the obligation.

When the effect of discounting is material, the amount recognised for a provision is the present value at the end of the reporting period of the future expenditures expected to be required to settle the obligation. The increase in the discounted present value amount arising from the passage of time is included in finance costs in the statement of profit or loss.

2.4 Summary of significant accounting policies (continued)

Income tax

Income tax comprises current and deferred tax. Income tax relating to items recognised outside profit or loss is recognised outside profit or loss, either in other comprehensive income or directly in equity.

Current tax assets and liabilities are measured at the amount expected to be recovered from or paid to the taxation authorities, based on tax rates (and tax laws) that have been enacted or substantively enacted by the end of the reporting period, taking into consideration interpretations and practices prevailing in the countries in which the Group operates.

Deferred tax is provided, using the liability method, on all temporary differences at the end of the reporting period between the tax bases of assets and liabilities and their carrying amounts for financial reporting purposes.

Deferred tax liabilities are recognised for all taxable temporary differences, except:

- when the deferred tax liability arises from the initial recognition of goodwill or an asset or liability in a transaction that is not a business combination and, at the time of the transaction, affects neither the accounting profit nor taxable profit or loss; and

- in respect of taxable temporary differences associated with investments in subsidiaries, associates and joint ventures, when the timing of the reversal of the temporary differences can be controlled and it is probable that the temporary differences will not reverse in the foreseeable future.

Deferred tax assets are recognised for all deductible temporary differences, and the carryforward of unused tax credits and any unused tax losses. Deferred tax assets are recognised to the extent that it is probable that taxable profit will be available against which the deductible temporary differences, the carryforward of unused tax credits and unused tax losses can be utilised, except:

- when the deferred tax asset relating to the deductible temporary differences arises from the initial recognition of an asset or liability in a transaction that is not a business combination and, at the time of the transaction, affects neither the accounting profit nor taxable profit or loss; and

- in respect of deductible temporary differences associated with investments in subsidiaries, associates and joint ventures, deferred tax assets are only recognised to the extent that it is probable that the temporary differences will reverse in the foreseeable future and taxable profit will be available against which the temporary differences can be utilised.

2.4 Summary of significant accounting policies (continued)

Income tax (continued)

The carrying amount of deferred tax assets is reviewed at the end of each reporting period and reduced to the extent that it is no longer probable that sufficient taxable profit will be available to allow all or part of the deferred tax asset to be utilised. Unrecognised deferred tax assets are reassessed at the end of each reporting period and are recognised to the extent that it has become probable that sufficient taxable profit will be available to allow all or part of the deferred tax asset to be recovered.

Deferred tax assets and liabilities are measured at the tax rates that are expected to apply to the period when the asset is realised or the liability is settled, based on tax rates (and tax laws) that have been enacted or substantively enacted by the end of the reporting period.

Deferred tax assets and deferred tax liabilities are offset if and only if the Group has a legally enforceable right to set off current tax assets and current tax liabilities and the deferred tax assets and deferred tax liabilities relate to income taxes levied by the same taxation authority on either the same taxable entity or different taxable entities which intend either to settle current tax liabilities and assets on a net basis, or to realise the assets and settle the liabilities simultaneously, in each future period in which significant amounts of deferred tax liabilities or assets are expected to be settled or recovered.

Government grants

Government grants are recognised at their fair value where there is reasonable assurance that the grant will be received and all attaching conditions will be complied with. When the grant relates to an expense item, it is recognised as income on a systematic basis over the periods that the costs, which it is intended to compensate, are expensed.

Where the grant relates to an asset, the fair value is credited to a deferred income account and is released to the statement of profit or loss over the expected useful life of the relevant asset by equal annual instalments or deducted from the carrying amount of the asset and released to the statement of profit or loss by way of a reduced depreciation charge.

Where the Group receives grants of non-monetary assets, the grants are recorded at the fair value of the non-monetary assets and released to the statement of profit or loss over the expected useful lives of the relevant assets by equal annual instalments.

Where the Group receives government loans granted with no or at a below-market rate of interest for the construction of a qualifying asset, the initial carrying amount of the government loans is determined using the effective interest rate method, as further explained in the accounting policy for “Financial liabilities” above. The benefit of the government loans granted with no or at a below-market rate of interest, which is the difference between the initial carrying value of the loans and the proceeds received, is treated as a government grant and released to the statement of profit or loss over the expected useful life of the relevant asset by equal annual instalments.

2.4 Summary of significant accounting policies (continued)

Revenue recognition

Revenue from contracts with customers

Revenue from contracts with customers is recognised when control of goods or services is transferred to the customers at an amount that reflects the consideration to which the Group expects to be entitled in exchange for those goods or services.

When the consideration in a contract includes a variable amount, the amount of consideration is estimated to which the Group will be entitled in exchange for transferring the goods or services to the customer. The variable consideration is estimated at contract inception and constrained until it is highly probable that a significant revenue reversal in the amount of cumulative revenue recognised will not occur when the associated uncertainty with the variable consideration is subsequently resolved.

When the contract contains a financing component which provides the customer with a significant benefit of financing the transfer of goods or services to the customer for more than one year, revenue is measured at the present value of the amount receivable, discounted using the discount rate that would be reflected in a separate financing transaction between the Group and the customer at contract inception. When the contract contains a financing component which provides the Group a significant financial benefit for more than one year, revenue recognised under the contract includes the interest expense accreted on the contract liability under the effective interest method. For a contract where the period between the payment by the customer and the transfer of the promised goods or services is one year or less, the transaction price is not adjusted for the effects of a significant financing component, using the practical expedient in IFRS 15.

(a) Sale of biopharmaceutical products

Revenue from the sale of biopharmaceutical products is recognised at the point in time when control of the asset is transferred to the customer, generally upon receipt of the biopharmaceutical products by customers.

Some contracts for the sale of biopharmaceutical products provide customers with rights of return and trade discounts. The rights of return and trade discounts give rise to variable consideration.

(i) Rights of return

For contracts which provide a customer with a right to return the goods within a specified period, the expected value method is used to estimate the goods that will not be returned because this method best predicts the amount of variable consideration to which the Group will be entitled. The requirements in IFRS 15 on constraining estimates of variable consideration are applied in order to determine the amount of variable consideration that can be included in the transaction price. For goods that are expected to be returned, instead of revenue, a refund liability is recognised. A right-of-return asset (and the corresponding adjustment to cost of sales) is also recognised for the right to recover products from a customer.

2.4 Summary of significant accounting policies (continued)

Revenue recognition (continued)

Revenue from contracts with customers (continued)

(a) Sale of biopharmaceutical products (continued)

(ii) Trade discounts

Retrospective trade discounts may be provided to certain customers once they paid timely. Trade discounts are offset against amounts payable by the customer. To estimate the variable consideration for the expected future trade discounts, the most likely amount method is used for contracts with the expected value method for contracts. The selected method that best predicts the amount of variable consideration is primarily driven by the credit of customers. The requirements on constraining estimates of variable consideration are applied and a refund liability for the expected future rebates is recognised.

(b) Contracts for services

Revenue from the provision of technical services is recognised over time, using an input method to measure progress towards complete satisfaction of the service. The input method recognises revenue based on the proportion of the actual costs incurred relative to the estimated total costs for satisfaction of the services.

Other income

Interest income is recognised on an accrual basis using the effective interest method by applying the rate that exactly discounts the estimated future cash receipts over the expected life of the financial instrument or a shorter period, when appropriate, to the net carrying amount of the financial asset.

Dividend income is recognised when the shareholders' right to receive payment has been established, it is probable that the economic benefits associated with the dividend will flow to the Group and the amount of the dividend can be measured reliably.

Contract assets

A contract asset is the right to consideration in exchange for goods or services transferred to the customer. If the Group performs by transferring goods or services to a customer before the customer pays consideration or before payment is due, a contract asset is recognised for the earned consideration that is conditional. Contract assets are subject to impairment assessment, details of which are included in the accounting policies for impairment of financial assets.

2.4 Summary of significant accounting policies (continued)

Contract liabilities

A contract liability is recognised when a payment is received, or a payment is due (whichever is earlier) from a customer before the Group transfers the related goods or services. Contract liabilities are recognised as revenue when the Group performs under the contract (i.e., transfers control of the related goods or services to the customer).

Contract costs

Other than the costs which are capitalised as inventories, property, plant and equipment and intangible assets, costs incurred to fulfil a contract with a customer are capitalised as an asset if all of the following criteria are met:

(a) The costs relate directly to a contract or to an anticipated contract that the entity can specifically identify.

(b) The costs generate or enhance resources of the entity that will be used in satisfying (or in continuing to satisfy) performance obligations in the future.

(c) The costs are expected to be recovered.

The capitalised contract costs are amortised and charged to the statement of profit or loss on a systematic basis that is consistent with the pattern of the revenue to which the asset related is recognised. Other contract costs are expensed as incurred.

Right-of-return assets

A right-of-return asset is recognised for the right to recover the goods expected to be returned by customers. The asset is measured at the former carrying amount of the goods to be returned, less any expected costs to recover the goods and any potential decreases in the value of the returned goods. The Group updates the measurement of the asset for any revisions to the expected level of returns and any additional decreases in the value of the returned goods.

Refund liabilities

A refund liability is recognised for the obligation to refund some or all of the consideration received (or receivable) from a customer and is measured at the amount the Group ultimately expects it will have to return to the customer. The Group updates its estimates of refund liabilities (and the corresponding change in the transaction price) at the end of each reporting period.

2.4 Summary of significant accounting policies (continued)

Contracts for services

Contract revenue on the rendering of services comprises the agreed contract amount. Costs of rendering services comprise labour and other costs of personnel directly engaged in providing the services and attributable overheads.

Revenue from the rendering of services is recognised based on the percentage of completion of the transaction, provided that the revenue, the costs incurred and the estimated costs to completion can be measured reliably. The percentage of completion is established by reference to the costs incurred to date as compared to the total costs to be incurred under the transaction. Where the outcome of a contract cannot be measured reliably, revenue is recognised only to the extent that the expenses incurred are eligible to be recovered.

Provision is made for foreseeable losses as soon as they are anticipated by management. Where contract costs incurred to date plus recognised profits less recognised losses exceed progress billings, the surplus is treated as an amount due from contract customers. Where progress billings exceed contract costs incurred to date plus recognised profits less recognised losses, the surplus is treated as an amount due to contract customers.

Share-based payments

The Company operates a share option scheme for the purpose of providing incentives and rewards to eligible participants who contribute to the success of the Group's operations. Employees (including directors) of the Group receive remuneration in the form of share-based payments, whereby employees render services as consideration for equity instruments ("**equity-settled transactions**").

The cost of equity-settled transactions with employees for grants is measured by reference to the fair value of the equity instruments at the date at which they are granted. The fair value is determined by an external valuer using a binomial model, further details of which are given in note 35 to the financial statements.

The cost of equity-settled transactions is recognised in employee benefit expense, together with a corresponding increase in equity, over the period in which the performance and/or service conditions are fulfilled. The cumulative expense recognised for equity-settled transactions at the end of each reporting period until the vesting date reflects the extent to which the vesting period has expired and the Group's best estimate of the number of equity instruments that will ultimately vest. The charge or credit to the statement of profit or loss for a period represents the movement in the cumulative expense recognised as at the beginning and end of that period.

2.4 Summary of significant accounting policies (continued)

Share-based payments (continued)

Service and non-market performance conditions are not taken into account when determining the grant date fair value of awards, but the likelihood of the conditions being met is assessed as part of the Group's best estimate of the number of equity instruments that will ultimately vest. Market performance conditions are reflected within the grant date fair value. Any other conditions attached to an award, but without an associated service requirement, are considered to be non-vesting conditions. Non-vesting conditions are reflected in the fair value of an award and lead to an immediate expensing of an award unless there are also service and/or performance conditions.

For awards that do not ultimately vest because non-market performance and/or service conditions have not been met, no expense is recognised. Where awards include a market or non-vesting condition, the transactions are treated as vesting irrespective of whether the market or non-vesting condition is satisfied, provided that all other performance and/or service conditions are satisfied.

Where the terms of an equity-settled award are modified, as a minimum an expense is recognised as if the terms had not been modified, if the original terms of the award are met. In addition, an expense is recognised for any modification that increases the total fair value of the share-based payments, or is otherwise beneficial to the employee as measured at the date of modification.

Where an equity-settled award is cancelled, it is treated as if it had vested on the date of cancellation, and any expense not yet recognised for the award is recognised immediately. This includes any award where non-vesting conditions within the control of either the Group or the employee are not met. However, if a new award is substituted for the cancelled award, and is designated as a replacement award on the date that it is granted, the cancelled and new awards are treated as if they were a modification of the original award, as described in the previous paragraph.

The dilutive effect of outstanding options is reflected as additional share dilution in the computation of earnings per share.

The cost of cash-settled transactions is measured initially at fair value at the grant date using the Black-Scholes formula, taking into account the terms and conditions upon which the instruments were granted. The fair value is expensed over the period until the vesting date with recognition of a corresponding liability. The cumulative expense recognised for cash-settled transactions at the end of each reporting period until the vesting date reflects the extent to which the vesting period has expired and the Group's best estimate of the number of awards that will ultimately vest. The liability is measured at the end of each reporting period up to and including the settlement date, with changes in fair value recognised in the statement of profit or loss.

2.4 Summary of significant accounting policies (continued)

Other employee benefits

Pension scheme

The Group's subsidiaries operating in Mainland China participate in a central defined contribution retirement benefit plan managed by the local municipal government in the locations in which they operate. Contributions are made based on a percentage of the companies' payroll costs and are charged to the statement of profit or loss as they become payable in accordance with the rules of the central defined contribution retirement benefit plan.

Defined benefit plan

The Group operates a defined benefit pension plan which requires contributions to be made to a separately administered fund. The benefits are unfunded. The cost of providing benefits under the defined benefit plan is determined using the projected unit credit actuarial valuation method.

Remeasurements arising from the defined benefit pension plan, comprising actuarial gains and losses, the effect of the asset ceiling (excluding amounts included in net interest on the net defined benefit liability) and the return on plan assets (excluding amounts included in net interest on the net defined benefit liability), are recognised immediately in the consolidated statement of financial position with a corresponding debit or credit to retained profits through other comprehensive income in the period in which they occur. Remeasurements are not reclassified to profit or loss in subsequent periods.

Past service costs are recognised in profit or loss at the earlier of:

- the date of the plan amendment or curtailment; and
- the date that the Group recognises restructuring-related costs

Net interest is calculated by applying the discount rate to the net defined benefit liability or asset. The Group recognises the following changes in the net defined benefit obligation under "cost of sales" and "administrative expenses" in the consolidated statement of profit or loss by function:

- service costs comprising current service costs, past-service costs, gains and losses on curtailments and non-routine settlements
- net interest expense or income

2.4 Summary of significant accounting policies (continued)

Other employee benefits (continued)

Termination benefits

Termination benefits are recognised at the earlier of when the Group can no longer withdraw the offer of those benefits and when the Group recognises restructuring costs involving the payment of termination benefits.

Borrowing costs

Borrowing costs directly attributable to the acquisition, construction or production of qualifying assets, i.e., assets that necessarily take a substantial period of time to get ready for their intended use or sale, are capitalised as part of the cost of those assets. The capitalisation of such borrowing costs ceases when the assets are substantially ready for their intended use or sale. Investment income earned on the temporary investment of specific borrowings pending their expenditure on qualifying assets is deducted from the borrowing costs capitalised. All other borrowing costs are expensed in the period in which they are incurred. Borrowing costs consist of interest and other costs that an entity incurs in connection with the borrowing of funds.

Dividends

Final dividends are recognised as a liability when they are approved by the shareholders in a general meeting. Proposed final dividends are disclosed in the notes to the financial statements.

Interim dividends are simultaneously proposed and declared, because the Company's memorandum and articles of association grant the directors the authority to declare interim dividends. Consequently, interim dividends are recognised immediately as a liability when they are proposed and declared.

Foreign currencies

These financial statements are presented in RMB. Each entity in the Group determines its own functional currency and items included in the financial statements of each entity are measured using that functional currency. Foreign currency transactions recorded by the entities in the Group are initially recorded using their respective functional currency rates prevailing at the dates of the transactions. Monetary assets and liabilities denominated in foreign currencies are translated at the functional currency rates of exchange ruling at the end of the reporting period. Differences arising on settlement or translation of monetary items are recognised in the statement of profit or loss.

2.4 Summary of significant accounting policies (continued)

Foreign currencies (continued)

Differences arising on settlement or translation of monetary items are recognised in the statement of profit or loss with the exception of monetary items that are designated as part of the hedge of the Group's net investment of a foreign operation. These are recognised in other comprehensive income until the net investment is disposed of, at which time the cumulative amount is reclassified to the statement of profit or loss. Tax charges and credits attributable to exchange differences on those monetary items are also recorded in other comprehensive income.

Non-monetary items that are measured in terms of historical cost in a foreign currency are translated using the exchange rates at the dates of the initial transactions. Non-monetary items measured at fair value in a foreign currency are translated using the exchange rates at the date when the fair value was measured. The gain or loss arising on translation of a non-monetary item measured at fair value is treated in line with the recognition of the gain or loss on change in fair value of the item (i.e., translation difference on the item whose fair value gain or loss is recognised in other comprehensive income or profit or loss is also recognised in other comprehensive income or profit or loss, respectively).

In determining the exchange rate on initial recognition of the related asset, expense or income on the derecognition of a non-monetary asset or non-monetary liability relating to an advance consideration, the date of initial transaction is the date on which the Group initially recognises the non-monetary asset or non-monetary liability arising from the advance consideration. If there are multiple payments or receipts in advance, the Group determines the transaction date for each payment or receipt of the advance consideration.

The functional currencies of certain overseas subsidiaries and associates are currencies other than the RMB. As at the end of the reporting period, the assets and liabilities of these entities are translated into RMB at the exchange rates prevailing at the end of the reporting period and their statements of profit or loss are translated into RMB at the weighted average exchange rates for the year.

The resulting exchange differences are recognised in other comprehensive income and accumulated in the exchange fluctuation reserve. On disposal of a foreign operation, the component of other comprehensive income relating to that particular foreign operation is recognised in the statement of profit or loss.

Any goodwill arising on the acquisition of a foreign operation and any fair value adjustments to the carrying amounts of assets and liabilities arising on acquisition are treated as assets and liabilities of the foreign operation and translated at the closing rate.

For the purpose of the consolidated statement of cash flows, the cash flows of overseas subsidiaries are translated into RMB at the exchange rates ruling at the dates of the cash flows. Frequently recurring cash flows of overseas subsidiaries which arise throughout the year are translated into RMB at the weighted average exchange rates for the year.

3. Significant accounting judgements and estimates

The preparation of the Group's financial statements requires management to make judgements, estimates and assumptions that affect the reported amounts of revenues, expenses, assets and liabilities, and their accompanying disclosures, and the disclosure of contingent liabilities. Uncertainty about these assumptions and estimates could result in outcomes that could require a material adjustment to the carrying amounts of the assets or liabilities affected in the future.

Judgements

In the process of applying the Group's accounting policies, management has made the following judgements, apart from those involving estimations, which have the most significant effect on the amounts recognised in the financial statements:

Revenue from contracts with customers

The Group applied the following judgements that significantly affect the determination of the amount and timing of revenue from contracts with customers:

- Determining the method to estimate variable consideration and assessing the constraint for the sale of biopharmaceutical products.

  Certain contracts for the sale of biopharmaceutical products include a right of return and trade discounts that give rise to variable consideration. In estimating the variable consideration, the Group is required to use either the expected value method or the most likely amount method based on which method better predicts the amount of consideration to which it will be entitled.

  The Group determined that the expected value method is the appropriate method to use in estimating the variable consideration for the sale of biopharmaceutical products with rights of return, given the large number of customer contracts that have similar characteristics. In estimating the variable consideration for the sale of biopharmaceutical products with trade discounts, the Group determined that using a combination of the most likely amount method and the expected value method is appropriate. The selected method that better predicts the amount of variable consideration related to trade discounts is primarily driven by the credit of customers contained in the contract.

  Before including any amount of variable consideration in the transaction price, the Group considers whether the amount of variable consideration is constrained. The Group determined that the estimates of variable consideration are not constrained based on its historical experience, business forecast and the current economic conditions. In addition, the uncertainty on the variable consideration will be resolved within a short time frame.

3. Significant accounting judgements and estimates (continued)

Judgements (continued)

Tax provisions

Determining tax provisions involves judgement on the future tax treatment of certain transactions. The Group carefully evaluates tax implications of transactions, and tax provisions are set up accordingly. The tax treatment of such transactions is assessed periodically to take into account all the changes in the tax legislation and practices.

Determination of control over certain entity

The Group considers that it has no control over certain entity even through it has more than 50% of the voting rights. Based on the assessment following the basis of consolidation and accounting policies set out in note 2.1 and 2.4 respectively, the Group has not consolidated certain entity that it has no control. For the investment that the Group has significant influence, it is accounted for as an associate in accordance with IAS 28 *Investment in Associates and Joint Ventures*.

Estimation uncertainty

The key assumptions concerning the future and other key sources of estimation uncertainty at the end of the reporting period, that have a significant risk of causing a material adjustment to the carrying amounts of assets and liabilities within the next financial year, are described below.

Variable consideration for returns and trade discounts

The Group estimates variable consideration to be included in the transaction price for the sale of biopharmaceutical products with rights of return and trade discounts.

The Group developed a statistical model for forecasting sales returns. The model used the historical return data of each product to come up with expected return percentages. These percentages are applied to determine the expected value of the variable consideration. Any significant changes in experience as compared to historical return pattern will impact the expected return percentages estimated by the Group.

3. Significant accounting judgements and estimates (continued)

Estimation uncertainty (continued)

Impairment of goodwill

The Group determines whether goodwill is impaired at least on an annual basis. This requires an estimation of the value in use of the cash-generating units to which the goodwill is allocated. Estimating the value in use requires the Group to make an estimate of the expected future cash flows from the cash-generating units and also to choose a suitable discount rate in order to calculate the present value of those cash flows. The carrying amount of goodwill at 31 December 2019 was approximately RMB4,145,896,000 (2018: RMB4,089,064,000). Further details are given in note 16 to the financial statements.

Provision for expected credit losses on trade receivables, prepayments, other receivables and other assets and long-term receivables

The Group uses a provision matrix to calculate ECLs for trade receivables, prepayments, other receivables and other assets and long-term receivables. The provision rates are based on ageing for groupings of various customer segments that have similar loss patterns (i.e., by customer type and rating).

The provision matrix is initially based on the Group's historical observed default rates. The Group will calibrate the matrix to adjust the historical credit loss experience with forward-looking information. For instance, if forecast economic conditions (i.e., gross domestic products) are expected to deteriorate over the next year which can lead to an increased number of defaults in the manufacturing sector, the historical default rates are adjusted. At each reporting date, the historical observed default rates are updated and changes in the forward-looking estimates are analysed.

The assessment of the correlation among historical observed default rates, forecast economic conditions and ECLs is a significant estimate. The amount of ECLs is sensitive to changes in circumstances and forecast economic conditions. The Group's historical credit loss experience and forecast of economic conditions may also not be representative of a customer's actual default in the future. The information about the ECLs on the Group's trade receivables is disclosed in note 24 to the financial statements.

3. Significant accounting judgements and estimates (continued)

Estimation uncertainty (continued)

Leases — Estimating the incremental borrowing rate

The Group cannot readily determine the interest rate implicit in a lease, and therefore, it uses an incremental borrowing rate ("**IBR**") to measure lease liabilities. The IBR is the rate of interest that the Group would have to pay to borrow over a similar term, and with a similar security, the funds necessary to obtain an asset of a similar value to the right-of-use asset in a similar economic environment. The IBR therefore reflects what the Group "would have to pay", which requires estimation when no observable rates are available (such as for subsidiaries that do not enter into financing transactions) or when it needs to be adjusted to reflect the terms and conditions of the lease (for example, when leases are not in the subsidiary's functional currency). The Group estimates the IBR using observable inputs (such as market interest rates) when available and is required to make certain entity-specific estimates (such as the subsidiary's stand-alone credit rating).

Impairment of non-financial assets (other than goodwill)

The Group assesses whether there are any indicators of impairment for all non-financial assets at the end of each reporting period. Indefinite life intangible assets are tested for impairment annually and at other times when such an indicator exists. Other non-financial assets are tested for impairment when there are indicators that the carrying amounts may not be recoverable. An impairment exists when the carrying value of an asset or a cash-generating unit exceeds its recoverable amount, which is the higher of its fair value less costs of disposal and its value in use. The calculation of the fair value less costs of disposal is based on available data from binding sales transactions in an arm's length transaction of similar assets or observable market prices less incremental costs for disposing of the asset. When value in use calculations are undertaken, management must estimate the expected future cash flows from the asset or cash-generating unit and choose a suitable discount rate in order to calculate the present value of those cash flows.

Deferred tax assets

Deferred tax assets are recognised for unused tax losses to the extent that it is probable that taxable profit will be available against which the losses can be utilised. Significant management judgement is required to determine the amount of deferred tax assets that can be recognised, based upon the likely timing and level of future taxable profits together with future tax planning strategies. Further details are contained in note 22 to the financial statements.

3. Significant accounting judgements and estimates (continued)

Estimation uncertainty (continued)

Fair value of unlisted equity investments

The unlisted equity investments have been valued based on a market-based valuation technique as detailed in note 44 to the financial statements. The valuation requires the Group to determine the comparable public companies (peers) and select the price multiple. In addition, the Group makes estimates about the discount for illiquidity. The Group classifies the fair value of these investments as Level 3. The fair value of the unlisted equity investments at 31 December 2019 was RMB174,070,000 (2018: RMB313,246,000). Further details are included in note 20 to the financial statements.

Development costs

Development costs are capitalised in accordance with the accounting policy for research and development costs in note 2.4 to the financial statements. Determining the amounts to be capitalised requires management to make assumptions regarding the expected future cash generation of the assets, discount rates to be applied and the expected period of benefits. At 31 December 2019, the best estimate of the carrying amount of capitalised development costs was RMB151,764,000 (2018: RMB138,481,000).

Estimation of inventory provision

The Group recognises a provision for inventories when the cost of inventories exceeds the net realisable value. The assessment of inventory provision requires management estimates on the future selling price and future cost to be incurred of the inventories. Where the actual outcome or expectation in future is different from the original estimate, such differences will impact on the carrying value of inventories and provision charge/write-back of provision. The Group also reviews the condition of the inventories of the Group and makes provision for obsolete inventory items identified that were no longer suitable for sale.

Share-based payments

The Group measures the cost of equity-settled transactions with employees by reference to the fair value of the equity instruments at the date at which they are granted. Estimating fair value requires determining the most appropriate valuation model for a grant of equity instruments, which is dependent on the terms and conditions of the grant. This also requires determining the most appropriate inputs to the valuation model including the expected life of the option, volatility and dividend yield and making assumptions about them. Details of share-based payments are contained in note 35 to the financial statements.

3. Significant accounting judgements and estimates (continued)

Estimation uncertainty (continued)

Useful lives, residual values and depreciation of property, plant and equipment

The Group determines the estimated useful lives and related depreciation charges for the Group's property, plant and equipment. This estimate is based on the historical experience of the actual useful lives of property, plant and equipment of similar nature and functions. The Group will revise the depreciation charges where useful lives are different to those previously estimated, or it will write off or write down technically obsolete or non-strategic assets that have been abandoned or sold. Actual economic lives may differ from estimated useful lives; and actual residual values may differ from estimated residual values. Periodic review could result in a change in depreciable lives and residual values and therefore depreciation expenses in the future periods.

4. Operating segment information

The Group has only one operating segment, which is the development, production, marketing and sale of biopharmaceutical products.

Geographical information

(a) Revenue from external customers

	2019	2018
	RMB'000	RMB'000
Mainland China	**5,175,586**	4,430,024
Others	**142,505**	153,845
	5,318,091	4,583,869

The revenue information above is based on the locations of the customers.

4. Operating segment information (continued)

Geographical information (continued)

(b) Non-current assets

	2019 RMB'000	2018 RMB'000
Mainland China	**7,391,487**	6,817,104
Others	**2,009,070**	2,158,612
	9,400,557	8,975,716

The non-current asset information above is based on the locations of the assets and excludes financial instruments and deferred tax assets.

Information about major customers

The Group's customer base is diversified and no revenue from transactions with a significant customer amounted of 10% or more of the Group's total revenue during the year.

5. Revenue, other income and gains

An analysis of revenue is as follows:

	2019 RMB'000	2018 RMB'000
Revenue from contracts with customers		
Sale of biopharmaceuticals	**5,292,397**	4,569,565
Technical service	**25,694**	14,304
	5,318,091	4,583,869

5. Revenue, other income and gains (continued)

Revenue from contracts with customers

(a) Disaggregated revenue information

	2019 RMB'000	2018 RMB'000
Type of goods or services		
Sale of biopharmaceuticals	**5,292,397**	4,569,565
Technical service	**25,694**	14,304
Total revenue from contracts with customers	**5,318,091**	4,583,869
Geographical markets		
Mainland China	**5,175,586**	4,430,024
Others	**142,505**	153,845
Total revenue from contracts with customers	**5,318,091**	4,583,869
Timing of revenue recognition		
Goods transferred at a point in time	**5,292,397**	4,569,565
Services transferred over time	**25,694**	14,304
Total revenue from contracts with customers	**5,318,091**	4,583,869

The following table shows the amount of revenue recognised in the current reporting period that was included in the contract liabilities at the beginning of the reporting period and recognised from performance obligations satisfied in previous periods:

Revenue recognised that was included in contract liabilities at the beginning of the reporting period:

	2019 RMB'000	2018 RMB'000
Sale of biopharmaceuticals	**29,816**	76,854

5. Revenue, other income and gains (continued)

Revenue from contracts with customers (continued)

(b) Performance obligations

Information about the Group's performance obligations is summarised below:

Sale of biopharmaceuticals

The performance obligation is satisfied upon receipt of the biopharmaceutical products by customers and payment is generally due within 60 to 90 days from reception, except for new customers, where payment in advance is normally required. Some contracts provide customers with a right of return and trade discounts which give rise to variable consideration subject to constraint.

Technical service

The performance obligation is satisfied over time as services are rendered and payment is generally due upon completion of milestones and customer acceptance.

The amounts of transaction prices allocated to the remaining performance obligations (unsatisfied or partially unsatisfied) as at 31 December are as follows:

	2019	2018
	RMB'000	RMB'000
Amounts expected to be recognised as revenue:		
Within one year	**18,300**	6,485
After one year	**15,705**	6,710
	34,005	13,195

The amounts of transaction prices allocated to the remaining performance obligations which are expected to be recognised as revenue within two years related to technical service. The amounts disclosed above do not include variable consideration which is constrained.

5. Revenue, other income and gains (continued)

Revenue from contracts with customers (continued)

(b) Performance obligations (continued)

Technical service (continued)

	2019 RMB'000	2018 RMB'000
Other income		
Government grants related to		
— Assets (a)	**31,578**	35,350
— Income (b)	**36,508**	26,786
Interest income	**83,858**	64,771
Licensing income	**991**	1,397
Others	**17,550**	16,396
	170,485	144,700
Gains		
Gain on reclassification from an investment in an associate to an equity investment designated at fair value through other comprehensive income (c)	**—**	201,324
Foreign exchange differences, net	**47,622**	83,786
	47,622	285,110
	218,107	429,810

Notes:

(a) The Group has received certain government grants to purchase items of property, plant and equipment. The grants are initially recorded as deferred income and are amortised against the depreciation charge of the underlying property, plant and equipment in accordance with the assets' estimated useful lives (note 30).

(b) The government grants have been received for the Group's contribution to the development of the local pharmaceutical industry. There are no unfulfilled conditions or contingencies attaching to these grants.

(c) On 13 July 2018, Ascentage Pharma Group International ("**Ascentage International**") completed the reorganisation. Ascentage Jiangsu Pharmaceutical Group Co., Ltd. ("**Ascentage Jiangsu**") became a 100% subsidiary of Ascentage International. After reorganisation, the Group no longer holds equity in Ascentage Jiangsu, and holds 10,140,375 preferred shares of Ascentage International which accounts for 4.89% of its total equity.

On 6 July 2018, the Group withdrew from the board of directors and had no significant impact on Ascentage international. In accordance with IFRS 9, the investment in Ascentage International was remeasured from an investment in an associate to an equity investment designated at fair value through other comprehensive income, and the Group recognised a gain upon reclassification of RMB201,324,000.

6. Profit before tax

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

	Notes	2019 RMB'000	2018 RMB'000
Cost of inventories sold		**918,155**	870,628
Cost of service provided		**7,192**	6,627
Depreciation of property, plant and equipment	14	**185,608**	165,248
Depreciation of right-of-use assets (2018: amortisation of land lease payments)	15(b)	**13,292**	8,480
Amortisation of other intangible assets		**135,068**	148,016
Amortisation of long-term deferred expenditures		**3,780**	1,958
Minimum lease payments under operating leases		**—**	9,137
Lease payments not included in the measurement of lease liabilities	15(d)	**6,615**	—
Auditor's remuneration		**9,367**	7,813
Employee benefit expenses (excluding directors' and chief executive's remuneration):			
Wages, salaries and staff welfare		**973,269**	878,758
Equity-settled compensation expenses		**153,469**	15,756
Pension scheme contributions		**71,694**	68,384
Social welfare and other costs		**108,237**	91,218
		1,306,669	1,054,116
Other expenses and losses:			
Donation		**63,679**	36,224
Loss on disposal of items of property, plant and equipment		**3,367**	10,054
Impairment of long-term receivables	21	**28,170**	8,095
(Reversal of provision for impairment)/provision for impairment of trade receivables	24	**(12,078)**	36,622
Provision for impairment of prepayments, other receivables and other assets	25	**25,717**	23,299
Fair value loss on a derivative financial instrument		**—**	1,323
Others		**5,169**	8,045
		114,024	123,662

7. Finance costs

An analysis of finance costs is as follows:

	2019 RMB'000	2018 RMB'000
Interest on bank loans	**36,380**	65,609
Interest on convertible bonds	**72,518**	72,773
Interest on lease liabilities	**578**	—
	109,476	138,382

8. Directors' and chief executive's remuneration

Directors' and chief executive's remuneration for the year, disclosed pursuant to the Listing Rules, section 383(1)(a), (b), (c) and (f) of the Hong Kong Companies Ordinance and Part 2 of the Companies (Disclosure of Information about Benefits of Directors) Regulation, is as follows:

	2019 RMB'000	2018 RMB'000
Fees	**6,975**	11,035
Other emoluments:		
Salaries, allowances, bonuses and other benefits	**2,011**	2,183
Equity-settled compensation expenses	**192,642**	1,731
Pension scheme contributions	**646**	708
	202,274	15,657

On 2 February 2017, certain directors were granted share options, in respect of their services to the Group, under the share option scheme of the Company, further details of which are set out in note 35 to the financial statements. The fair value of such options, which has been recognised in the statement of profit or loss over the vesting period, was determined as at the date of grant and the amount included in the financial statements for the current year is included in the above directors' and chief executive's remuneration disclosures.

8. Directors' and chief executive's remuneration (continued)

(a) Independent non-executive directors

The fees paid to independent non-executive directors during the year were as follows:

	2019 RMB'000	2018 RMB'000
Mr. David Ross Parkinson	269	263
Mr. Jun Ma (i)	127	263
Mr. Tianruo Pu	269	263
Mr. Wong Lap Yan (ii)	62	–
	727	789

(i) Mr. Jun Ma resigned on 20 June 2019.

(ii) Mr. Wong Lap Yan was appointed on 8 October 2019.

There were no other emoluments payable to the independent non-executive directors during the year (2018: Nil).

(b) Executive directors, non-executive directors and the chief executive

	Fees RMB'000	Salaries, allowances, bonuses and other benefits RMB'000	Equity-settled compensation expenses RMB'000	Pension scheme contributions RMB'000	Total RMB'000
2019					
Chief executive					
Dr. Jing Lou (i)	2,809	432	190,405	318	193,964
Executive directors					
Mr. Bo Tan (ii)	2,218	368	363	215	3,164
Ms. Dongmei Su	523	851	1,874	99	3,347
Mr. Bin Huang (iii)	698	360	–	14	1,072
Non-executive directors					
Mr. Bin Huang (iii)	–	–	–	–	–
Mr. Dong Liu	–	–	–	–	–
Mr. Dasong Wang (iv)	–	–	–	–	–
	6,248	2,011	192,642	646	201,547

8. Directors' and chief executive's remuneration (continued)

(b) Executive directors, non-executive directors and the chief executive (continued)

	Fees RMB'000	Salaries, allowances, bonuses and other benefits RMB'000	Equity-settled compensation expenses RMB'000	Pension scheme contributions RMB'000	Total RMB'000
2018					
Chief executive					
Dr. Jing Lou (i)	5,147	432	577	294	6,450
Executive directors					
Mr. Bo Tan (ii)	3,898	482	577	200	5,157
Ms. Dongmei Su	515	824	577	156	2,072
Mr. Bin Huang (iii)	686	445	—	58	1,189
Non-executive directors					
Mr. Dong Liu	—	—	—	—	—
Mr. Dasong Wang (iv)	—	—	—	—	—
	10,246	2,183	1,731	708	14,868

(i) Dr. Jing Lou who acts as the chief executive and the president of the Company is also an executive director of the Company.

(ii) Mr. Bo Tan resigned on 2 December 2019.

(iii) Mr. Bin Huang resigned as executive director and was appointed as non-executive director on 20 June 2019.

(iv) Mr. Dasong Wang resigned on 8 October 2019.

There was no arrangement under which a director or the chief executive waived or agreed to waive any remuneration during the year.

9. Five highest paid employees

The five highest paid employees during the year included the chief executive (2018: one director and the chief executive), details of whose remuneration are set out in note 8 above. Details of the remuneration for the year of the remaining four (2018: three) highest paid employees who are neither directors nor chief executives of the Company are as follows:

	2019 RMB'000	2018 RMB'000
Salaries, allowances, bonuses and other benefits	**11,231**	9,254
Pension scheme contributions	**503**	379
Equity-settled compensation expenses	**58,757**	4,372
	70,491	14,005

The number of non-director and non-chief executive highest paid employees whose remuneration fell within the following bands is as follows:

	Number of employees	
	2019	2018
HKD4,000,001 to HKD4,500,000	**—**	1
HKD4,500,001 to HKD5,000,000	**—**	1
HKD6,500,001 to HKD7,000,000	**1**	1
HKD9,000,001 to HKD9,500,000	**1**	—
HKD29,500,001 to HKD33,000,000	**1**	—
HKD33,000,001 to HKD33,500,000	**1**	—
	4	3

On 2 February 2017, share options were granted to two non-director and non-chief executive highest paid employees in respect of their services to the Group, further details of which are included in the disclosures in note 35 to the financial statements. The fair value of such options, which has been recognised in the statement of profit or loss over the vesting period, was determined as at the date of grant and the amount included in the financial statements for the current year is included in the above non-director and non-chief executive highest paid employees' remuneration disclosures.

10. Pension schemes

The Company's subsidiaries registered in the PRC and Italy are required to participate in the retirement benefit schemes operated by the relevant local government authorities in Mainland China and Italy. The relevant local government authorities in Mainland China and Italy are responsible for the pension liabilities payable to retired employees. The Group is required to make contributions for those employees who are registered as permanent residents in Mainland China and Italy within the scope of the relevant PRC and Italy regulations at 16% and 30%(2018: 20% and 30%) of the employees' salaries for the year, respectively.

The Group's contributions to the retirement benefit schemes for the year ended 31 December 2019 amounted to approximately RMB72,340,000 (2018: RMB69,092,000).

11. Income tax

The Group is subject to income tax on an entity basis on profits arising in or derived from the jurisdictions in which members of the Group are domiciled and operate.

Pursuant to the relevant rules and regulations of the Cayman Islands and the British Virgin Islands ("**BVI**"), the Company and the subsidiaries of the Group incorporated therein are not subject to any income tax in the Cayman Islands and the BVI.

No provision for Hong Kong profits tax has been made during the year as the Group had no assessable profits arising in Hong Kong.

Under the relevant PRC income tax law, except for Shenyang Sunshine, Sciprogen, Zhejiang Wansheng, NERC and Sunshine Guojian which enjoy certain preferential treatment available to the Group, the PRC subsidiaries of the Group are subject to income tax at a rate of 25% on their respective taxable income.

Shenyang Sunshine, Sciprogen, Zhejiang Wansheng, NERC and Sunshine Guojian are qualified as High and New Technology Enterprises and are entitled to a preferential income tax rate of 15%. In accordance with relevant Italian tax regulations, Sirton is subject to income tax at a rate of 27.9% (2018: 27.9%).

Pursuant to the PRC Corporate Income Tax Law, a 10% withholding tax is levied on dividends declared to foreign investors from the foreign investment enterprises established in Mainland China. The requirement became effective on 1 January 2008 and applies to earnings after 31 December 2007. A lower withholding tax rate may be applied if there is a tax treaty between the PRC and the jurisdiction of the foreign investors.

11. Income tax (continued)

An analysis of the provision for tax in the financial statements is as follows:

	2019 RMB'000	2018 RMB'000
Current	**286,431**	242,145
Deferred	**(43,646)**	(23,880)
Total tax charge for the year	**242,785**	218,265

A reconciliation of the tax expense applicable to profit before tax using the statutory rate for Mainland China to the tax expense at the effective tax rate is as follows:

	2019 RMB'000	2018 RMB'000
Profit before tax	**1,223,013**	1,495,511
At the PRC's statutory income tax rate of 25%	**305,753**	373,878
Preferential income tax rates applicable to subsidiaries	**(81,911)**	(186,862)
Additional deductible allowance for research and development expenses	**(59,890)**	(32,430)
Income not subject to tax	**(15,157)**	(24,503)
Effect of non-deductible expenses	**16,744**	29,964
Tax losses utilised from previous periods	**(1,361)**	(1,268)
Tax losses not recognised	**74,889**	59,657
Others	**3,718**	(171)
Tax charge at the Group's effective rate	**242,785**	218,265

The effective tax rate of the Group for the year ended 31 December 2019 was 19.9% (2018: 14.6%).

12. Dividends

	2019 RMB'000	2018 RMB'000
Proposed and declared dividend	–	–

No dividends were declared or paid by the Company for the year ended 31 December 2019 (31 December 2018: Nil).

13. Earnings per share attributable to ordinary equity holders of the parent

The calculation of the basic earnings per share amount is based on the profit for the year attributable to ordinary equity holders of the parent and the weighted average number of ordinary shares of 2,535,438,744 (2018: 2,540,646,747) in issue during the year, as adjusted to reflect the issue of ordinary shares during the year.

The calculation of the diluted earnings per share amount is based on the profit for the year attributable to ordinary equity holders of the parent, adjusted to reflect the interest on the convertible bonds. The weighted average number of ordinary shares used in the calculation is the number of ordinary shares in issue during the year, as used in the basic earnings per share calculation, and the weighted average number of ordinary shares assumed to have been issued at no consideration on the deemed exercise or conversion of all dilutive potential ordinary shares into ordinary shares.

The calculations of basic and diluted earnings per share are based on:

	2019 RMB'000	2018 RMB'000
Earnings		
Profit attributable to ordinary equity holders of the parent	**973,717**	1,277,167
Interest on convertible bonds	–	72,773
Profit attributable to ordinary equity holders of the parent before interest on convertible bonds	**973,717**	1,349,940

13. Earnings per share attributable to ordinary equity holders of the parent (continued)

	2019	2018
Shares		
Weighted average number of ordinary shares in issue during the year	**2,535,438,744**	2,540,646,747
Effect of dilution — weighted average number of ordinary shares:		
Warrants	**—**	23,600,245
Share options	**2,299,436**	1,428,049
Convertible bonds	**—**	188,363,445
	2,537,738,180	2,754,038,486

Because the diluted earnings per share amount is increased when taking convertible bonds into account, the convertible bonds had an anti-dilutive effect on the basic earnings per share for the year and were ignored in the calculation of diluted earnings per share.

14. Property, plant and equipment

2019

	Land and buildings RMB'000	Plant and machinery RMB'000	Furniture and fixtures RMB'000	Motor vehicles RMB'000	Construction in progress RMB'000	Total RMB'000
At 31 December 2018 and at 1 January 2019:						
Cost	857,819	1,148,204	159,486	13,547	353,914	2,532,970
Accumulated depreciation	(171,818)	(443,143)	(115,789)	(10,259)	–	(741,009)
Net carrying amount	686,001	705,061	43,697	3,288	353,914	1,791,961
At 1 January 2019, net of accumulated depreciation	686,001	705,061	43,697	3,288	353,914	1,791,961
Additions	15	53,855	53,357	2,032	278,796	388,055
Disposals	(2,234)	(2,205)	(825)	(146)	–	(5,410)
Depreciation provided during the year	(46,245)	(106,977)	(31,127)	(1,259)	–	(185,608)
Transfers	39,652	28,182	383	–	(68,217)	–
Exchange realignment	(64)	(97)	(5)	(4)	(35)	(205)
At 31 December 2019, net of accumulated depreciation	677,125	677,819	65,480	3,911	564,458	1,988,793
At 31 December 2019:						
Cost	893,638	1,215,211	206,514	14,116	564,458	2,893,937
Accumulated depreciation	(216,513)	(537,392)	(141,034)	(10,205)	–	(905,144)
Net carrying amount	677,125	677,819	65,480	3,911	564,458	1,988,793

A freehold land with a carrying amount of approximately RMB3,980,000 as at 31 December 2019 (2018: RMB3,996,000) is situated in Italy.

The Group is in the process of applying for the title certificates of certain of its buildings with an aggregate book value of approximately RMB65,472,000 as at 31 December 2019 (2018: RMB68,885,000). The directors are of the view that the Group is entitled to lawfully and validly occupy and use the above-mentioned buildings. The directors are also of the opinion that the aforesaid matter did not have any significant impact on the Group's financial position as at 31 December 2019.

At 31 December 2019, certain of the Group's land and buildings, which had an aggregate carrying amount of approximately RMB2,733,000 (2018: RMB2,744,000) and RMB14,443,000 (2018: RMB14,308,000) respectively, were pledged to secure general banking facilities granted to the Group (note 31).

14. Property, plant and equipment (continued)

2018

	Land and buildings RMB'000	Plant and machinery RMB'000	Furniture and fixtures RMB'000	Motor vehicles RMB'000	Construction in progress RMB'000	Total RMB'000
At 31 December 2017 and at 1 January 2018:						
Cost	712,401	796,402	123,013	13,268	730,547	2,375,631
Accumulated depreciation	(148,026)	(369,488)	(88,889)	(9,559)	–	(615,962)
Net carrying amount	564,375	426,914	34,124	3,709	730,547	1,759,669
At 1 January 2018, net of accumulated depreciation	564,375	426,914	34,124	3,709	730,547	1,759,669
Additions	5,606	19,566	35,868	1,081	148,181	210,302
Disposals	(8,227)	(4,327)	(439)	(159)	–	(13,152)
Depreciation provided during the year	(44,635)	(89,222)	(30,046)	(1,345)	–	(165,248)
Transfers	168,785	352,009	4,185	–	(524,979)	–
Exchange realignment	97	121	5	2	165	390
At 31 December 2018, net of accumulated depreciation	686,001	705,061	43,697	3,288	353,914	1,791,961
At 31 December 2018:						
Cost	857,819	1,148,204	159,486	13,547	353,914	2,532,970
Accumulated depreciation	(171,818)	(443,143)	(115,789)	(10,259)	–	(741,009)
Net carrying amount	686,001	705,061	43,697	3,288	353,914	1,791,961

15. Leases

The Group as a lessee

The Group has lease contracts for certain land and buildings. Lump sum payments were made upfront to acquire the leased land from the owners with lease periods of 30 to 50 years, and no ongoing payments will be made under the terms of these land leases. Some of leased buildings have lease terms of 12 months or less and/or are individually of low value. Generally, the Group is restricted from assigning and subleasing the leased assets outside the Group.

(a) Prepaid land lease payments (before 1 January 2019)

	RMB'000
Carrying amount at 1 January 2018	314,726
Additions	28,959
Recognised in profit or loss during the year	(8,480)
Carrying amount at 31 December 2018	335,205
Current portion included in prepayments, other receivables and other assets	(8,748)
Non-current portion	326,457

(b) Right-of-use assets

The carrying amounts of the Group's right-of-use assets and the movements during the year are as follows:

	Prepaid land lease payments RMB'000	Operating lease RMB'000	Total RMB'000
As at 1 January 2019	**335,205**	**8,243**	**343,448**
Additions	**—**	**5,780**	**5,780**
Depreciation charge	**(8,769)**	**(4,523)**	**(13,292)**
As at 31 December 2019	**326,436**	**9,500**	**335,936**

15. Leases (continued)

The Group as a lessee (continued)

(c) Lease liabilities

The carrying amount of lease liabilities and the movements during the year are as follows:

	2019 Lease liabilities RMB'000
Carrying amount at 1 January	8,243
New leases	5,780
Accretion of interest recognised during the year	578
Payments	(5,170)
Carrying amount at 31 December	9,431
Analysed into:	
Current portion	5,467
Non-current portion	3,964

The maturity analysis of lease liabilities is disclosed in note 45 to the financial statements.

(d) The amounts recognised in profit or loss in relation to leases are as follows:

	2019 RMB'000
Interest on lease liabilities	578
Depreciation charge of right-of-use assets	13,292
Expense relating to short-term leases and other leases with remaining lease terms ended on or before 31 December 2019 (included in administrative expenses)	5,956
Expense relating to leases of low-value assets (included in administrative expenses)	659
Total amount recognised in profit or loss	20,485

16. Goodwill

	RMB'000
Cost at 1 January 2018	3,923,598
Exchange realignment	165,466
Cost and net carrying amount at 31 December 2018	4,089,064
Cost at 1 January 2019	**4,089,064**
Exchange realignment	**56,832**
Cost and net carrying amount at 31 December 2019	**4,145,896**
At 31 December 2019:	
Cost	**4,145,896**
Accumulated impairment	**—**
Net carrying amount	**4,145,896**

Impairment testing of goodwill

Goodwill acquired through business combinations is allocated to the group of biopharmaceutical products cash-generating units ("**CGUs**"), which is the sole group of CGUs of the Group.

The recoverable amount of the group of CGUs has been determined based on a value in use calculation using cash flow projections which are based on financial forecast approved by the Company's directors covering a period of six years (the "**Forecast Period**"). The discount rate applied to the cash flow projections is 16.0%, which is determined by reference to the average rate for similar industries and the business risk of the relevant business units. The growth rate used to extrapolate the cash flows beyond the Forecast Period is 3%.

In the opinion of the Company's directors, any reasonably possible change in the key assumptions on which the recoverable amount is based would not cause the carrying amount of the group of CGUs to exceed the recoverable amount.

Assumptions were used in the value in use calculation of the group of CGUs as at 31 December 2019. The following describes each key assumption on which management has based its cash flow projections to undertake impairment testing of goodwill:

Gross margins — Gross margins are based on the average gross margins achieved in the year immediately before the forecast year and are increased over the Forecast Period for anticipated efficiency improvements and expected market development.

16. Goodwill (continued)

Impairment testing of goodwill (continued)

Discount rate — The discount rate used is before tax and reflects specific risks relating to the relevant group of CGUs.

Growth rate — The growth rate is based on historical sales over the last three years and expected growth rates of the pharmaceutical market according to published industry research.

The values assigned to the key assumptions are consistent with external information sources.

In the opinion of the Company's directors, a decrease in the growth rate by 5% would cause the recoverable amount of the cash-generating unit to exceed its carrying amount by approximately RMB3,203,657,000 to RMB1,157,869,000, and any reasonably possible change in the other key assumptions on which the recoverable amount is based would not cause the carrying amount of the cash-generating unit to exceed its recoverable amount.

17. Other Intangible Assets

2019

	Exclusive distribution right RMB'000	IP rights RMB'000	Patents and technology know-how RMB'000	IPR&Ds RMB'000	Others RMB'000	Total RMB'000
Cost at 1 January 2019, net of accumulated amortisation	550,886	1,279,980	301,081	138,481	28,307	2,298,735
Additions	–	–	–	13,283	1,569	14,852
Amortisation provided during the year	(58,097)	(69,350)	(19,553)	–	(8,604)	(155,604)
Exchange realignment	7,174	–	–	–	(18)	7,156
At 31 December 2019	499,963	1,210,630	281,528	151,764	21,254	2,165,139
At 31 December 2019:						
Cost	627,220	1,717,863	422,897	151,764	69,573	2,989,317
Accumulated amortisation	(127,257)	(507,233)	(141,369)	–	(48,319)	(824,178)
Net carrying amount	499,963	1,210,630	281,528	151,764	21,254	2,165,139

17. Other intangible assets (continued)

2018

	Exclusive distribution right RMB'000	IP rights RMB'000	Patents and technology know-how RMB'000	IPR&Ds RMB'000	Others RMB'000	Total RMB'000
Cost at 1 January 2018, net of accumulated amortisation	402,013	1,346,882	341,690	124,636	38,295	2,253,516
Additions	167,374	3,460	–	13,845	1,438	186,117
Amortisation provided during the year	(39,246)	(70,362)	(40,609)	–	(11,438)	(161,655)
Exchange realignment	20,745	–	–	–	12	20,757
At 31 December 2018	550,886	1,279,980	301,081	138,481	28,307	2,298,735
At 31 December 2018:						
Cost	618,712	1,717,863	422,897	138,481	68,019	2,965,972
Accumulated amortisation	(67,826)	(437,883)	(121,816)	–	(39,712)	(667,237)
Net carrying amount	550,886	1,279,980	301,081	138,481	28,307	2,298,735

Impairment testing of IPR&Ds

IPR&Ds were either acquired from a third party or capitalised in accordance with the accounting policies for the research and development costs in note 2.4 to the financial statements. The useful life of IPR&Ds is considered indefinite until the completion or abandonment of the related research and development efforts. IPR&Ds are not amortised but tested individually for impairment annually. The useful life of an intangible asset with an indefinite life is reviewed annually to determine whether the indefinite life assessment continues to be supportable.

The recoverable amounts of IPR&Ds have been determined based on a value in use calculation using cash flow projections which are based on financial forecast approved by the Company's directors. The discount rates applied to the cash flow projections are 29.0%, 26.0%,and 18.5%, which are determined by reference to the average rates for in progress research and development projects with similar business risk and after taking into account the risk premium in connection with the related research and development efforts.

17. Other intangible assets (continued)

Impairment testing of IPR&Ds (continued)

In the opinion of the Company's directors, any reasonably possible change in the key assumptions on which the recoverable amounts are based would not cause the carrying amounts of IPR&Ds to exceed their recoverable amounts.

Assumptions were used in the value in use calculation of IPR&Ds as at 31 December 2019. The following describes each key assumption on which management has based its cash flow projections to undertake impairment testing of IPR&Ds:

Discount rates — The discount rates used are before tax and reflect specific risks in respect of the related research and development efforts.

Royalty rate — The royalty rate is based on similar royalty rates charged by third parties in the pharmaceutical and biotech industry.

Growth rate — The growth rates used to extrapolate the cash flows beyond the five-year period are based on the estimated growth rate of the Group taking into account the industry growth rate, past experience and the medium-term or long-term growth target of the Group.

The values assigned to the key assumptions are consistent with external information sources.

18. Investment in a joint venture

	2019 RMB'000	2018 RMB'000
Share of net assets	**7,470**	2,500

18. Investment in a joint venture (continued)

Particulars of the Group's joint venture are as follows:

Name	Place of registration and business	Percentage of Ownership interest	Voting power	Profit sharing	Principal activities
Liaoning Sunshine Bio-Pharmaceutical Investment Fund Management Partnership LLP ("**Sunshine Bio-Pharmaceutical Fund**")	PRC/ Mainland China	50%	50%	50%	Health industry investment management

The following table illustrates the aggregate financial information of the Group's joint venture that is not individually material:

	2019 RMB'000	2018 RMB'000
Share of the joint venture's profit for the year	**4,970**	—
Aggregate carrying amount of the Group's investment in a joint venture	**7,470**	2,500

19. Investments in associates

	2019 RMB'000	2018 RMB'000
Share of net assets	**593,414**	385,850

19. Investments in associates (continued)

Particulars of the Group's associates are as follows:

Name	Particulars of issued shares held	Place of incorporation/ registration and business	Percentage of ownership interest attributable to the Group %	Principal activities
Refuge Biotechnologies, Inc. (a) (b) ("**Refuge**")	Preferred shares	United States	10.21	Research and development
Shanghai Companion Diagnostics Technology Ltd. (a) (c) ("**Shanghai Companion**")	Ordinary shares	PRC/ Mainland China	14.00	Research and development
Liaoning Sunshine Medical Industry Investment Fund Partnership LLP (a) (d) ("**Sunshine Medical Industry Fund**")	Limited partner	PRC/ Mainland China	66.01	Investment holding
Verseau Therapeutics, Inc. (a) (e) ("**Verseau**")	Preferred shares	United States	11.75	Research and development
Shanghai Corinline Diagnostics Technology Ltd. (a) (f) ("**Corinline**")	Ordinary shares	PRC/ Mainland China	8.00	Research and development
Numab Therapeutics AG, Inc. (a) (g) ("**Numab**")	Preferred shares	Switzerland	16.53	Research and development

19. Investments in associates (continued)

Notes:

(a) Not audited by Ernst & Young, Hong Kong or another member firm of the Ernst & Young global network.

(b) On 30 April 2018, the Group entered into a share subscription agreement to purchase 1,962,349 preferred shares at a consideration of USD8,000,000. The Group retained one seat in the board and can exercise significant influence over Refuge.

(c) On 10 March 2018, the Group entered into an agreement to obtain certain equity interest in Shanghai Companion at a consideration of RMB250,000. The Group retained one seat in the board and can exercise significant influence over Shanghai Companion.

(d) On 28 December 2018, Shenyang Sunshine paid the first instalment of the capital contribution of RMB333,333,000 to acquire certain equity shares of Sunshine Medical Industry Fund. The Group can exercise significant influence over Sunshine Medical Industry Fund.

(e) On 2 February 2019, the Group entered into an agreement to purchase 3,750,000 preferred shares at a consideration of USD15,000,000. The Group retained one seat in the board and can exercise significant influence over Verseau.

(f) On 19 August 2019, the Group entered into an agreement to obtain certain equity interest in Corinline at a consideration of RMB12,000,000. The Group retained one seat in the board and can exercise significant influence over Corinline.

(g) On 27 September 2019, the Group entered into an agreement to acquire certain equity of Numab at a consideration of Swiss Franc 15,001,000. The Group retained one seat in the board and can exercise significant influence over Numab.

The following table illustrates the aggregate financial information of the Group's associates that are not individually material:

	2019	2018
	RMB'000	RMB'000
Share of the associates' losses for the year	**(16,001)**	(8,245)
Share of the associates' total comprehensive losses	**(16,001)**	(8,245)
Aggregate carrying amount of the Group's investments in the associates	**593,414**	385,850

20. Equity investments designated at fair value through other comprehensive income

	2019 RMB'000	2018 RMB'000
Equity investments designated at fair value through other comprehensive income		
Listed equity investments, at fair value	**502,919**	32,872
Unlisted equity investments, at fair value	**174,070**	313,246
	676,989	346,118

The above equity investments were irrevocably designated at fair value through other comprehensive income as the Group considers these investments to be strategic in nature.

In August 2018, the Group sold its equity interest in a listed company as this investment no longer coincided with the Group's investment strategy. The fair value on the date of sale was RMB43,076,000 and the accumulated gain recognised in other comprehensive income of RMB5,796,000 was transferred to retained earnings.

21. Long-term receivables

	2019 RMB'000	2018 RMB'000
Long-term receivables due from a related party (a)	**37,816**	36,853
Long-term receivables	**6,849**	1,845
	44,665	38,698
Provision for impairment of long-term receivables	**(38,110)**	(9,940)
	6,555	28,758

(a) On 29 March 2016, Shenyang Sunshine lent to Zhejiang Sunshine Pharmaceutical Co., Ltd. ("Zhejiang Sunshine"), a related party which was under control of certain middle management personnel of the Company, a convertible loan with a principal amount of RMB75,000,000 at an annual interest rate of 8%. The convertible loan can be converted into equity interests in Zhejiang Sunshine at the discretion of Shenyang Sunshine. In 2017, Zhejiang Sunshine had repaid the principal amount of RMB50,000,000. Pursuant to supplemental agreements dated on 29 June 2018, the maturity date was extended to 29 June 2020. The accrued interest for the year ended 31 December 2019 was RMB963,000 (2018: RMB1,481,000).

The movements in the loss allowance for impairment of long-term receivables are as follows:

	2019 RMB'000	2018 RMB'000
Balance at beginning of the year	**9,940**	1,845
Additions	**28,170**	8,095
Balance at end of the year	**38,110**	9,940

The individually impaired long-term receivables relate to customers that were in financial difficulties or were in default and only a portion of the receivables is expected to be recovered.

21. Long-term receivables (continued)

Impairment under IFRS 9 for the year ended 31 December 2019

An impairment analysis is performed at each reporting date using a provision matrix to measure expected credit losses. The provision rates are based on ageing. The calculation reflects the probability-weighted outcome, the time value of money and reasonable and supportable information that is available at the reporting date about past events, current conditions and forecasts of future economic conditions.

Set out below is the information about the credit risk exposure on the Group's long-term receivables using a provision matrix:

As at 31 December 2019

	Ageing		
	Within 1 Year	1 to 2 years	Over 2 years
Expected credit loss rate	1%	56.0%	100%
Gross carrying amount (RMB'000)	5,963	1,481	37,221
Expected credit losses (RMB'000)	60	829	37,221

22. Deferred tax

The movements in deferred tax liabilities and assets during the year are as follows:

Deferred tax liabilities

	2019			
	Fair value adjustment arising from acquisition of subsidiaries RMB'000	Fair value adjustments of equity investments designated at fair value through other comprehensive income RMB'000	Others RMB'000	Total RMB'000
At 31 December 2018	264,367	6,394	—	270,761
Effect of adoption of IFRS 16	—	—	1,237	1,237
At 1 January 2019 (restated)	**264,367**	**6,394**	**1,237**	**271,998**
Deferred tax credited to the consolidated statement of profit or loss during the year (note 11)	**(10,886)**	**—**	**10,538**	**(348)**
Deferred tax credited to the consolidated statement of comprehensive income	**—**	**(3,573)**	**—**	**(3,573)**
Gross deferred tax liabilities at 31 December 2019	**253,481**	**2,821**	**11,775**	**268,077**

22. Deferred tax (continued)

Deferred tax assets

	2019					
	Accruals RMB'000	Impairment of inventories and financial assets RMB'000	Decelerated depreciation for tax purposes RMB'000	Government grants RMB'000	Others RMB'000	Total RMB'000
At 31 December 2018	31,109	13,710	1,195	27,949	10,439	84,402
Effect of adoption of IFRS 16	–	–	–	–	1,237	1,237
At 1 January 2019 (restated)	31,109	13,710	1,195	27,949	11,676	85,639
Deferred tax credited/(charged) to the consolidated statement of profit or loss during the year (note 11)	36,259	8,569	1,332	(2,279)	(583)	43,298
Deferred tax credited to the consolidated statement of comprehensive income	–	–	–	–	87	87
Gross deferred tax assets at 31 December 2019	67,368	22,279	2,527	25,670	11,180	129,024

22. Deferred tax (continued)

Deferred tax liabilities

	2018		
	Fair value adjustment arising from acquisition of subsidiaries RMB'000	Fair value adjustments of equity investments designated at fair value through other comprehensive income RMB'000	Total RMB'000
Gross deferred tax liabilities at 1 January 2018	280,268	—	280,268
Deferred tax credited to the consolidated statement of profit or loss during the year (note 11)	(15,901)	—	(15,901)
Deferred tax credited to the consolidated statement of comprehensive income	—	6,394	6,394
Gross deferred tax liabilities at 31 December 2018	264,367	6,394	270,761

22. Deferred tax (continued)

Deferred tax assets

	2018					
	Accruals RMB'000	Provision for Impairment of inventories and financial assets RMB'000	Decelerated depreciation for tax purposes RMB'000	Government grants RMB'000	Others RMB'000	Total RMB'000
At 1 January 2018	31,166	4,968	958	28,449	10,822	76,363
Deferred tax credited/(charged) to the consolidated statement of profit or loss during the year (note 11)	(57)	8,742	237	(500)	(443)	7,979
Exchange realignment	—	—	—	—	60	60
Gross deferred tax assets at 31 December 2018	31,109	13,710	1,195	27,949	10,439	84,402

Pursuant to the PRC Corporate Income Tax Law, a 10% withholding tax is levied on dividends declared to foreign investors from the foreign investment enterprises established in Mainland China. The requirement is effective from 1 January 2008 and applies to earnings after 31 December 2007. A lower withholding tax rate may be applied if there is a tax treaty between Mainland China and the jurisdiction of the foreign investors. For the Group, the applicable rate is 5% or 10%. The Group is therefore liable for withholding taxes on dividends distributed by those subsidiaries established in Mainland China in respect of earnings generated from 1 January 2008.

At 31 December 2019, no deferred tax liabilities have been recognised for withholding taxes that would be payable on the unremitted earnings that are subject to withholding taxes of the Group's subsidiaries established in Mainland China (2018: Nil).

In the opinion of the directors, it is not probable that these subsidiaries will distribute such earnings in the foreseeable future. The aggregate amount of temporary differences associated with investments in subsidiaries in Mainland China for which deferred tax liabilities have not been recognised was approximately RMB4,306,848,000 (2018: RMB3,651,738,000).

There are no income tax consequences attaching to the payment of dividends by the Company to its shareholders.

22. Deferred tax (continued)

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

	2019 RMB'000	2018 RMB'000
Tax losses arising in Mainland China (a)	**130,199**	112,452
Tax losses arising in Hong Kong and other countries (b)	**585,542**	291,588
	715,741	404,040

Notes:

(a) The tax losses arising in Mainland China are available for a maximum of ten years for offsetting against future taxable profits of the companies in which the losses arose.

(b) The tax losses arising in Hongkong and in other countries could not be utilised to offset against future profits.

23. Inventories

	2019 RMB'000	2018 RMB'000
Raw materials	**154,710**	87,985
Work in progress	**233,235**	188,270
Finished goods	**117,846**	81,775
Consumables and packaging materials	**24,975**	27,365
	530,766	385,395
Impairment	**(2,293)**	(786)
	528,473	384,609

24. Trade and notes receivables

	2019 RMB'000	2018 RMB'000
Trade receivables	**982,331**	1,410,660
Notes receivable	**87,485**	136,854
	1,069,816	1,547,514
Provision for impairment of trade receivables	**(51,551)**	(63,629)
	1,018,265	1,483,885

The Group's trading terms with its customers are mainly on credit. The credit period is generally two months, extending up to three months for major customers. The Group seeks to maintain strict control over its outstanding receivables and overdue balances are reviewed regularly by senior management. In view of the aforementioned and the fact that the Group's trade receivables relate to a large number of diversified customers, there is no significant concentration of credit risk. Trade receivables are non-interest-bearing.

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

	2019 RMB'000	2018 RMB'000
Within 1 month	**464,339**	708,267
1 to 3 months	**375,581**	566,211
3 to 6 months	**74,424**	28,350
6 months to 1 year	**18,682**	44,203
1 to 2 years	**14,981**	38,939
Over 2 years	**34,324**	24,690
	982,331	1,410,660

24. Trade and notes receivables (continued)

The movements in the loss allowance for impairment of trade receivables are as follows:

	2019 RMB'000	2018 RMB'000
At beginning of year	**63,629**	27,007
Impairment losses, net	**(12,078)**	36,622
At end of year	**51,551**	63,629

An impairment analysis is performed at each reporting date using a provision matrix to measure expected credit losses. The provision rates are based on ageing for groupings of various customer segments with similar loss patterns (i.e., by customer type and rating). The calculation reflects the probability-weighted outcome, the time value of money and reasonable and supportable information that is available at the reporting date about past events, current conditions and forecasts of future economic conditions.

Set out below is the information about the credit risk exposure on the Group's trade receivables using a provision matrix:

As at 31 December 2019

	Ageing					
	Within 1 month	1 to 3 months	3 to 6 months	6 months to 1 year	1 to 2 years	Over 2 years
Expected credit loss rate	**0.83%**	**0.83%**	**0.83%**	**0.83%**	**63.30%**	**100%**
Gross carrying amount (RMB'000)	**464,339**	**375,581**	**74,424**	**18,682**	**14,981**	**34,324**
Expected credit losses (RMB'000)	**3,854**	**3,117**	**618**	**155**	**9,483**	**34,324**

As at 31 December 2018

	Ageing					
	Within 1 month	1 to 3 months	3 to 6 months	6 months to 1 year	1 to 2 years	Over 2 years
Expected credit loss rate	0.83%	0.83%	0.83%	0.83%	71.29%	100%
Gross carrying amount (RMB'000)	708,267	566,211	28,350	44,203	38,939	24,690
Expected credit losses (RMB'000)	5,879	4,700	235	367	27,758	24,690

25. Prepayments,other receivables and other assets

	2019 RMB'000	2018 RMB'000
Prepayments, other receivables and other assets — current portion:		
Interest receivables	**418**	75
Prepayments	**25,951**	27,763
Prepaid land lease payments — current portion	**—**	8,748
Other deposits and other receivables	**138,861**	85,945
Deductible input VAT	**23,182**	8,601
Due from related parties — current portion	**334,969**	321,441
Due from Wealth Honest (a)	**—**	266,808
	523,381	719,381
Impairment allowance	**(51,101)**	(23,955)
Exchange realignment	**80**	(1,429)
	472,360	693,997
Prepayments, other receivables and other assets — non-current portion:		
Advance payments for property, plant and equipment	**121,595**	65,076
Other non-current assets	**42,314**	16,073
	163,909	81,149

Note:

(a) On 27 December 2017, the Group entered into an agreement with Wealth Honest Limited ("**Wealth Honest**"), Zhongjing Xinhua Property Management (Hong Kong) Co., Limited ("**Zhongjing Xinhua**") and Gao Yang, the sole director of Wealth Honest and Zhongjing Xinhua, to lend Wealth Honest an amount of EUR34,000,000 at an annual interest rate of 9%and the maturity date was six months from the date of the borrower's withdrawal. The loan is pledged with the 100% equity of Wealth Honest Cayman Holdings Company Limited ("**Wealth Honest Cayman**") which is held by Wealth Honest, the 100% equity of Wealth Honest Fund LP which is held by Wealth Honest Cayman and a guarantee provided by Zhongjing Xinhua and Gao Yang. On 27 December 2019,Zhongjing Xinhua repaid the loan principal on behalf of Wealth Honest fully in cash.

25. Prepayments,other receivables and other assets (continued)

The movements in the loss allowance for impairment of prepayments, other receivables and other assets are as follows:

	2019 RMB'000	2018 RMB'000
Balances at beginning of the year	**(25,384)**	(656)
Charge for the year	**(25,717)**	(23,299)
Exchange realignment	**80**	(1,429)
At end of the year	**(51,021)**	(25,384)

Other receivables mainly represent the Group's receivables from related parties and third parties. In according to the related party's historical credit, repayment and mortgage information, the loss given default was estimated to be 1% within one year, 56.0% from one year to two years and 100% for more than two years.

26. Financial assets at fair value through profit or loss

	2019 RMB'000	2018 RMB'000
Other unlisted investments, at fair value	**472,163**	35,260

The above unlisted investments were treasury or cash management products issued by banks in Mainland China. They were mandatorily classified as financial assets at fair value through profit or loss as their contractual cash flows are not solely payments of principal and interest.

27. Cash and cash equivalents and pledged deposits

	2019 RMB'000	2018 RMB'000
Cash and bank balances	**2,082,142**	1,791,104
Restricted cash	**705**	1,501
Pledged deposits	**22,073**	14,289
	2,104,920	1,806,894
Less:		
Pledged deposits for letters of credit	**(10,000)**	(248)
Pledged deposits for bank acceptance bills	**(12,073)**	(14,041)
Cash and cash equivalents	**2,082,847**	1,792,605

The RMB is not freely convertible into other currencies. However, under Mainland China's Foreign Exchange Control Regulations and Administration of Settlement, Sales and Payment of Foreign Exchange Regulations, the Group is permitted to exchange RMB for other currencies through banks authorised to conduct foreign exchange business. The remittance of funds out of Mainland China is subject to exchange restrictions imposed by the PRC government.

The Group's cash and cash equivalents and deposits as at 31 December 2019 are denominated in the following currencies:

	2019 RMB'000	2018 RMB'000
Denominated in:		
— RMB	**1,585,014**	674,036
— HKD	**85,380**	142,063
— USD	**310,954**	308,185
— EUR	**123,570**	682,607
— Great Britain Pound ("**GBP**")	**2**	3
	2,104,920	1,806,894

Cash at banks earns interest at floating rates based on daily bank deposit rates. The bank balances and deposits are deposited with creditworthy banks with no recent history of default. The carrying amounts of the cash and cash equivalents approximated to their fair values as at the end of the reporting period. Deposits of approximately RMB22,073,000 (2018: RMB14,289,000) have been pledged to secure letters of credit and bank acceptance bills as at 31 December 2019.

28. Trade and bills payables

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

	2019 RMB'000	2018 RMB'000
Within 3 months	**131,436**	92,046
3 to 6 months	**14,790**	18,721
Over 6 months	**3,537**	2,148
	149,763	112,915

The trade and bills payables are non-interest-bearing and repayable within the normal operating cycle or on demand.

29. Other payables and accruals

	2019 RMB'000	2018 RMB'000
Accrued selling and marketing expenses	**294,498**	308,205
Accrued salaries, bonuses and welfare expenses	**157,277**	173,004
Contract liabilities (a)	**34,431**	29,816
Due to related parties (note 41 (b))	**71,855**	70,691
Taxes payable (other than income tax)	**41,008**	50,640
Interest payables	**143,666**	86,203
Payable to vendors of property, plant and equipment and other intangible assets	**31,828**	21,434
Others	**139,427**	105,732
	913,990	845,725

29. Other payables and accruals (continued)

Note:

(a) Details of contract liabilities are as follows:

	31 December 2019 RMB'000	31 December 2018 RMB'000	1 January 2018 RMB'000
Short-term advances received from customers			
Sale of biopharmaceuticals	**34,431**	29,816	76,854
Total contract liabilities	**34,431**	29,816	76,854

(b) Other payables are non-interest-bearing.

30. Deferred income

	2019 RMB'000	2018 RMB'000
At beginning of the year	**311,224**	337,081
Received during the year		
— Government grants (a)	**12,743**	17,434
Less: Recognition during the year		
— Government grants (a)	**(44,436)**	(43,291)
	279,531	311,224
Less: Deferred income — current portion		
— Government grants (a)	**(37,217)**	(35,887)
	242,314	275,337

Note:

(a) The grants relate to the subsidies received from the government for compensation for expenses arising from research and the improvement of manufacturing facilities on certain special projects. Upon completion of the related projects and the final assessment of the relevant government authorities, the grants related to the expense items will be recognised as other income directly in the consolidated statement of profit or loss when such expense items have been incurred by the Group and the grants related to an asset will be released to the consolidated statement of profit or loss over the expected useful life of the relevant asset.

31. Interest-bearing bank and other borrowings

	2019			2018		
	Effective interest rate (%)	Maturity	RMB'000	Effective interest rate (%)	Maturity	RMB'000
Current						
Bank loans – secured	1–4.35	2020	483,957	3.71	2019	52,572
Current portion of long term bank loans – secured	–	–	–	4.2	2019	517,756
			483,957			570,328
Non-current						
Other secured bank loans	2.75	2028	13,286	2.75–4.65	2021–2028	425,022
			13,286			425,022
Convertible bonds (note 32)	2.5	2017–2022	2,304,750	2.5	2017–2022	2,299,321
			2,304,750			2,299,321
			2,801,993			3,294,671

31. Interest-bearing bank and other borrowings (continued)

	2019 RMB'000	2018 RMB'000
Analysed into:		
Bank loans and overdrafts repayable:		
Within one year or on demand	**483,957**	570,328
In the second year	**–**	–
In the third to ten years, inclusive	**13,286**	425,022
	497,243	995,350

Notes:

(a) The bank borrowings bear interest at fixed interest rates ranging from 1% to 4.65%per annum.

(b) Certain of the Group's bank loans are secured by mortgages over the Group's land and buildings, which had an aggregate carrying value at the end of the reporting period of approximately RMB2,733,000 (2018: RMB2,744,000) and RMB14,443,000 (2018: RMB14,308,000), respectively.

(c) As at 31 December 2019, except for secured bank borrowings of RMB179,157,000 (2018: RMB692,996,000) and RMB64,086,000 (2018: RMB2,354,000) which were denominated in HKD and in EUR respectively, all the bank borrowings were denominated in RMB.

(d) The carrying amounts of the current bank borrowings approximate to their fair values.

32. Convertible bonds

On 21 July 2017, Strategic International, a directly wholly-owned subsidiary of the Company, issued Euro-denominated zero-coupon convertible bonds with a nominal value of EUR300,000,000. There was no repayment in the number of these convertible bonds during the year. The bonds are guaranteed by the Company and convertible at the option of the bondholders into ordinary shares with the initial conversion price of HKD14.28 per share at any time on and after 31 August 2017 and up to the close of business on the date falling seven days prior to 21 July 2022. The bonds are redeemable at the option of the bondholders at a 2.5% gross yield upon early redemption.

The fair value of the liability component was estimated at the issuance date using an equivalent market interest rate for a similar bond without a conversion option. The residual amount is assigned as the equity component and is included in shareholders' equity.

The convertible bonds issued during the year have been split into the liability and equity components as follows:

	RMB'000
Nominal value of convertible bonds issued at 21 July 2017	2,351,970
Equity component	(47,133)
Direct transaction costs attributable to the liability component	(28,224)
Liability component at the issuance date	2,276,613
Interest accrual	5,472
Exchange realignment	(10,211)
Liability component at 31 December 2017	2,271,874
Liability component at 1 January 2018	2,271,874
Interest accrual	13,918
Exchange realignment	13,529
Liability component at 31 December 2018	2,299,321
Liability component at 1 January 2019	**2,299,321**
Interest accrual	**13,902**
Exchange realignment	**(8,473)**
Liability component at 31 December 2019 (note 31)	**2,304,750**

33. Retirement benefit obligations

The Italian subsidiary of the Group operates an unfunded defined benefit plan, namely the Italian staff leaving indemnity (the "**TFR**"). The TFR is classified as a defined benefit pension plan, which defines an amount of pension benefit that an employee will receive on retirement, usually dependent on one or more factors such as age, years of service and compensation.

In 2007,with the Italian labour law reform, it was decided that the TFR accrued each month starting from January 2008 would be paid monthly to a private external fund or social institution, transforming the contribution to the pension plan into a defined contribution plan. It was also decided that the remaining TFR balances by the end of 2007 would be recorded as non-current liabilities to be paid to employees upon retirement. Such TFR balances are subject to actuarial valuation in accordance with IAS 19.

The TFR benefit liability represents the present value of the defined benefit obligations at the end of the reporting period less the fair value of plan assets, together with adjustments for unrecognised past-service costs. The defined benefit obligations are calculated annually by an independent actuary using the project unit credit method. The present value of the defined benefit obligations is determined by discounting the estimated future cash outflows. Actuarial gains and losses arising from the changes in actuarial assumptions are charged or credited to other comprehensive income in the period in which they arise. Past service costs are recognised immediately in profit or loss.

The plan is exposed to inflation risk and the risk of changes in the life expectancy of the plan members.

The principal actuarial assumptions used at the end of the reporting period are as follows:

	2019
Discount rate (%)	**1.5**
Expected rate of future pension cost increases (%) — 2020	**2.0**
Expected rate of future pension cost increases (%) — 2021	**2.3**
Expected rate of future pension cost increases (%) — 2022	**2.5**
Expected rate of future pension cost increases (%) — from 2023	**2.9**

	2018
Discount rate (%)	1.5
Expected rate of future pension cost increases (%)	2.5

33. Retirement benefit obligations (continued)

A quantitative sensitivity analysis for significant assumption as at the end of the reporting period is shown below:

	Increase in rate %	Net decrease in defined benefit obligations RMB'000	Decrease in rate %	Net increase in defined benefit obligations RMB'000
2019				
Discount rate	**0.5**	**258**	**0.5**	**282**
2018				
Discount rate	0.5	257	0.5	280

The sensitivity analysis above has been determined based on a method that extrapolates the impact on defined benefit obligations as a result of reasonable changes in key assumptions occurring at the end of the reporting period. The sensitivity analysis above is based on a change in an assumption while holding all other assumptions constant. The sensitivity analysis may not be representative of an actual change in the defined benefit obligations as it is unlikely that changes in assumptions would occur in isolation of one another.

The total expenses recognised in the consolidated statement of profit or loss in respect of the plan are as follows:

	2019 RMB'000	2018 RMB'000
Current service cost	**219**	227
Interest cost	**86**	79
Net benefit expenses	**305**	306
Recognised in finance costs	**305**	306

33. Retirement benefit obligations (continued)

The movements in the present value of the defined benefit obligations are as follows:

	2019 RMB'000	2018 RMB'000
At 1 January	**6,303**	5,823
Current service cost	**219**	227
Interest cost	**86**	79
Benefit paid	**(649)**	(50)
Actuarial loss	**(24)**	188
Exchange realignment	**(69)**	36
At 31 December	**5,866**	6,303

The plan has no defined benefit plan assets.

The Group does not expect to make further contributions to the defined benefit plan in future years.

The average duration of the defined benefit obligations at the end of the reporting period was 15 years (2018: 15 years).

34. Share capital

Shares

	2019 RMB'000	2018 RMB'000
Issued and fully paid:		
2,535,048,051 (2018: 2,543,714,551) ordinary shares	155	156

	Number of shares in issue	Share capital RMB'000	Share premium RMB'000	Total RMB'000
Ordinary shares of USD0.00001 each at 31 December 2018 and 1 January 2019	2,543,714,551	156	4,376,056	4,376,212
Share options exercised (a)	1,063,500	–	10,504	10,504
Shares cancelled (b)	(9,730,000)	(1)	(78,765)	(78,766)
Ordinary shares of USD0.00001 each at 31 December 2019	2,535,048,051	155	4,307,795	4,307,950
Issued but not fully paid:				
4,926,081 (2018: Nil) ordinary shares (c)	4,926,081	–	–	–

	Number of shares	Treasury shares RMB'000
At 1 January 2018	–	–
Repurchased	4,370,000	40,586
At 31 December 2018	4,370,000	40,586
Repurchased	5,000,000	38,180
Cancelled	(9,370,000)	(78,766)
At 31 December 2019	–	–

34. Share capital (continued)

Shares (continued)

Note:

(a) The subscription rights attaching to 1,063,500 share options were exercised at the subscription price of HK$7.62 per share (note 35), resulting in the issue of 1,063,500 shares for a total cash consideration, before expenses, of RMB7,135,000. An amount of RMB3,369,000 was transferred from the contributed surplus to share premium upon the exercise of the share options.

(b) The Group repurchased a total of 5,000,000 ordinary shares at an aggregate cash consideration of RMB38,180,000. All the repurchased shares have been cancelled during the year.

(c) The Group issued 4,926,081 shares as new awarded shares to further grant to selected participants.

35. Share incentive scheme

Share option scheme adopted by the Company

On 26 September 2016, a total of 20,000,000 share options, each of which entitles the holders to subscribe for one ordinary share of the Company at an exercise price of HKD9.10, under the post-IPO share option scheme of the Company adopted on 23 May 2015 and 28 June 2016 (the "**Share Option Scheme**"), were granted to TMF (Cayman) Ltd. ("**TMF**"), as the trustee of The Empire Trust (the "**Grantee**"), a trust established by the Company for the beneficiaries who are executive directors and employees of the Group and its holding companies, and any other persons as nominated from time to time by the advisory committee of the Grantee that is established with the authority of the board of the directors of the Company. The share options will vest and become exercisable upon meeting certain vesting conditions. If the vesting conditions are not met, the share options will lapse.

On 2 February 2017, the Company and the Grantee had agreed that the grant of 20,000,000 share options which was approved by the board on 22 September 2016 was cancelled at nil consideration. By the date of cancellation, no beneficiary had been nominated by the advisory committee of the Grantee and no options had been designated to any beneficiary, and thus the Group did not recognise any share-based payment expenses in relation to the cancelled 20,000,000 share options. On the same date, a total of 20,000,000 share options, each of which entitles the holders to subscribe for one ordinary share of the Company at an exercise price of HKD7.62 (which is the highest of the closing price of HKD7.30 per share and the average closing price of HKD7.62 per share)were granted to TMF, as the trustee of the Grantee under the Share Option Scheme for the benefits of the designated beneficiaries. The share options will vest and become exercisable upon meeting certain vesting conditions. If the vesting conditions are not met, the share options will lapse.

35. Share incentive scheme (continued)

Share option scheme adopted by the Company (continued)

The following share options were outstanding under the Scheme during the year:

	2019		2018	
	Weighted average exercise price HKD per share	**Number of options '000**	Weighted average exercise price HKD per share	Number of options '000
At 1 January	**7.62**	**20,000**	7.62	20,000
Granted during the year	**–**	**–**	–	–
Forfeited during the year	**–**	**(660)**	–	–
Exercised during the year	**7.62**	**(1,064)**	–	–
Expired during the year	**–**	**–**	–	–
At 31 December	**7.62**	**18,276**	7.62	20,000

The weighted average share price at the date of exercise for share options exercised during the year was HK$11.44 per share (2018: No share options were exercised).

The fair value of the share options at the grant date is estimated using a binomial option pricing model, taking into account the terms and conditions upon which the share options were granted. The contractual life of each option granted is ten years. There is no cash settlement of the share options. The fair value of share options granted on 2 February 2017 was estimated on the date of grant using the following assumptions:

Dividend yield (%)	–
Expected volatility (%)	39.63
Risk-free interest rate (%)	1.91
Expected contractual life of share options (years)	10.00
Underlying share price (RMB)	6.45
Exercise price of each share option (RMB)	6.73

At the date of approval of the consolidated financial statements, the Company had 18,276,500 share options outstanding under the Share Option Scheme, which represented approximately 0.7% of the Company's shares in issue as at that date.

There were no share options granted during the year (2018: Nil).The Group had recorded share-based payment expenses of RMB11,001,000 in the statement of profit or loss during the year ended 31 December 2019 (2018: RMB17,487,000).

35. Share incentive scheme (continued)

Employee share ownership plan adopted by Sunshine Guojian

As part of the Group's initiatives to incentivise the performance of its directors, senior management and employees, on 19 June 2019, the shareholders of Sunshine Guojian approved the adoption of the employee share ownership plan ("**ESOP**") to further promote the productivity and strong work performance of the directors, senior management and employees of the Group.

On 19 June 2019, the shareholders of Sunshine Guojian approved and resolved to issue 44,367,221 shares, representing not more than 8% of the enlarged issued share capital of Sunshine Guojian, for the purpose of granting and allotting the awarded shares to the selected participants: (1) 25,160,657 awarded shares issued to Achieve Well International (Hong Kong) Limited, which is under control of a director of the Company and (2) 19,206,564 awarded shares issued to Shanghai Haohan Investment Partnership (Limited Partnership), which is beneficially owned by certain management personnel of the Group.

The fair value of the awarded shares at the grant date was estimated using a discounted cash flow model with the following assumptions:

Risk-free interest rate (%)	2.64
Weighted average cost of capital (%)	14.00
Discount for lack of marketability (%)	25.00

In 2019, 44,367,221 awarded shares have been exercised with the total consideration of RMB44,367,221 at the weighted average exercise price of RMB1.00. The Group had recorded the expenses associated with the awarded shares under the ESOP of RMB335,110,000 in the statement of profit or loss in 2019.

Warrants granted by the Company

On 1 January 2015, the Company issued warrants to Shanghai Junling Investment Partnership (Limited Partnership), which is beneficially owned by certain management members of Sunshine Guojian (the "**Sunshine Guojian Warrants**"), in which the Group held an approximately 6.96% equity interest. The Sunshine Guojian Warrants entitle the holders to purchase 1,128.82033 ordinary shares of the Company at an exercise price of USD1.00 for each warrant. Pursuant to the subdivision of the par value of the Company's authorised shares from USD1.00 per share to USD0.00001 per share on 4 February 2015, the number of shares of the Company exercisable by the Sunshine Guojian Warrants has been changed to 112,882,033 and the exercise price has been changed from USD1.00 per share to USD0.00001 per share.

35. Share incentive scheme (continued)

Warrants granted by the Company (continued)

The fair value at the grant date is estimated using the Black-Scholes option pricing model, taking into account the terms and conditions upon which the warrants were granted. The contractual life of each option granted is three and a half years. There is no cash settlement of the warrants. The fair value of warrants granted on 1 January 2015 was estimated on the date of grant using the following assumptions:

Dividend yield (%)	—
Expected volatility (%)	37.50
Risk-free interest rate (%)	1.10
Contractual life of warrants (years)	3.50
Underlying share price (RMB)	70.50
Exercise price of each warrant (RMB)	0.00006

As at 31 December 2018, the Sunshine Guojian Warrants expired, and the remainder of the vested Sunshine Guojian Warrants, exercisable for 28,040,036 shares, had been forfeited.

36. Reserves

The amounts of the Group's reserves and the movements therein are presented in the consolidated statement of changes in equity.

Statutory surplus reserves

Pursuant to the relevant PRC rules and regulations, those PRC subsidiaries which are domestic enterprises in the PRC as mentioned in note 1 to the financial statements are required to transfer no less than 10% of their profits after taxation, as determined under PRC accounting regulations and their respective articles of association, to the statutory reserve until the reserve balance reaches 50% of the registered capital. The transfer to this reserve must be made before the dividend distribution to shareholders.

37. Notes to the consolidated statement of cash flows

(a) Major non-cash transactions

During the year,the Group had non-cash additions to right-of-use assets and lease liabilities of RMB5,780,000 and RMB5,780,000, respectively, in respect of lease arrangements for certain buildings (2018: Nil).

(b) Changes in liabilities arising from financing activities

2019

	Bank and other borrowings RMB'000	**Lease liabilities RMB'000**	**Convertible bonds RMB'000**
At 31 December 2018	995,350	—	2,299,321
Effect of adoption of IFRS 16	—	8,243	—
At 1 January 2019 (restated)	**995,350**	**8,243**	**2,299,321**
Changes from financing cash flows	**(510,522)**	**(4,592)**	**—**
New leases	**—**	**5,780**	**—**
Interest accrual	**—**	**578**	**13,902**
Interest paid classified as operating cash flows	**—**	**(578)**	**—**
Exchange realignment	**12,415**	**—**	**(8,473)**
At 31 December 2019	**497,243**	**9,431**	**2,304,750**

2018

	Bank and other borrowings RMB'000	Convertible bonds RMB'000
At 1 January 2018	2,134,257	2,271,874
Changes from financing cash flows	(1,188,852)	—
Interest accrual	—	13,918
Exchange realignment	49,945	13,529
At 31 December 2018	995,350	2,299,321

37. Notes to the consolidated statement of cash flows (continued)

(c) Total cash outflow for leases

The total cash outflow for leases included in the statement of cash flows is as follows:

	2019 RMB'000
Within operating activities	7,193
Within financing activities	4,592
	11,785

38. Contingent liabilities

As at 31 December 2019, neither the Group nor the Company had any significant contingent liabilities (2018: Nil).

39. Pledge of assets

Details of the Group's interest-bearing bank and other borrowings which are secured by the assets of the Group are included in note 31 to the financial statements.

40. Commitments

(a) The Group had the following capital commitments at the end of the reporting period:

	2019	2018
	RMB'000	RMB'000
Contracted, but not provided for:		
Plant and machinery	1,064,452	149,549
Capital contribution payable to funds	757,499	746,667
Initial payment on collaboration	—	56,632
	1,821,951	952,848

(b) Operating lease commitments at 31 December 2018

The Group leased certain buildings under operating lease arrangements. Leases for buildings were negotiated of terms ranging from one to five years.

At 31 December 2018, the Group had future minimum lease payments under non-cancellable operating leases falling due as follows:

	2018
	RMB'000
Within one year	4,406
In the second to fifth years, inclusive	7,445
	11,851

(c) The Group has one lease contract that has not yet commenced as at 31 December 2019. The future lease payments for this non-cancellable lease contract are RMB398,000 due within one year, and RMB815,000 due in the second to fifth years.

41. Related party transactions

Details of the Group's principal related parties are as follows:

Company	Relationship
Century Sunshine Limited ("**Century Sunshine**")	Ultimate shareholder of the Company
Sunshine Bio-Pharmaceutical Fund	Joint venture
Beijing Huansheng Medical Investment Co., Ltd. ("**Beijing Huansheng**")	Under control of certain middle management personnel of the Company
Liaoning Sunshine Technology Development Co., Ltd. ("**Liaoning Sunshine Technology**")	A subsidiary of Beijing Huansheng
Zhejiang Sunshine Pharmaceutical Co., Ltd. ("**Zhejiang Sunshine**")	Under control of certain middle management personnel of the Company
Medical Recovery Limited ("**Medical Recovery**")	Under control of directors of the Company
Achieve Well International (Hong Kong) Limited ("**Achieve HK**")	Under control of a director of the Company

(a) The Group had the following transactions with related parties during the year:

	Notes	**2019** **RMB'000**	2018 RMB'000
Convertible loan including interest to Zhejiang Sunshine	21(a)	**37,816**	36,853
Loans to Liaoning Sunshine Technology	(i)	**32,853**	32,170
Loans to Beijing Huansheng	(ii)	**10,653**	10,695
Loans to Zhejiang Sunshine	(iii)	**61,685**	61,308
Loans to Medical Recovery	(iv)	**221,121**	209,329
Loans to Sunshine Bio-Pharmaceutical Fund	(v)	**–**	100
Loan from Century Sunshine	(vi)	**71,855**	70,691
Loans to Zhejiang Sunshine	(vii)	**1,100**	1,100

41. Related party transactions (continued)

(a) The Group had the following transactions with related parties during the year: (continued)

Notes:

(i) On 7 December 2016 and 23 December 2016, Sunshine Guojian extended loans, the principal amounts of which being RMB20,000,000 and RMB10,000,000, to Liaoning Sunshine Technology at an annual interest rate of 3.85%. Pursuant to a supplemental agreements dated on 7 March 2018, 23 March 2018 and 27 March 2019, the maturity dates were extended to 6 March 2019, 22 March 2019 and 26 March 2020, respectively and the annual interest rate was changed to 4.35%. During the year ended 31 December 2019, Liaoning Sunshine Technology repaid RMB32,677,000, including loan principal and interest, to Sunshine Guojian. On 20 June 2019, Shenzhen Sciprogen provided a loan, the principal amount of which being RMB32,200,000, to Liaoning Sunshine Technology at an interest rate of 3.92% per annum with the maturity date on 20 June 2020. The accrued interest for the year of 2019 was RMB653,000 (2018: Nil).

(ii) On 26 May 2017, Zhejiang Wansheng provided a loan, the principal amount of which being RMB10,000,000, to Beijing Huansheng at an interest rate of 4.35% per annum with the maturity date on 26 May 2018. Pursuant to a supplemental agreements dated on 27 May 2018 and 27 May 2019, the maturity dates were extended to 26 May 2019 and 27 May 2020, respectively. During the year ended 31 December 2019, Beijing Huansheng repaid interest of RMB410,000 to Zhejiang Wansheng. The accrued interest for the year of 2019 was RMB435,000 (2018: RMB435,000).

(iii) On 11 August 2017 and 18 September 2017, Shenyang Sunshine provided entrusted loans, the principal amounts of which being RMB20,000,000 and RMB10,000,000, to Zhejiang Sunshine at an annual interest rate of 3.48% with the maturity dates on 11 August 2018 and 18 September 2018, respectively. Pursuant to a supplemental agreements dated on 9 August 2018, the maturity dates were extended to 8 August 2019. On 8 August 2019, Zhejiang Sunshine repaid RMB31,016,000, including loan principal and interest, to Shenyang Sunshine.

On 25 September 2018, Shenyang Sunshine provided a loan, the principal amount of which being RMB30,000,000, to Zhejiang Sunshine at an interest rate of 3.48% per annum with the maturity date on 25 September 2019. Pursuant to a supplemental agreement dated on 25 September 2019, the maturity date was extended to 25 September 2020.

On 8 August 2019, Shenyang Sunshine provided an entrusted loan, the principal amounts of which being RMB30,000,000, to Zhejiang Sunshine at an annual interest rate of 3.48% per annum with the maturity date on 7 August 2020. The accrued interest for the year of 2019 was RMB962,000 (2018: RMB936,000).

(iv) On 17 July 2018, Strategic International entered into a loan agreement with Medical Recovery to provide a loan of USD30,000,000 at an interest rate of 4% per annum with the maturity date on 16 July 2019. Pursuant to a supplemental agreement dated on 16 July 2019, the maturity date was extended to 17 July 2020. The accrued interest for the year of 2019 was RMB11,835,000 (2018: RMB3,432,000).

(v) On 24 December 2018, Shenyang Sunshine provided a loan of RMB100,000, to Sunshine Bio-Pharmaceutical Fund. On 15 March 2019, Sunshine Bio-Pharmaceutical Fund repaid the loan principal entirely.

(vi) On 29 December 2014 and 9 January 2015, Century Sunshine provided a loan of USD12,700,000 and USD3,100,000, respectively, to Hongkong Sansheng. Hongkong Sansheng repaid Century Sunshine a loan of USD5,500,000 partially during 2017, which was equivalent to RMB37,135,000. As at 31 December 2019, the balance was approximately RMB71,855,000.

(vii) On 8 August 2018, Xing Sheng provided a loan of RMB1,100,000 to Zhejiang Sunshine with no maturity date and non-interest-earning.

41. Related party transactions (continued)

(b) Outstanding balances with related parties:

The Group had the following significant balances with its related parties at the end of the reporting period:

	2019 RMB'000	2018 RMB'000
Due from related parties		
Current portion		
Medical Recovery	**218,910**	207,236
Zhejiang Sunshine	**44,955**	44,216
Liaoning Sunshine Technology	**32,524**	31,222
Beijing Huansheng	**4,875**	10,115
Directors and senior management	**6,496**	7,336
Sunshine Bio-Pharmaceutical Fund	**—**	100
	307,760	300,225
Non-current portion		
Zhejiang Sunshine	**1,605**	28,758

	2019 RMB'000	2018 RMB'000
Due to related parties		
Current portion		
Century Sunshine	**71,855**	70,691

(c) Compensation of key management personnel of the Group:

Key management compensation is detailed in notes 8 and 9 to the financial statements.

(d) Disposal of a subsidiary

On 7 May 2019, Shenyang Sunshine entered into an agreement with a middle management employee of the Group to dispose of 100% equity interests of Shanghai Aoxi Technology Information Consulting Co., Ltd. with a cash consideration of RMB5,000,000.

42. Financial instruments by category

The carrying amounts of each of the categories of financial instruments as at the end of the reporting period are as follows:

2019

Financial assets

	Financial assets at fair value through profit or loss (Designated as such upon initial recognition) RMB'000	Financial assets at fair value through other comprehensive income (Equity investment) RMB'000	Financial assets at amortised cost RMB'000	Total RMB'000
Equity investments designated at fair value through other comprehensive income	–	676,989	–	676,989
Financial assets at fair value through profit or loss	472,163	–	–	472,163
Financial assets included in prepayments, other receivables and other assets	–	–	385,413	385,413
Trade and notes receivables	–	–	1,018,265	1,018,265
Long-term receivables	–	–	6,555	6,555
Cash and cash equivalents	–	–	2,082,847	2,082,847
Pledged deposits	–	–	22,073	22,073
	472,163	676,989	3,515,153	4,664,305

42. Financial instruments by category (continued)

2019 (continued)

Financial liabilities

	Financial liabilities at amortised cost RMB'000
Lease liabilities	9,431
Trade and bills payables	149,763
Financial liabilities included in other payables and accruals	386,776
Interest-bearing bank and other borrowings	497,243
Convertible bonds	2,304,750
	3,347,963

42. Financial instruments by category (continued)

2018

Financial assets

	Financial assets at fair value through profit or loss (Designated as such upon initial recognition) RMB'000	Financial assets at fair value through other comprehensive income (Equity investment) RMB'000	Financial assets at amortised cost RMB'000	Total RMB'000
Equity investments designated at fair value through other comprehensive income	–	346,118	–	346,118
Financial assets at fair value through profit or loss	35,260	–	–	35,260
Derivative financial instrument	16	–	–	16
Financial assets included in prepayments, other receivables and other assets	–	–	590,428	590,428
Trade and notes receivables	–	–	1,483,885	1,483,885
Long-term receivables	–	–	28,758	28,758
Cash and cash equivalents	–	–	1,792,605	1,792,605
Pledged deposits	–	–	14,289	14,289
	35,276	346,118	3,909,965	4,291,359

42. Financial instruments by category (continued)

2018 (continued)

Financial liabilities

	Financial liabilities at amortised cost RMB'000
Trade and bills payables	112,915
Financial liabilities included in other payables and accruals	284,060
Interest-bearing bank and other borrowings	995,350
Convertible bonds	2,299,321
	3,691,646

43. Transfers of financial assets

As at 31 December 2019, the Group endorsed certain notes receivable (the "**Derecognised Bills**") accepted by major banks in Mainland China (the "**PRC banks**") to certain of its suppliers in order to settle the trade payables due to such suppliers with a carrying amount totalling approximately RMB30,603,000 (2018: RMB9,362,000). The Derecognised Bills had a maturity of one to six months at the end of the reporting period. In accordance with the Law of Negotiable Instruments in the PRC, the holders of the Derecognised Bills have a right of recourse against the Group if the PRC banks default (the "**Continuing Involvement**"). In the opinion of the directors, the Group has transferred substantially all risks and rewards relating to the Derecognised Bills. Accordingly, it has derecognised the full carrying amounts of the Derecognised Bills and the associated trade payables. The maximum exposure to loss from the Group's Continuing Involvement in the Derecognised Bills and the undiscounted cash flows to repurchase these Derecognised Bills is equal to their carrying amounts. In the opinion of the directors, the fair values of the Group's Continuing Involvement in the Derecognised Bills are not significant.

During the year ended 31 December 2019, the Group had not recognised any gain or loss on the date of transfer of the Derecognised Bills. No gains or losses were recognised from the Continuing Involvement, both during the year or cumulatively. The endorsements had been made evenly throughout the year.

44. Fair value and fair value hierarchy of financial instruments

The carrying amounts and fair values of the Group's financial instruments, other than those with carrying amounts that reasonably approximate to fair values, are as follows:

	Carrying amounts		Fair values	
	31 December 2019	31 December 2018	**31 December 2019**	31 December 2018
	RMB'000	RMB'000	**RMB'000**	RMB'000
Financial assets				
Equity investments designated at fair value through other comprehensive income	**676,989**	346,118	**676,989**	346,118
Financial assets at fair value through profit or loss	**472,163**	35,260	**472,163**	35,260
Derivative financial instrument	**—**	16	**—**	16
Long-term receivables	**6,555**	28,758	**6,555**	28,758
	1,155,707	410,152	**1,155,707**	410,152
Financial liabilities				
Interest-bearing bank borrowings:				
Non-current	**13,286**	425,022	**13,642**	429,965
Lease liabilities: non-current	**3,964**	—	**3,964**	—
Convertible bonds	**2,304,750**	2,299,321	**2,304,750**	2,299,321
	2,322,000	2,724,343	**2,322,356**	2,729,286

Management has assessed that the fair values of cash and cash equivalents, pledged deposits, trade and notes receivables, trade and bills payables, financial assets included in prepayments, other receivables and other assets, financial liabilities included in other payables and accruals, the current portion of interest-bearing bank and other borrowings approximate to their carrying amounts largely due to the short term maturities of these instruments.

The Group's finance department headed by the finance manager is responsible for determining the policies and procedures for the fair value measurement of financial instruments. The finance manager reports directly to the chief financial officer and the audit committee. At each reporting date, the finance department analyses the movements in the values of financial instruments and determines the major inputs applied in the valuation. The valuation is reviewed and approved by the chief financial officer. The valuation process and results are discussed with the audit committee twice a year for interim and annual financial reporting.

The fair values of the financial assets and liabilities are included at the amount at which the instrument could be exchanged in a current transaction between willing parties, other than in a forced or liquidation sale.

44. Fair value and fair value hierarchy of financial instruments (continued)

The following methods and assumptions were used to estimate the fair values:

The fair values of the non-current portion of interest-bearing bank and other borrowings, lease liabilities and convertible bonds have been calculated by discounting the expected future cash flows using rates currently available for instruments with similar terms, credit risk and remaining maturities. The changes in fair value as a result of the Group's own non-performance risk for interest-bearing bank and other borrowings as at 31 December 2019 were assessed to be insignificant. The fair value of the liability portion of the convertible bonds is estimated by discounting the expected future cash flows using an equivalent market interest rate for a similar convertible bond with consideration of the Group's own non-performance risk.

The fair values of listed equity investments are based on quoted market prices. The fair values of unlisted equity investments designated at fair value through other comprehensive income have been estimated using a market-based valuation technique based on assumptions that are not supported by observable market prices or rates. The valuation requires the directors to determine comparable public companies (peers) based on industry, size, leverage and strategy, and to calculates an appropriate price multiple, such as enterprise value to earnings before interest, taxes, depreciation and amortisation ("**EV/EBITDA**") multiple and price to earnings ("**P/E**") multiple, for each comparable company identified. The multiple is calculated by dividing the enterprise value of the comparable company by an earnings measure. The trading multiple is then discounted for considerations such as illiquidity and size differences between the comparable companies based on company-specific facts and circumstances. The discounted multiple is applied to the corresponding earnings measure of the unlisted equity investments to measure the fair value. The directors believe that the estimated fair values resulting from the valuation technique, which are recorded in the consolidated statement of financial position, and the related changes in fair values, which are recorded in other comprehensive income, are reasonable, and that they were the most appropriate values at the end of the reporting period.

The Group invests in unlisted investments, which represent treasure or cash management products issued by banks in Mainland China. The Group has estimated the fair value of these unlisted investments by using a discounted cash flow valuation model based on the market interest rates of instruments with similar terms and risks.

The fair value of derivative financial instrument is measured using the Black-Scholes option pricing model which incorporates various market observable inputs including risk-free interest rate, quoted market price of the underlying stock and dividend ratio.

For the fair value of the unlisted equity investments at fair value through other comprehensive income, management has estimated the potential effect of using reasonably possible alternatives as inputs to the valuation model.

44. Fair value and fair value hierarchy of financial instruments (continued)

Below is a summary of significant unobservable input to the valuation of financial instruments together with a quantitative sensitivity analysis as at 31 December 2019 and 2018:

	Valuation technique	Significant unobservable input	Range	Sensitivity of fair value to the input
Unlisted equity investments	Market approach	Discount for lack of marketability	2019: -10% to 10% (2018: -10% to 10%)	10% (2018: 10%) increase/decrease in discount would result in decrease/ increase in fair value of RMB370,000 and RMB392,000 respectively (2018: RMB809,000 and RMB798,000)

The discount for lack of marketability represents the amounts of premiums and discounts determined by the Group that market participants would take into account when pricing the investments.

44. Fair value and fair value hierarchy of financial instruments (continued)

Fair value hierarchy

The following tables illustrate the fair value measurement hierarchy of the Group's financial instruments:

Assets measured at fair value:

As at 31 December 2019

	Fair value measurement using			
	Quoted prices in active markets (Level 1) RMB'000	Significant observable inputs (Level 2) RMB'000	Significant unobservable inputs (Level 3) RMB'000	Total RMB'000
Equity investments designated at fair value through other comprehensive income:				
Listed equity investments	**502,919**	**—**	**—**	**502,919**
Unlisted equity investments	**—**	**—**	**174,070**	**174,070**
Financial assets at fair value through profit or loss: Treasure or cash management products	**—**	**472,163**	**—**	**472,163**
	502,919	**472,163**	**174,070**	**1,149,152**

As at 31 December 2018

	Fair value measurement using			
	Quoted prices in active markets (Level 1) RMB'000	Significant observable inputs (Level 2) RMB'000	Significant unobservable inputs (Level 3) RMB'000	Total RMB'000
Equity investments designated at fair value through other comprehensive income:				
Listed equity investments	32,872	—	—	32,872
Unlisted equity investments	—	—	313,246	313,246
Financial assets at fair value through profit or loss: Treasure or cash management products	—	35,260	—	35,260
Derivative financial instrument	—	16	—	16
	32,872	35,276	313,246	381,394

44. Fair value and fair value hierarchy of financial instruments (continued)

Fair value hierarchy (continued)

Assets measured at fair value: (continued)

The movements in fair value measurements within Level 3 during the year are as follows:

	2019 RMB'000	2018 RMB'000
Equity investments at fair value through other comprehensive income:		
At 1 January	**313,246**	48,333
Purchases	**74,036**	32,738
Reclassification from investment in an associate		221,982
Reclassification to equity investments designated at fair value through other comprehensive income — listed equity investment	**(272,512)**	—
Total gains recognised in other comprehensive income	**58,722**	10,084
Exchange realignment	**578**	109
At 31 December	**174,070**	313,246

The Group did not have any financial liabilities measured at fair value as at 31 December 2019 and 31 December 2018.

During the year, there were no transfers of fair value measurements between Level 1 and Level 2 (2018: Nil) and there was a transfer from Level 3 into Level 1 amounting to RMB272,512,000 (2018: Nil) due to the change of valuation technique following the successful listing of certain investee in current year.

44. Fair value and fair value hierarchy of financial instruments (continued)

Fair value hierarchy (continued)

Assets for which fair values are disclosed:

As at 31 December 2019

	Fair value measurement using			
	Quoted prices in active markets (Level 1) RMB'000	Significant observable inputs (Level 2) RMB'000	Significant unobservable inputs (Level 3) RMB'000	Total RMB'000
Long-term receivables	—	6,555	—	6,555

As at 31 December 2018

	Fair value measurement using			
	Quoted prices in active markets (Level 1) RMB'000	Significant observable inputs (Level 2) RMB'000	Significant unobservable inputs (Level 3) RMB'000	Total RMB'000
Long-term receivables	—	28,758	—	28,758

44. Fair value and fair value hierarchy of financial instruments (continued)

Fair value hierarchy (continued)

Liabilities for which fair values are disclosed:

As at 31 December 2019

	Fair value measurement using			
	Quoted prices in active markets (Level 1) RMB'000	Significant observable inputs (Level 2) RMB'000	Significant unobservable inputs (Level 3) RMB'000	Total RMB'000
Interest-bearing bank and other borrowings:				
non-current	—	13,642	—	13,642
Lease liabilities: non-current	—	3,964	—	3,964
Convertible bonds	—	2,304,750	—	2,304,750
	—	2,322,356	—	2,322,356

As at 31 December 2018

	Fair value measurement using			
	Quoted prices in active markets (Level 1) RMB'000	Significant observable inputs (Level 2) RMB'000	Significant unobservable inputs (Level 3) RMB'000	Total RMB'000
Interest-bearing bank and other borrowings:				
Non-current	—	429,965	—	429,965
Convertible bonds	—	2,299,321	—	2,299,321
	—	2,729,286	—	2,729,286

45. Financial risk management objectives and policies

The Group's principal financial instruments comprise cash and cash equivalents, pledged deposits, interest-bearing bank and other borrowings, lease liabilities and convertible bonds. The main purpose of these financial instruments is to raise finance for the Group's operations. The Group has various other financial assets and liabilities such as trade and notes receivables and trade and bills payables, which arise directly from its operations.

The main risks arising from the Group's financial instruments are interest rate risk, foreign currency risk, credit risk, liquidity risk and equity price risk. The board of directors and senior management meet periodically to analyse and formulate measures to manage the Group's exposure to these risks.

Interest rate risk

The Group is exposed to cash flow interest rate risk due to fluctuations in the prevailing market interest rates on cash and cash equivalents, and pledged and non-pledged deposits. Management considers that these bank balances are not sensitive to fluctuations in interest rates.

The Group's interest rate risk relates primarily to bank borrowings. The Group currently does not have an interest rate hedging policy. However, management monitors interest rate exposure and will consider hedging significant interest rate exposure should the need arise. The Group's interest rate profile as monitored by management is set out in note 31 to the financial statements.

Foreign currency risk

The Group's business is mainly located in Mainland China and most transactions are conducted in RMB. Most of the Group's assets and liabilities were denominated in RMB, except for certain bank balances denominated in USD, HKD, GBP and EUR as disclosed in note 27 and Euro-denominated convertible bonds as disclosed in note 32 to the financial statements.

The Group's assets and liabilities denominated in USD and EUR were mainly held by the Company and certain subsidiaries incorporated outside Mainland China which had USD and EUR as their functional currency, and the Group did not have material foreign currency transactions during the year.

45. Financial risk management objectives and policies (continued)

Credit risk

As at 31 December 2019, all pledged deposits and cash and cash equivalents were deposited in high quality financial institutions without significant credit risk.

The Group trades only with recognised and creditworthy third parties. It is the Group's policy that all customers who wish to trade on credit terms are subject to credit verification procedures. In addition, receivable balances are monitored on an ongoing basis and the Group's exposure to bad debts is not significant.

Maximum exposure and year-end staging

The tables below show the credit quality and the maximum exposure to credit risk based on the Group's credit policy, which is mainly based on past due information unless other information is available without undue cost or effort, and year-end staging classification as at 31 December. The amounts presented are gross carrying amounts for financial assets.

As at 31 December 2019

	12-month ECLs	Lifetime ECLs			
	Stage 1 RMB'000	Stage 2 RMB'000	Stage 3 RMB'000	Simplified approach RMB'000	Total RMB'000
Trade and notes receivables*	—	—	—	1,018,265	1,018,265
Financial assets included in prepayments, other receivables and other assets*	—	—	—	385,413	385,413
Long-term receivables*	—	—	—	6,555	6,555
Pledged deposits					
— Not yet past due	22,073	—	—	—	22,073
Cash and cash equivalents					
— Not yet past due	2,082,847	—	—	—	2,082,847
	2,104,920	—	—	1,410,233	3,515,153

45. Financial risk management objectives and policies (continued)

Credit risk (continued)

As at 31 December 2018

	12-month ECLs	Lifetime ECLs			
	Stage 1 RMB'000	Stage 2 RMB'000	Stage 3 RMB'000	Simplified approach RMB'000	Total RMB'000
Trade and notes receivables*	—	—	—	1,483,885	1,483,885
Financial assets included in prepayments, other receivables and other assets*	—	—	—	590,428	590,428
Long-term receivables*	—	—	—	28,758	28,758
Pledged deposits					
— Not yet past due	14,289	—	—	—	14,289
Cash and cash equivalents					
— Not yet past due	1,792,605	—	—	—	1,792,605
	1,806,894	—	—	2,103,071	3,909,965

* For trade and notes receivables, financial assets included in prepayments, other receivables and other assets and long-term receivables to which the Group applies the simplified approach for impairment, information based on the provision matrix is disclosed in note 24 to the financial statements.

Since the Group trades only with recognised and creditworthy third parties, there is no requirement for collateral. Concentrations of credit risk are managed by customer/counterparty and by geographical region. There are no significant concentrations of credit risk within the Group as the customer bases of the Group's trade and notes receivables are widely dispersed in different regions.

45. Financial risk management objectives and policies (continued)

Liquidity risk

The Group monitors its risk to a shortage of funds based on the maturity of its financial assets and financial liabilities and projected cash flows from operations.

The Group's objective is to maintain a balance between continuity of funding and flexibility through the use of interest-bearing bank and other borrowings, convertible bonds, lease liabilities and issue of new debts or equity instruments. The directors have reviewed the Group's profitability, working capital and capital expenditure requirements and determined that the Group has no significant liquidity risk.

The maturity profile of the Group's financial liabilities at the end of the reporting period, based on the contractual undiscounted payments, is as follows:

Group

	2019			
	Within 3 months RMB'000	3 to 12 months RMB'000	1 to 10 years RMB'000	Total RMB'000
Financial liabilities:				
Trade and bills payables	131,436	14,790	3,537	149,763
Financial liabilities included in other payables and accruals	160,839	89,874	136,063	386,776
Interest-bearing bank and other borrowings	54,000	429,957	13,286	497,243
Convertible bonds	—	—	2,304,750	2,304,750
Lease liabilities	1,367	4,100	3,964	9,431
	347,642	538,721	2,461,600	3,347,963

45. Financial risk management objectives and policies (continued)

Liquidity risk (continued)

Group (continued)

	2018			
	Within 3 months RMB'000	3 to 12 months RMB'000	1 to 10 years RMB'000	Total RMB'000
Financial liabilities:				
Trade and bills payables	92,046	20,028	841	112,915
Financial liabilities included in other payables and accruals	120,635	96,014	67,411	284,060
Interest-bearing bank and other borrowings	—	570,328	425,022	995,350
Convertible bonds	—	—	2,299,321	2,299,321
	212,681	686,370	2,792,595	3,691,646

Equity price risk

Equity price risk is the risk that the fair values of equity securities decrease as a result of changes in the levels of equity indices and the value of individual securities. The Group is exposed to equity price risk arising from individual equity investments included in equity investments designated at fair value through other comprehensive income (note 20) as at 31 December 2019 and 31 December 2018. The Group's major listed equity investments during the year ended 31 December 2019 were listed on the NASDAQ Stock Market ("**NASDAQ**"), the Euronext Stock Market ("**Euronext**"), Hong Kong Exchanges and Clearing Market ("**HKEX**") and were valued at quoted market prices at the end of the reporting period.

At 31 December 2019, if the quoted market price of these financial assets held by the Group had increased/decreased by 10%, with all other variables held constant, other comprehensive income and equity would have been RMB50,258,000 (2018: RMB3,254,000) and RMB50,258,000 (2018: RMB3,254,000) higher/lower respectively as a result of the changes in fair value of these financial assets.

Capital management

The primary objectives of the Group's capital management are to safeguard the Group's ability to continue as a going concern and to maintain healthy capital ratios in order to support its business and maximise shareholders' value.

The Group manages its capital structure and makes adjustments to it in light of changes in economic conditions. To maintain or adjust the capital structure, the Group may issue new shares or debt instruments. No changes were made in the objectives, policies or processes for managing capital during the year ended 31 December 2019.

45. Financial risk management objectives and policies (continued)

Capital management (continued)

The Group monitors capital using a gearing ratio, which is interest-bearing bank and other borrowings, lease liabilities and convertible bonds divided by the total equity.

The gearing ratio as at the end of the reporting periods were as follows:

	31 December 2019 RMB'000	1 January 2019 RMB'000 (note)	31 December 2018 RMB'000
Interest-bearing bank and other borrowings (note 31)	**497,243**	**995,350**	**995,350**
Lease liabilities	**9,431**	**8,243**	**—**
Convertible bonds	**2,304,750**	**2,299,321**	**2,299,321**
	2,811,424	**3,302,914**	**3,294,671**
Total equity	**10,359,319**	**8,907,370**	**8,907,370**
Gearing ratio	**27.1%**	**37.1%**	**37.0%**

Note: The Group has adopted IFRS 16 using the modified retrospective approach and the effect of the initial adoption is adjusted against the opening balances as at 1 January 2019 with no adjustments to the comparative amounts as at 31 December 2018. This resulted in an increase in the Group's net debt and hence the Group's gearing ratio increased from 37.0% to 37.1% on 1 January 2019 when compared with the position as at 31 December 2018.

46. Events after the reporting period

The outbreak of novel coronavirus ("**COVID-19**") in January 2020 continues to spread throughout China and to countries across the world. The COVID-19 has unfathomable uncertainties to the business operations of the Group, and the degree of the impact depends on the situation of the pandemic preventive measures and the duration of the pandemic. The Group will monitor the developments of COVID-19 closely, assess and react actively to its impacts on the financial position and operating results of the Group. Up to the date of this report, the assessment is still in progress. Given the dynamic nature of these circumstances, the related impacts on the Group's consolidated results of operations, cash flows and financial position could not be reasonably estimated at this stage and will be reflected in the Group's 2020 interim and annual financial statements.

47. Statement of financial position of the company

Information about the statement of financial position of the Company at the end of the reporting period is as follows:

	2019 RMB'000	2018 RMB'000
NON-CURRENT ASSETS		
Property, plant and equipment	**1,619**	1,619
Investments in subsidiaries	**3,178,495**	3,033,570
Equity investments designated at fair value through other comprehensive income	**244,486**	76,115
Total non-current assets	**3,424,600**	3,111,304
CURRENT ASSETS		
Equity investments designated at fair value through other comprehensive income	**—**	32,541
Due from subsidiaries	**1,736,131**	1,831,739
Cash and cash equivalents	**423,700**	152,166
Total current assets	**2,159,831**	2,016,446
CURRENT LIABILITIES		
Trade payables	**7**	7
Other payables and accruals	**940,613**	479,047
Total current liabilities	**940,620**	479,054
NET CURRENT ASSETS	**1,219,211**	1,537,392
TOTAL ASSETS LESS CURRENT LIABILITIES	**4,643,811**	4,648,696
NON-CURRENT LIABILITIES	**—**	—
Total non-current liabilities	**—**	—
Net assets	**4,643,811**	4,648,696
EQUITY		
Share capital	**155**	156
Treasury shares	**—**	(40,586)
Share premium (note)	**4,233,138**	4,304,768
Other reserves (note)	**410,518**	384,358
Total equity	**4,643,811**	4,648,696

47. Statement of financial position of the company (continued)

Note:

A summary of the Company's reserves is as follows:

	Share premium	Contributed surplus	Fair value reserve	Exchange fluctuation reserve	Retained earnings	Total
	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000
At 1 January 2018	4,301,172	45,213	(2,687)	68,101	147,813	4,559,612
Total comprehensive loss for the year	–	–	6,708	215,911	29,716	252,335
Equity-settled share option arrangement (note 35)	–	17,487	–	–	–	17,487
Dividends paid	–	–	–	–	(140,308)	(140,308)
Transfer to retained profits	–	–	(5,796)	–	5,796	–
Shares issued upon exercise of warrants	3,596	(3,596)	–	–	–	–
At 31 December 2018	4,304,768	59,104	(1,775)	284,012	43,017	4,689,126
Total comprehensive income for the year	**–**	**–**	**(48,068)**	**72,363**	**(9,136)**	**15,169**
Equity-settled share option arrangements (note 35)	**–**	**11,001**	**–**	**–**	**–**	**11,001**
Shares cancelled	**(78,765)**	**–**	**–**	**–**	**–**	**(78,765)**
Shares issued upon exercise of share option (note 35)	**7,135**	**–**	**–**	**–**	**–**	**7,135**
At 31 December 2019	**4,233,138**	**70,105**	**(49,843)**	**356,375**	**33,881**	**4,643,656**

48. Approval of the financial statements

The financial statements were approved and authorised for issue by the board of directors on 30 March 2020.

2019 Environmental, Social and Governance Report of 3SBio Inc.

April 2020

CONTENTS

1. Corporate Social Responsibility Management

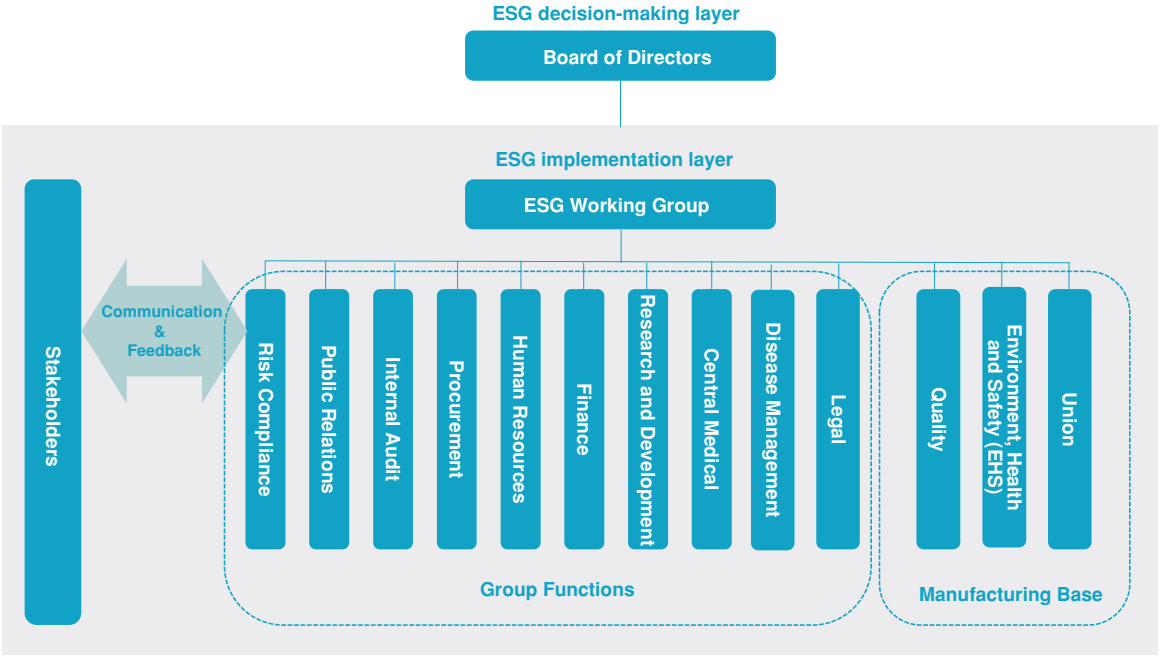
1.1 Social Responsibility Philosophy

Driven by the mission of "improving the qualities of life of patients and bringing health benefits to the human race by developing and manufacturing high quality drugs", the Group has always been committed to helping patients solve clinical medication problems and continually conquering challenges brought by diseases. The goal of the Group is to improve patients' quality of life with high-quality drugs and make contributions to human health.

The Group takes compliance operation as the foundation of its responsibility. At the same time, the Group honors its commitments to stakeholders including shareholders, customers and consumers, employees, the public and the community, government and regulatory authorities; actively strives to fulfill its social responsibilities; provides doctors with reliable treatment tools and provides patients with trustworthy drugs; carries out reforms in medical and health cause for the government; gives more care and love to employees; and brings life-saving hopes to patients and families in need.

ESG Management Structure and ESG Working Group

The Group's board (the "**Board**") of directors (the "**Directors**") has established an environmental, social and governance (the "**ESG**") working group that is responsible for ESG decision-making. Under the leadership of the office (the "**Office**") of the Board and the public relations department (the "**PR Department**"), the ESG working group coordinates ESG management, communication and information disclosure. The Office of the Board and the PR Department report the progress and fruits of ESG work to the Board. All functional departments and production base departments are responsible for implementing specific ESG work. In 2019, the Group's ESG working group actively performed various responsibilities to ensure orderly progress of ESG management. In addition, the Group adopted digital tools to carry out systematic ESG performance management to improve the effectiveness of ESG management performance and timely monitor ESG-related risks, for the purpose of promoting sustainable development of the Group.



Responsibilities of ESG Working Group of 3SBIO INC.

- Assess ESG risks and report to the Board in a timely manner;
- Formulate ESG goals and regularly report to the Board about the achievement of goals;
- Coordinate and promote the implementation of ESG works in all functional departments and subsidiaries;
- Communicate with stakeholders, etc.

1.2 Stakeholder Communication and Material Analysis

The Group believes that it is significant to continuously improve social responsibility management after it well understands the demands and concerns of stakeholders. Therefore, the Group always adheres to the principle that stakeholders get engaged in its social responsibility management.

In 2019, the Group expanded the scope of stakeholder communication and adopted the form of questionnaire communication. 257 questionnaires responses were collected from stakeholders, including shareholders and investors, employees, suppliers, and customers, of which 244 were valid. Based on the questionnaires, we identified the concerns of different stakeholders and analyzed the materiality degree of 20 issues to form a matrix of material issues. In this report, we will give key responses to important ESG issues that the stakeholders concern.

Important Issues of Stakeholders and Corresponding Response

Key stakeholders	Issues of concern	Communication and response
Shareholders	Compliance management, business ethics, product safety and quality, responsible marketing	Listed company information disclosure, shareholder meetings, investor meetings
Senior management	Compliance management, business ethics, product safety and quality, product innovation and R&D, responsible marketing	Senior management meeting
Grass-roots employees or middle management employees	Compliance management, product safety and quality, employee health and safety, employee development and retention	Labor unions and workers' congresses, EHS (Environment, Health and Safety) management system, regular training assessment and promotion

Key stakeholders	Issues of concern	Communication and response
Customers and consumers	Product safety and quality, product pricing and accessibility, responsible marketing, customer satisfaction and communication	Quality management system, standardized medication training, customer service system, Sales Force Effectiveness (SFE) management system
Government and regulatory authorities	Compliance management, business ethics, product safety and quality, product innovation and R&D, industrial development	Construction and management of compliance systems, participating in policy making and recommendations, scientific research and innovation, intellectual property protection
Suppliers	Compliance management, business ethics, product safety and quality, product innovation and R&D	Standardized supplier management system, transparent and fair procurement, cooperative development
The public and community	Product safety and quality, product innovation and R&D, industrial development, community and public welfare	Public welfare projects, environmental impact analysis and planning control

Material Issue Analysis Procedure

Issue identification:

- Identify 20 material issues according to Environmental, Social and Governance Reporting Guide of The Stock Exchange of Hong Kong Limited (the "Stock Exchange"), peer benchmarking and actual operations of the Company

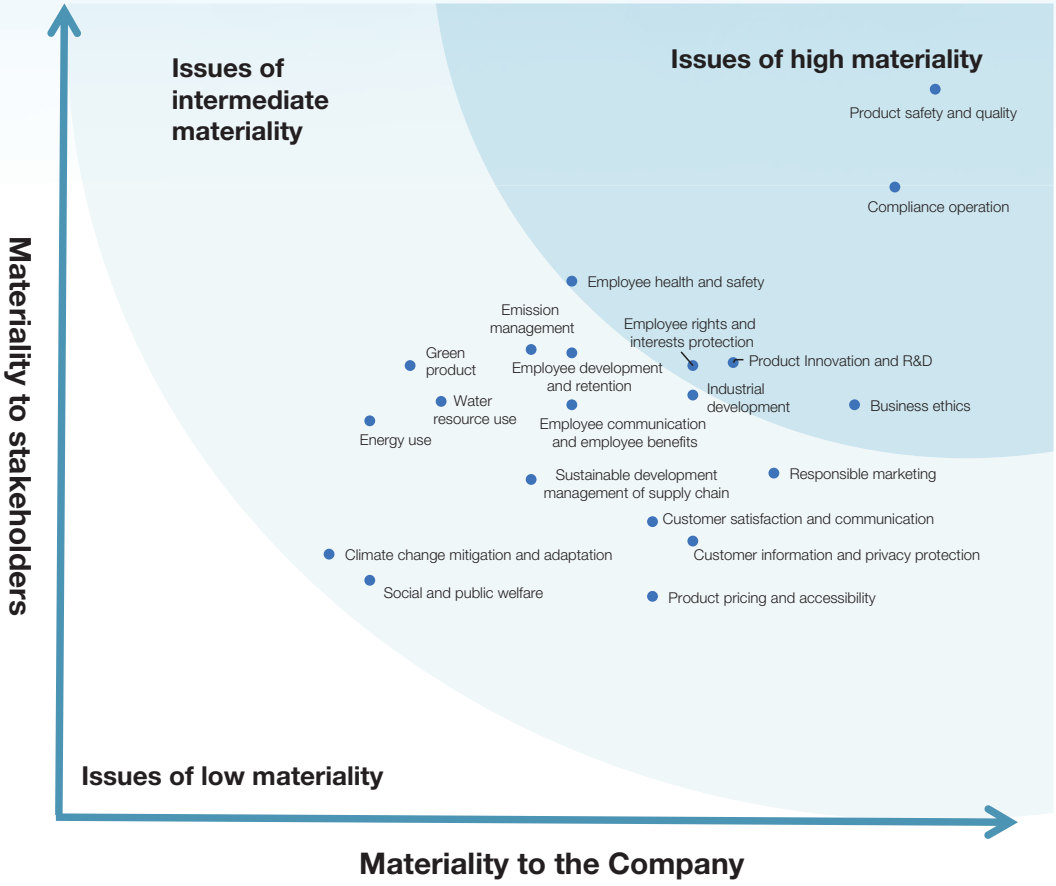
Stakeholder communication:

- Adopting a questionnaire survey to communicate with stakeholders. Having received a total of 244 valid questionnaires in 2019

Ranking of material issues:

- Having formed a matrix of material issues based on communication with stakeholders, opinions of experts and materiality analysis

Material issue matrix



1.3 Social Recognition

Honor name	Issuing unit
3SBIO INC. Group	
2018 Top 100 in pharmaceutical industry in China (58th)	China National Pharmaceutical Industry Information Center
Top 100 in pharmaceutical industry in China	All-China Federation of Industry & Commerce Medical (ACFIC) Pharmaceutical Commercial Association
Top 50 growing company in pharmaceutical industry in China	All-China Federation of Industry & Commerce Medical (ACFIC) Pharmaceutical Commercial Association
"Caring Enterprise Award" of Beijing Bethune Charitable Foundation	Beijing Bethune Charitable Foundation
Shenyang Sunshine	
Excellent promotion organization for the 40th anniversary of Quality Control group activities in national pharmaceutical industry	China Quality Association for Pharmaceuticals (CQAP)
Top 100 private enterprises in Liaoning Province	Liaoning Federation of Industry and Commerce
2017–2018 "Abiding by Contract and Cherishing Credit" Enterprise in Liaoning Province/Credit Rating 5A	Liaoning Association for Enterprise Credit
Top 100 Technology Innovation Company of Shenyang private enterprises in 2018	Shenyang Federation of Industry and Commerce
Zhejiang Wansheng	
AA grade enterprise with the highest supervision level of Hangzhou pharmaceutical manufacturers	Hangzhou Market Supervision Administration Bureau
Science and Technology Policy Innovation Award (Tacrolimus)	Science and Technology Bureau of Lin'an District
"Industry-University-Research Cooperation Award" for promoting scientific and technological innovation and accelerating the transformation of scientific and technological achievements in Lin'an District	Science and Technology Bureau of Lin'an District

Honor name	Issuing unit
2019 Reassuring Consumer Unit (reliable factories)	People's Government of Hangzhou Lin'an District
Sciprogen	
2018 "Abiding by Contract and Cherishing Credit" Enterprise in Guangdong Province	Market Supervision Administration of Shenzhen Municipality
Sunshine Guojian	
"Ankylosing Spondylitis Healthy Poverty Alleviation Project" won "Targeted Poverty Alleviation Annual Sustainable Project" Award at the 11th China Corporate Social Responsibility Conference	Southern Weekly

2. Compliance Operation

Compliance operation is the foundation of the Group's development. The Group adheres to the principles of "integrity, standardization, transparency and fairness" for its business operations. The Company practically implements compliance culture construction, performs business ethics, practises responsible marketing and intellectual property protection. It deems responsible operation as the foundation of its development.

Laws and Regulations Related to Compliance Operations

Field	Major laws and regulations
Responsible marketing	*Advertisement Law of the People's Republic of China, Anti-unfair Competition Law of the People's Republic of China, Anti-monopoly Law of the People's Republic of China, Measures for the Examination of Drug Advertisements, The Pharmaceutical Administration Law of the People's Republic of China, Standards for the Examination and Issuance of Drug Advertisements, Administrative Regulations on Drug Instructions and Labels,* etc.
Intellectual property protection	*Patent Law of the People's Republic of China, Rules for the Implementation Regulations of the Patent Law of the People's Republic of China, Trademark Law of the People's Republic of China,* etc.

2.1 Formulation of the Compliance Culture

The Group has established a sound risk identification and compliance management system and has been continuously improving its compliance management system. The Group has formulated management systems such as *3SBIO INC. Compliance Management System*, *3SBIO INC. Employees' Conduct and Ethics Code*, and *3SBIO INC. Group Internal Audit Construction*, covering all aspects of its operations. The Group's risk-control & compliance department (the "**Risk-control & Compliance Department**") implements compliance supervision and inspection in accordance with these systems to ensure standardized implementation of various operation activities.

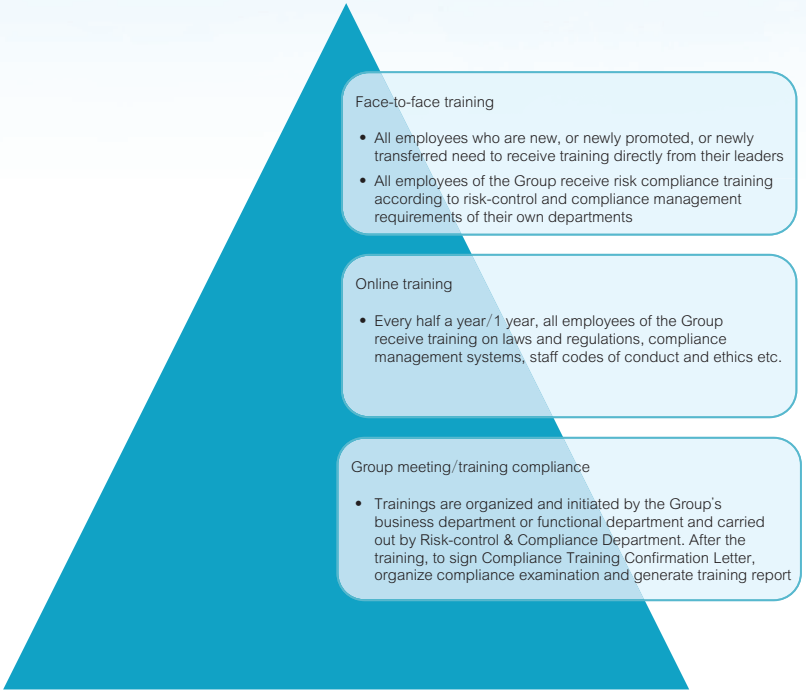
The Group is committed to compliance culture construction and it incorporates compliance concept into daily operations. The Group has formulated *Reporting and Approach Methods of Violations* so that all employees have the rights to report violations. In addition, the Group helps all employees improve their compliance awareness through internal audit, compliance training, Risk-Based Integrated Promotion Conduct Appraisal (the "**IPCA**") and other measures.

Compliance Training

The Group has established a compliance training system which also has been strictly implemented. All employees are given regular compliance training from the day they become one of us, and they are tested to make sure the training is effective. Their performance in compliance training will be incorporated into the IPCA for assessment. The Risk-control & Compliance Department is responsible for formulating annual all-employee-oriented compliance training plan. In addition, the Group continues to implement the "Integrity Ambassador Scheme", which is responsible for interpreting compliance policies, promoting the Group's compliance-related policies, and advancing the concept of integrity and compliance in the Region.

In 2019, the Group organized a total of 606 offline trainings related to compliance and business ethics. Training content involves compliance policy, the Group compliance culture and principles, responsibilities of compliance management department, business compliance guidance and analysis, etc. All employees are engaged, including part-time employees and outsourcing staff, reaching a total of 7,378 attendances.

Compliance training system



2.2 Anti-corruption and Business Ethics

In accordance with laws and regulations such as *Law of the People's Republic of China on Donation for Public Welfare Undertakings* and *Provisions on the Establishment of Commercial Bribery Records in the Purchase and Sale of Medicines*, the Group has formulated the *Giving, Sponsoring, and Donation (GSD) Management Guide* to strengthen code of conduct for financial aid to the third-party entities and strictly prevent corruption and bribery.

The Group's *Staff Code of Conduct and Ethics for Employees* also defines the code of conduct for employees, i.e. clearly clarifying anti-bribery principles when communicating with media and officials, as well as the interaction from distribution center to business units and Health Care Practitioners (HCP). In addition, the Group prohibits the payment of convenience fees.

Supervision and Reporting System

The Group has established a monitoring and reporting system and formulated systems such as *Reporting and Approach Methods of Violations*, *Staff Code of Conduct and Ethics* to encourage employees to report any violations of laws, disciplines and regulations. The Group has set up a variety of reporting channels such as reporting email, reporting telephone, etc. The Risk-control & Compliance Department of the Group will report to the compliance committee after receiving reports and guarantee clear reply and investigation results to the informant within one month. The Group protects the informant and ensures independence of information receiving and management personnel, as well as safety of reporting channels. In the event of any retaliation against the informant or witness, the Group will punish such behavior, including but not limited to dismissal, termination of labor contract, hand over to judicial organs, based on severity.

Anti-corruption Management on Suppliers

The Group requires suppliers to sign a declaration of conformity, which includes commitments on anti-corruption, gifts and entertainment, conflict of interest; if suppliers fail to comply with any of these commitments, the Group may terminate cooperation with them.

The Group's suppliers' commitments on anti-corruption, gifts and entertainment, conflict of interest (summary)

Anti-corruption	• Suppliers promise not to provide or give valuable items, in the name of the Group, to government officials, medical and medical professionals, customers, competitors and other third parties, in order to obtain unfair advantages in commercial competition
Gifts and entertainment	• Suppliers promise not to provide gifts or entertainment for employees of the Group
Conflict of interest	• Suppliers promise to truthfully disclose whether they have relatives, equity, cooperation relationships with our employees

For the purpose of strengthening the Group's management on anti-corruption policies of suppliers, in 2019, the procurement department (the "**Procurement Department**") of the Group actively implemented "Transparent Procurement" work and established a two-way communication channel with suppliers. The Procurement Department regularly called and emailed suppliers to describe and carry out anti-corruption propaganda and training. It also informed the suppliers about the reporting phone number on the Group's portal website and encouraged them to report corruption incidents they discovered.

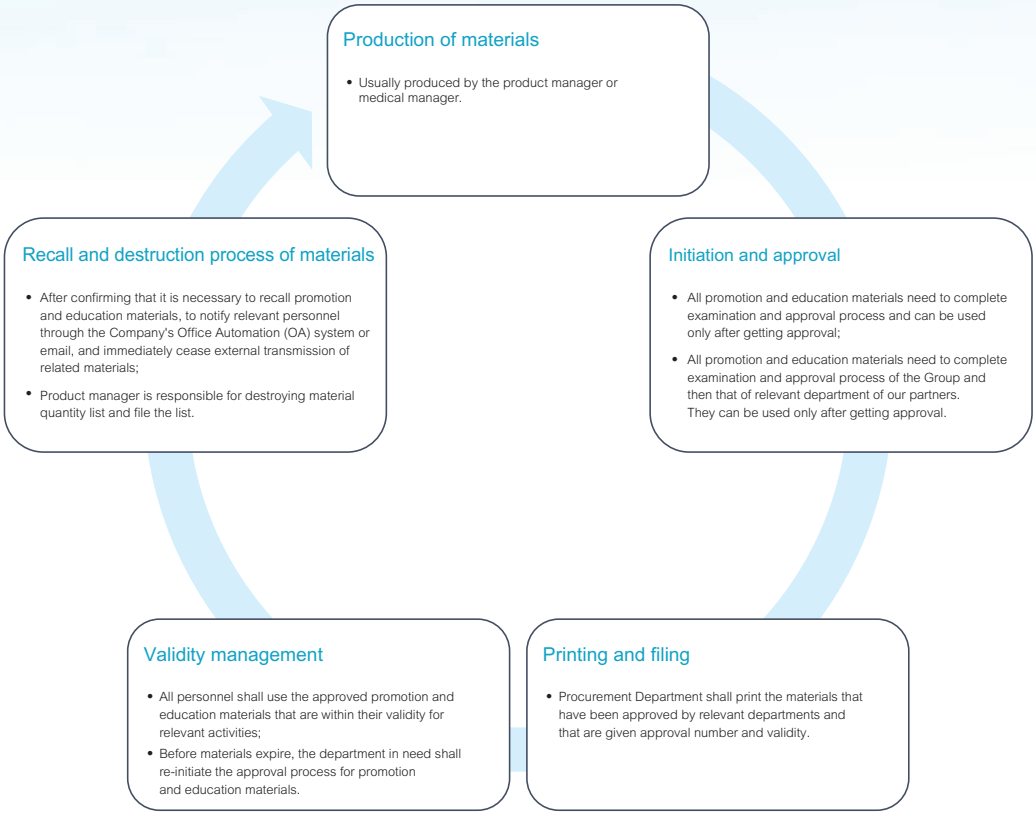
Main contents of propaganda or training to suppliers (summary)
• Prohibiting the suppliers to provide gifts or entertainment for employees of 3SBIO INC.;
• Prohibiting the suppliers to be involved in transactions with employees of 3SBIO INC., and have conflicts of interest;
• Prohibiting the suppliers to promise, provide or give valuable items, in the name of 3SBIO INC., to government officials, medical and medical professionals, customers, competitors and other third parties, in order to obtain or maintain business or unfair advantages in commercial competition.

2.3 Responsible Marketing

The Group upholds the business philosophy of "integrity, standardization, transparency, and fairness", and always adheres to the philosophy that it should promote drugs and medicines in a moral, scientific and objective way. The Group strictly abides by relevant national laws and regulations in product labeling and advertising, so that regulators, medical professionals and patients may timely receive authentic and rigorous product and academic information. In 2019, the Group formulated *3SBIO INC. Specification of Promotion and Education Materials Examination and Approval*, which clarifies the Group's preparation and examination and approval specification on drug promotion and education materials production.

At the same time, the Group conducts responsible marketing training to all employees to strengthen the awareness and knowledge of compliance and responsible marketing.

Promotion and Education Materials Examination and Approval



2.4 Intellectual Property Management and Protection

The Group adheres to the intellectual property management policy of "innovation driven research and development, future-oriented management". It has formulated systems including *Administrative Measures on Intellectual Property Rights*, *Administrative Measures on the Management of Trade Secrets,* and the *Manual on Intellectual Property Management of Enterprises* to effectively manage and protect intellectual property rights such as patents, trademarks, trade secrets, to protect the Company's competitive advantage and brand reputation, and to avoid infringing intellectual property rights of others. Sunshine Guojian and the National Engineering Research Center of Shanghai Antibody Medicine (NERC) implement the requirements of the Group system. Besides, they have formulated *Patent Management Measures, Trademark Management Measures, Patent Reward Measures* to further manage intellectual property rights of their own. In 2019, the Group's "YISAIPU" trademark won the third prize of Patent and Trademark of Shanghai Intellectual Property Innovation Award. Its project "Recombinant Human Thrombopoietin Preparation and Production Method" won the second prize of the Liaoning Patent Award.

Field	Progress in 2019
Patent	• 15 patent applications • 21 patent authorizations
Trademark	• 9 trademark applications • 7 trademark registration certificates
Other intellectual property	• 46 patent search and analysis • 3 non-authorized public opinion submissions to the National Intellectual Property Administration, PRC

3. Product and Customer Service Responsibility

The Group's highest goal is: "favoring global patients with high-quality China biological drugs". It sticks to quality control and dedicated to excellent products. Product and customer service are the key responsibility of the Group, so it continuously improves product quality management and customer service system. In 2019, the Group did not have any violations or lawsuits in terms of product quality and customer service.

Laws and regulations related to product and customer service responsibilities

Field	Major laws and regulations
Product quality	*Pharmaceutical Administration Law of the People's Republic of China* (revised in 2019), *Good Manufacture Practice of Medical Products' GMP, ICH Q10 Pharmaceutical Quality Management System,* U.S. FDA *Guidelines for Industry Quality System Approach to Pharmaceutical cGMP Regulations, Good Laboratory Practice, Good Clinical Practice of Pharmaceutical Products,* EU *Guide to GMP for Medicinal Products,* etc.

3.1 Providing High Quality Products

The Group's main products include TPIAO (for Thrombopoietin and Primary immune thrombocytopenia caused by solid tumor chemotherapy), Yisaipu (for rheumatoid arthritis, ankylosing spondylitis and psoriasis), EPIAO (Recombinant Human Erythropoietin Injection) (for anemia caused by chronic kidney disease, anemia caused by tumor chemotherapy and red blood cell mobilization during peripheral surgery), SEPO (Recombinant Human Erythropoietin Injection) (CHO cell) (for anemia caused by chronic kidney disease, anemia caused by tumor chemotherapy), Humulin (for diabetic patients who need insulin to maintain blood glucose level, also for early treatment of early diabetic patients and treatment of diabetic patients during pregnancy), Byetta/Bydureon (for improving blood glucose control in patients with type 2 diabetes), Qi-ming Keli (for retinopathy caused by type 2 diabetic), IV Sucrose (for iron-deficiency anemia), Sparin (Low Molecular Weight Heparin Calcium Injection) (prevention and treatment of deep venous thrombosis, and also for the prevention of blood clot formation during hemodialysis), Mandi (for male-pattern hair loss and alopecia areata), Jiannipai (Recombinant Humanized Anti-CD25 Monoclonal Antibody Injection) (prevention of acute rejection after kidney transplantation), etc. The Group's products are mainly sold to hospitals and other medical institutions (customers). For the year ended 31 December 2019, the Group provided products and services for approximately 2,574 Grade III hospitals and approximately 14,513 Grade II hospitals or lower grade hospitals and medical institutions, covering all provinces, autonomous regions and municipalities in the PRC.

Major recognition of the Company's products in 2019

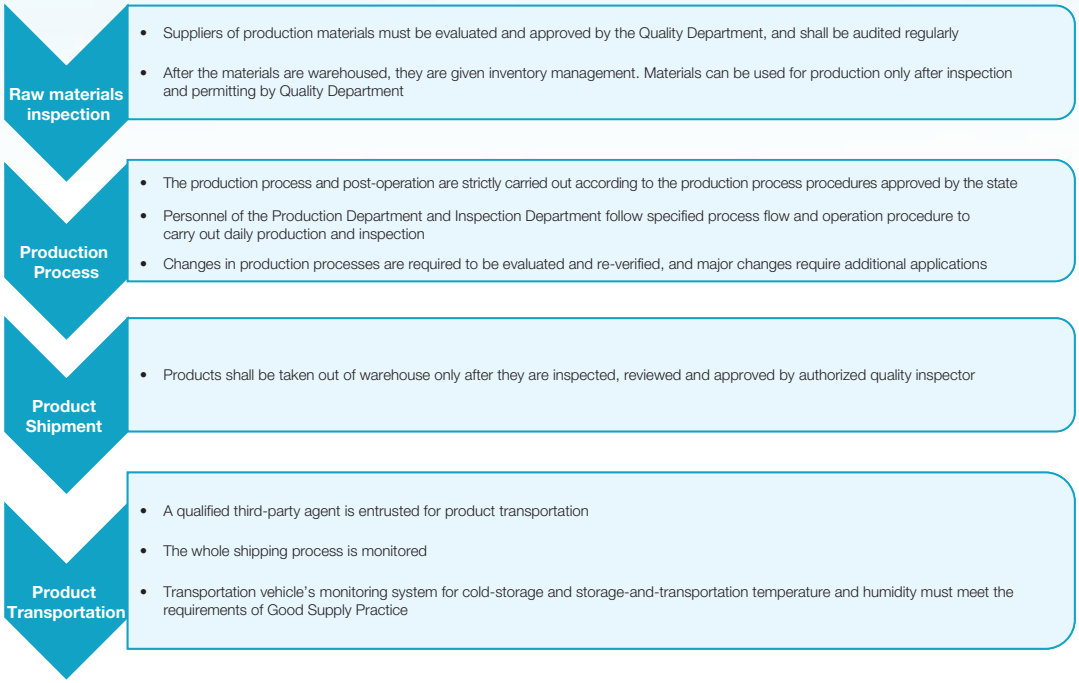
Major recognition	Issuing unit
"TPIAO" won the single champion of manufacturing	Ministry of Industry and Information Technology, PRC, China Federation of Industrial Economics
"Bydureon" won the top ten innovative drugs at the 11th Health China Forum (2018)	People.cn/Health Times
Fluticasone Propionate Cream won the honor of "Provincial New Product"	Zhejiang Economic and Information Commission

Quality Control System

The Group implements a unified quality management standard. The Group has formulated *Quality Inspection Management Regulations* and quality control processes based on the full life-cycle quality management system that covers raw material sources, production, product permitting, transportation, and post-marketing Pharmacovigilance. In 2019, the PRC revised and implemented the *Pharmaceutical Administration Law of the People's Republic of China.* In this context, the Group actively carried out gap analysis and improvement, and improved internal management process to ensure that current quality management system well meets the new requirements. All quality-related departments of the Group's production bases have a veto power on suppliers based on product quality.

The Group's quality control system has been widely recognized by domestic and foreign certification systems, and all of its pharmaceutical subsidiaries have obtained the 2010 Good Manufacturing Practice (GMP) certification of the PRC. Our Shenyang and Shanghai bases have further obtained Certification of PIC/S from countries such as Ukraine. All bases are audited by domestic and foreign GMP every year. In addition, all bases also carry out internal audit of the quality management system, including quarterly quality management review, annual self-inspection and irregular internal quality audit, so as to ensure the effective operation of quality system and promote its continuous improvement.

Product Quality Control System



Raw material is the first element of quality management. The quality department (the "**Quality Department**") of all manufacturing bases regularly conduct on-site audit on quality system of main suppliers and new suppliers, together with Procurement Department and material consumption departments, based on *Annual Planning of Evaluation on Supplier Quality*. The Quality Department signs quality agreement with major suppliers, and audits them every year. The Quality Department also analyzes indicators like product inspection qualification rate and deviation occurrence rate of suppliers and generates a report on a yearly basis. According to the actual demand, the base trains the suppliers from time to time. In 2019, our Shanghai plant organized training on product transportation quality control for outsourcing cold-chain transportation suppliers.

Production link is a key to quality. The Group's *GMP Training Standard Operating Procedures* stipulates training requirements for the Company's personnel related to drug production quality. All manufacturing bases implement post-related GMP training in an orderly manner to ensure that employees engaged in drug production behave in accordance with GMP quality requirements. At the same time, the Group carries out product adverse reaction training for all new employees from marketing system. The training proceeds offline and online, which includes national pharmacovigilance regulations, pharmacovigilance standard operating procedures and adverse reaction report filling specifications, etc. All trainings include on-site assessment in order to ensure the effect of trainings. In 2019, the Group's quality-related training covered all GMP-related staff, including outsourcing staff and interns.

All manufacturing bases have set up standard operating procedure for the handling of defective goods. The procedure specifies the treatment and requirements of defective goods including expired drugs. The Quality Department personnel of all bases shall monitor the entire handling process of defective goods.

Shenyang Sunshine Carries out Lean Lab Management

In 2019, Shenyang Sunshine has been advancing lean lab action in terms of laboratory inspection. In addition to regular 5S management, it also develops sample optimization and lean laboratory operation and so on, relying on lean management, to improve quality inspection ability and efficiency.

Drug Label Management

In accordance with *Provisions for the Administration of Drug Instructions and Labels*, *Pharmacopoeia* of the Peoples' Republic of China (2015 Edition), all manufacturing bases formulated *Management System for Printing Packaging Materials* and *Management System for Design Review of Printing Packaging Materials*. This is to establish drug label management procedure, and make clear regulations on design, purchase, receiving, inspection, storage, using and other links of labels and instructions.

Overview of Pharmaceutical Drug Label Management Procedures

- Product department/packaging material designer is responsible for the design, which will be reviewed by the Medical Department, Intellectual Property Department, Registration Department, Quality Department, Production Department, Procurement Department and packaging material manager to ensure its compliance with relevant regulations before approval by the person in charge of quality management

Label design: Standard Operational Procedures for the Design, Review and Approval of Printed Packaging Materials

- Procuring labels from qualified suppliers
- If the change of label involves marketing permit, an application is required to be filed to the drug regulatory authority, and it has to be approved by the quality department upon the approval of application

Label procurement: Material Procurement Management Procedures

- The warehousing department is responsible for receiving the label and conducting a preliminary warehousing inspection based on the sample label
- Upon warehousing, isolated storage and clearance inspection are implemented to compile complete written records

Label receipt: Material Warehousing and Receipt Management Procedures

- The quality control (QC) laboratory is responsible for the sampling and inspection of labels, and carrying out batch inspection and full inspection on the content, layout, color code, size, material and quantity of labels

Label inspection: Label Sampling and Inspection Management Procedures

- Labels are stored and locked up to prevent the risk of leakage of labels which would result in counterfeit drugs, and the warehouse department maintains a complete and traced written record of the quantity of labels
- Different batches of different products are stored separately to prevent confusion

Label storage: Material Management Procedures

- The use and application of labels in the type and quantity of medicine should be accurate
- The used labels are destroyed at the end of production, and the remaining blank labels are returned to the warehousing department for registration and storage

Label usage: Label Operation Management Procedures

Post-marketing product management

Once the product is launched into market, pharmacovigilance and risk management are important parts of product life-cycle risk management and also direct paths to medication safety for patients. For the purpose of safeguarding medication safety for patients, the Group set up improved pharmacovigilance system, based on *Provision for Adverse Drug Reaction Reporting and Monitoring and Announcement on Reporting Adverse Reactions Directly by Holders of Marketing Authorization* issued by National Medical Products Administration (NMPA). The standard management procedure for *Pharmacovigilance* clearly clarifies the reporting time limit of drug safety data after product launching.

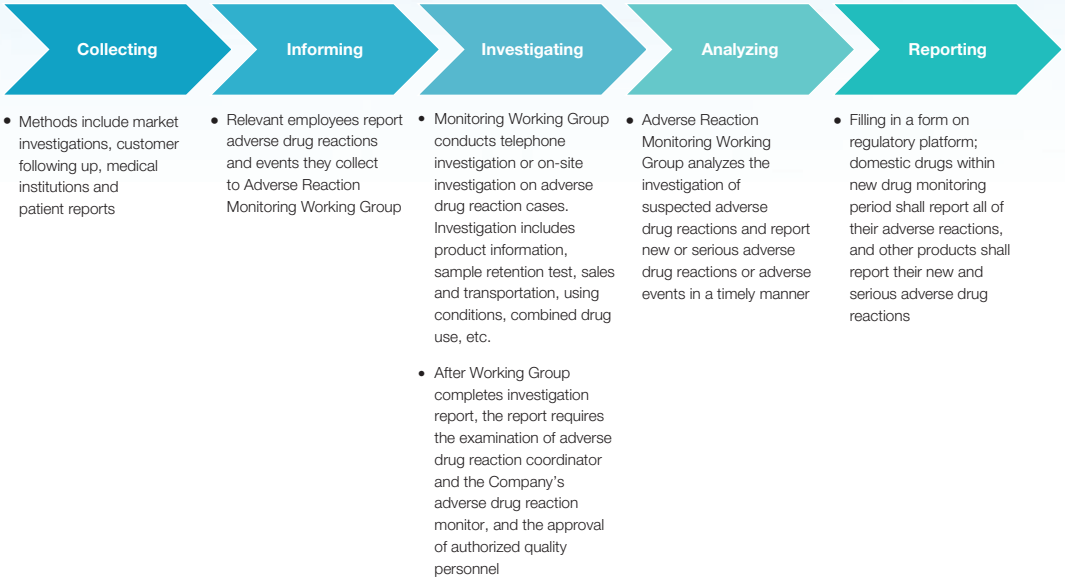
The Group has established a pharmacovigilance center. The Company's official website releases various channels such as e-mail, telephone and fax for receiving adverse drug reaction reports. The Group analyzes and evaluates the collected adverse drug reaction reports, and then inspect their authenticity, accuracy and integrity, and in the end timely reveals information related to drug safety.

The Pharmacovigilance center can discover safety risks of the products launched in time, and promptly inform relevant departments, organize relevant departments to carry out risk analysis and evaluation, and immediately take measures to minimize risks. All production bases have also formulated *Reporting and Collecting Management Regulations of Adverse Drug Reactions* to standardize the investigation and handling process of adverse drug reactions.

Time Limit for Reporting Drug Safety Data after Product Launching

	Reporting time limit	Event category
Domestic	Immediate report	• Any event involving death or suspected death • Group adverse event of drug
	Within 15 days	• New, serious adverse drug reactions
	Within 30 days	• Other general adverse drug reactions
Abroad	Within 30 days	• Serious adverse drug reactions
	Within 24 hours	• Drugs that shall be suspended from sale, use or market due to adverse drug reactions

Treatment Procedures of Adverse Drug Reaction



Product Recall Mechanism

The Group has established the *Product Recall Management Regulations*, which specify recall level and procedure in detail. With reference to NMPA's *Administrative Measures for Drug Recalls*, *Good Manufacture Practice of Medical Products (2010 Edition)* and *European Pharmaceutical Production Management Practices*, all manufacturing bases conduct imitated recall at least once every two years. Recall process includes recall initiation, transportation arrangement, receiving, isolating, investigating, transferring or destroying. In 2019, all manufacturing bases conduct imitated recalls that all reached our goals, which verified the effectiveness of product recall procedure. In 2019, the Group did not have any product recalls due to product quality defects.

3.2 Providing High-quality Service for Customers and Patients

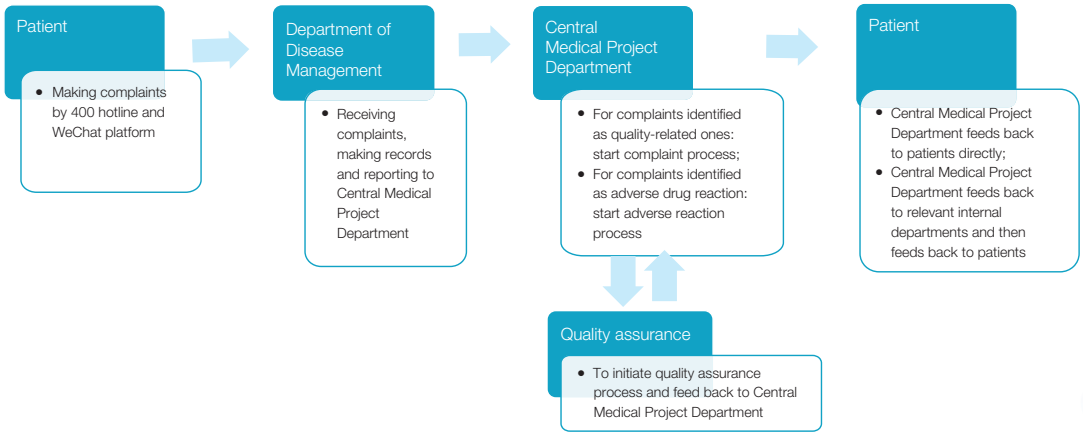
Customer Service System

We value our service to customers and patients, so we strive to build a special brand for our service for patients and make patient management one of our core competitiveness. The Group set up improved patient complaint and goods returning management system and procedure as one of our active efforts to construct channels for customer communication, for the purpose of working out effective solutions in time.

Customers and patients can contact the Group through our 400 hotline or WeChat platform. The Group will follow internal customer complaint handling process to carry out internal communication for complaint problems in the first place, for the purpose of jointly providing response and solutions for customers.

In addition, in order to improve the quality of customer service, the Group uses a 24-hour branding service hotline provided by third-party call center to timely handle the customer demand in pre-sale and after-sale period; the call center conducts regular follow-up after medication for different types of patients of each product. It cares for recent situation of patients, collects patient feedback, so as to improve service.

Customer Complaint Handling Process



Customer Privacy Protection

In order to protect the privacy of customers and consumers, the Group has established the *Code of Conduct and Ethics for Employees and Manual for Office Workers' Information Security Management*, which requires each employee to abide by the principle of information confidentiality for non-public information on customers, employees, agents and other third parties. This helps to strengthen office workers' awareness of information security and confidentiality in the Group. All employees of the Group shall sign confidentiality agreement as required and strictly abide by it.

The Group collects and manages necessary customer information through internal management system which is given strict authority management and sets different views and data authorities for users of different levels. Information related to commercial companies and hospitals can only be shown and used in this system, without any possibility to export any data in any form. In 2019, there was no confirmed information leakage, theft or loss of customer information in the Group.

4. Employee Development Responsibility

The Group deems employees as its core resource and precious wealth. Always adhering to the "people-oriented principle", the Group actively safeguards legitimate rights and interests of all employees and is committed to protecting their rights and benefits. It provides them with safe and healthy working environment, a platform for career and ability development, and a working environment that is harmonious and warm. In 2019, the Group did not have any litigations and violations of laws and regulations in terms of employment, occupational health and safety, child labor and forced labor.

Laws and Regulations Related to Employee Development Responsibility

Field	Major laws and regulations
Employee rights and benefits	*Labor Contract Law of the People's Republic of China, Regulations on Labor Protection of Female Employees*, *Regulations on Social Retirement Insurance*, *Social Insurance Law of the People's Republic of China*, *Labor Dispute Mediation and Arbitration Law of the People's Republic of China*, *Trade Union Law of the People's Republic of China*, *Individual Income Tax Law of the People's Republic of China*, etc.
Employee health and safety	*Law of the People's Republic of China on Safe Production, Law of the People's Republic of China on Prevention and Control of Occupational Diseases, Law of the People's Republic of China on Fire Protection, Regulations on the Management of Hazardous Chemicals, Code for Fire Prevention of Buildings,* etc.

4.1 Employee Rights and Benefits

Employee Employment and Basic Rights and Benefits

The Group always adheres to legal employment and signs labor contracts with all employees. In addition, it formulates policy documents such as *Employee Handbook, Employee Turnover Management Rules, Attendance and Vacation Management Measures, and Employee Supplementary Medical Insurance Fund Management Measures* to standardize various policies on recruitment, working hours, promotion, salary, welfare, and so on, for the purpose of protecting legitimate rights and interests of employees.

In recruitment, the Group verifies the age of applicants so as to resolutely prohibit the employment of child labor and forced labor, and to respect employees and protect their privacy. The Group strictly implements equal employment and follows the principle of open and equal employment to prevent employment discrimination in any form and to protect employees from discrimination due to race, religion, gender, age, marital status, disability, nationality and so on; it is dedicated to building a diversified talent development platform. In 2019, the Group did not employ any child labor or forced labor.

The Group adopts standardized employee recruitment, performance evaluation and salary management system, and unified performance management system to ensure a more scientific management channel for employee performance evaluation and promotion. In addition, the Group has established commercial welfare insurance policy to provide employees with commercial insurance (for employees aged 16–60). The Shanghai base of the Group has established an enterprise pension system. In 2019, the enterprise pension covered the labor contract employees who were recruited before the end of 2017. Shenyang Sunshine has established supplementary medical fund to provide multiple medical security for employees in need.

In order to arouse a sense of ownership and working passion from employees and reach a balance between long-term interests of the Group and short-term interests of individuals, overall interests of the Group and the private interests of individuals, the Group has established a sound equity incentive mechanism to standardize distribution principle, distribution method and assessment mechanism of employee equity incentive. It grants equity to the Company's senior management, middle-level management and key-post personnel (accounting for 6% of total of employees). With the fulfillment of the Company's overall performance goal as attributing condition, the Group aims to encourage employees to focus on the goal of the Company, thus facilitating long-term, balanced and coordinated development of the interests of the Company and employees.

Overview of Employment and Basic Rights and Interests Systems

Remuneration and dismissal	Employment and promotion	Working hours and leaves	Welfare
• **Remuneration:** formulating mechanism on remuneration and pays remuneration in accordance with the requirements of laws and regulations; implements the pay mechanism based on post, performance and capability; investigates and surveys the remuneration and welfare of pharmaceutical and other industries to provide reference for salary adjustment; implementing customized salary adjustment for excellent employees. • **Dismissal:** formulating *Details of Employee Turnover Management* to standardize and improve employee turnover management	• **Employment:** equal employment, prohibition of forced labor • **Promotion:** taking the result of employee performance evaluation as the standard of annual performance bonus and promotion, demotion or reward and punishment; according to personal development will, working out clear career development path for them from aspects of professional development and management development	• **Working hours:** employees of standard working hour work 40 hours a week; employees of comprehensive working hour work and rest according to actual situation of their departments • **Overtime:** employees can apply for compensatory leave if they have overtime work accordingly • **Leave:** providing paid annual leave, marriage leave, bereavement leave, maternity leave, sick leave, etc. in accordance with national regulations	• **Social insurance:** providing all employees with medical insurance, endowment insurance, unemployment insurance, etc. according to national regulations • **Supplementary medical insurance:** providing employees in need with supplementary medical insurance funds • **Business insurance:** providing employees (18– 60 years old) with accident insurance, serious illness insurance, outpatient/ inpatient business insurance, etc • **Equity incentive mechanism:** granting equity to senior managers, middle-level managers and key-post personnel of the Company

Employee Communication and Care

In order to better strengthen democratic communication and establish a harmonious and stable labor relationship, all production bases of the Group have set up labor unions and workers' congresses. The labor union and the Company have negotiated and signed collective contracts, collective salary negotiation agreements and *Special Protection Agreement for Women Workers*. The Group continues to improve management mechanism of all-staff participation to ensure adequate right to know, right to participate, right to express and right to supervise. In 2019, the Group conducted special satisfaction survey on "3SBIO INC. Pharmaceutical Marketing Annual Meeting", covering 1,812 people, so as to understand employees' opinions and suggestions on the Company's activity organization, content arrangement and so on.

The Group has set up serious disease medical fund to help and support employees in need. Zhejiang Wansheng further formulated an assisting system for employees, through which every year it inquires about employee living conditions and creates files for them, so as to provide supporting aid for them. In addition, the labor unions in all production bases actively carry out various activities to send warmth to employees in need.

Overview of Employee Care Activities in 2019

Shanghai base

- Responding to the "Light Up Micro Wish" activity of the labor union in Pudong New Area, by identifying employees in difficult conditions in the Company, and working with higher labor union to help them
- Upgrading the Company's mummy house
- The factory is equipped with multiple "Automatic External Defibrillator" and organized multiple training sessions to improve employee safety

Shenzhen base

- Investigating family financial situation of the Company's needy employees, and applying for subsidies from higher labor union for them
- Organizing female employees of the Company to attend breast health lecture of "Luckyln Club" organized by the Group, and invite experts in breast cancer field from Peking University Hospital to give breast health knowledge to female employees
- Caring for physical and mental health of female employees, and conducting irregular interviews to understand their difficulties at work and career planning

Shenyang base

- Providing "Mother and Baby Room" that is equipped with facilities such as refrigerators, lockers, sofas, screens and daily necessities, to help female workers solve actual difficulties of lactation
- Preparing holiday wishes and delicate gifts for female employees on Women's Day

Work-life Balance

The Group advocates work-life balance of employees, and strives to create a happy, healthy, and harmonious working and living atmosphere for them, so as to improve employees' sense of belonging and happiness. In order to enrich the life of employees, the Group encourages all employees to actively participate in all kinds of employee clubs, and provides support for the clubs to organize all kinds of cultural and sports activities. For example, the Shanghai production base is equipped with table tennis room, lunchtime study and other employee activity places.

In 2019, considering the needs of employees, the Group and production bases actively organized various kinds of sports events and conducted lectures on emotion management and mental health lectures that were open to all employees including labor dispatch staff and part-time employees. This helps alleviate employees' working pressure.

Shanghai Base Offers Stress Relieving Courses for Female Workers

In 2019, as part of "March 8 Goddess Day" activities, Shanghai base launched a "Stress Relieving Courses For Women" that was very meaningful to which provides a meaningful to female workers. The course invited professional health trainers to analyze the causes of working stress, explain the importance and elements of stress management, and put forward suitable ways for women to reduce their stress.

R&D Center Carried out Team Building Activity of "Together, We Are Building Our Dream"

The Group owns four R&D centers, i.e. Shanghai, Shenyang, Hangzhou and Shenzhen, and R&D teams co-work online in most of the time. In order to strengthen their exchange and communication, the group carried out team building activity of "Together, We Are Building Our Dream" that involved all members of R&D team. The activities designed sections like "City Crossing" and "Building a Ship Together", which enhanced team members' cohesion, sense of belonging and sense of group honor in cooperative games.

4.2 Occupational Health and Safety

Safety Production

The Group has set up safety production management committee, and formulated safety management systems such as *Safety Production Management System*, *Safety Inspection Management System, Safety Hazard Investigation and Governance Management System*, and *Emergency Rescue Management System* as guidelines for the Group to carry out safety management work.

All production bases regularly conduct evaluation on safety production, identify and manage safety risks in workplaces, investigate and rectify potential safety hazards and regularly carry out safety training and emergency drill, thus making every effort to ensure the safety of workplace for employees. As of 2019, Shenyang Sunshine, Sunshine Guojian, Zhejiang Wansheng and Sciprogen have all passed Level Three enterprise certification of national safety production standardization.

For hazardous chemicals involved in production and operation process, the Group follows *Hazardous Chemicals Management System* to clarify warehouse management procedure of hazardous chemicals and the responsibilities of purchasing, using and management personnel, to ensure the safety of using hazardous chemicals.

Production Bases Carried Out Risk Prevention Emergency Drill

In 2019, in order to strengthen security system management, our Shenzhen base carried out the campaign of "Safety Production Month". During this period, fire safety emergency drill activities were held for all employees of the production base. Our Shanghai base also carried out a fire escape drill for all employees, and at the same time, it gave a special drill about chemical leakage to relevant employees exposed to chemicals in daily work.

Occupational health

The Group is committed to creating a healthy and safe working and living environment for employees and strictly abides by relevant national and local laws and regulations. The Group formulated the *Manual of Environment*, *Occupational Health and Safety Management* and *Occupational Health Management System* and established the Management Department of Employee Health. All these efforts were made for the purpose of constantly improving management of employee occupational health.

In 2019, Shenyang Sunshine and Zhejiang Wansheng passed OHSAS18001 occupational health and safety management system certification; Sciprogen passed the ISO 45001:2018 occupational health and safety management system standard system certification; Sunshine Guojian was levelled up from its original OHSAS18001:2007 system certification to ISO 45001:2018 system certification. As of 2019, Shenyang Sunshine, Sunshine Guojian, Zhejiang Wansheng and Sciprogen have all passed occupational health and safety management system certification.

The Group made efforts in strengthening on-site warning and daily patrol to continuously standardize production process. It also equips employees with comprehensive occupational disease protection measures and articles and strengthens trainings for employees about occupational protection and safety awareness. All bases regularly carry out on-site inspection of occupational hazard factors and publicly display results. For employees exposed to occupational disease risks, the Group provides them with sufficient labor protection articles and annual occupational disease physical examination to ensure their occupational health. In 2019, there was no occupational disease incidents in the Group and its production bases.

Sunshine Guojian Carried Out Occupational Health Training at All Levels

Sunshine Guojian has been continuously improving its occupational health and safety management system by developing completed employee safety training system that includes new employee safety training, safety education for all employees and various special safety training. Sunshine Guojian has been well practicing these at all levels to strengthen safety awareness of all employees.

4.3 Talent Development and Retention

Employee Selection and Promotion

Employees are valuable to the Group and the driving force of the Group's continuous development. In order to standardize talent management, the Group adopts an unified performance management system to fairly and openly conduct performance evaluation and promotion management, for the purpose of advance outstanding talents. In 2019, the Group cooperated with universities at home and abroad to attract more talents through projects of "Employer Brand Building" and "Management Trainee".

The Group provides dual channels for employees to achieve professional development and management development and helps them to identify clear career development paths according to their personal wishes. All production bases formulated post promotion management measures, to standardize post management and define promotion principle and career development path, thus providing robust guarantee for employees to enjoy career growth and development. At the same time, the Group provides employees with career development advice and training, considering different professional knowledge and business skills required by different development paths.

3SBIO INC. Entered into University-Industry Cooperation with East China University of Science and Technology

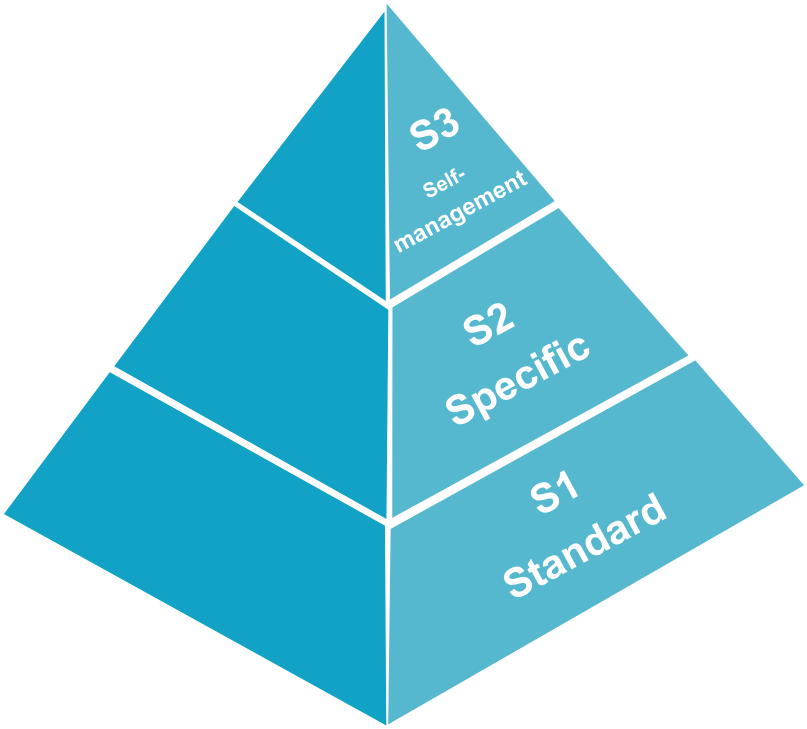
In 2019, the Group entered into an University-Industry cooperation with East China University of Science and Technology. It organized a total of six open days all across the year to welcome students from the Institute of Biological Engineering. The R&D center designed interesting biological practice courses for students, which effectively combines theories with reality.

In addition, in order to support national education cause and cultivate talents for biomedical R&D in China, the Group set up scholarships for East China University of Science and Technology. In 2019, the two-year "3SBIO INC. Cup" Star Dreamwork Project was initiated. The Company donated RMB100,000 to Education Development Foundation of East China University of Science and Technology as an exclusive title sponsor.

Talent Training

The Group attaches great importance to the cultivation of talents. It also regards employee development as an important driving force for corporate development and an important aspect of corporate social responsibility. The Group provides training opportunities for all employees, including outsourcing employees, and has established "3S training system" for all employees, i.e. three levels: Standard, Specific, Self-management. With diversified training courses provided, employees can choose training content based on their own demands. The Group incorporates product quality and safety training and employee leadership training into its regular training, so as to help employees improve their professional ability and management ability and develop in a comprehensive way.

In 2019, for the purpose of further consolidating training efficiency, the human resources training department (the "**HR Training Department**") of the Group launched a series of courses, i.e. "Daily Upgrading Courses", through which employees can make full use of fragmentation time to learn via two management-thinking-related videos one day. In addition, the Group launched mini-MBA course of Central European International Business School (CEIBS) for middle and senior management employees. The course was given in the form of online learning and offline practicing, helping to improve learning efficiency.



S3: Self-management training

S2: Specific training
For example:
Super Team project
Pillar Column project
Jiangshan Team project
Spotlight project
Wing project
Start-up project

S1: General training
For example:
Compliance training
Performance training
Quality training
Leadership training

3S Training System

Building High-Performance Teams Project

In 2019, the Group launched the project of "Building High-Performance Teams". During the project, the Group's HR Department regularly evaluated "team effectiveness" and "team performance" of all business units and identified their performance based on the matrix of "Team Effectiveness-Team Performance". Then HR Department put forward different development goals to business units in different positions of the matrix to guide them in strategy and plan formulating to enhance team performance.

During the project, the Group's HR Department provided training for managers of big regions of business units and shared 2–3 best practices on marketing platform every month to enhance high performance of all teams.

5. Responsibility to Protect Environment

As a good corporate citizen, it is important for the Group to fulfill its social responsibility by realizing harmony and creating a win-win situation with the environment and society. The Group insists in operating in eco-friendly and sustainable ways and incorporates the philosophy of green development into business development. It aims to advance environment performance through production process optimization and improving resource recycling.

Laws and Regulations Related to Environmental Protection Responsibilities

Field	Major laws and regulations
Environmental protection	*Environmental Protection Law of the People's Republic of China*, *Law of the People's Republic of China on the Prevention and Control of Environmental Pollution by Solid Waste, Law of the People's Republic of China on the Prevention and Control of Water Pollution, Law of the People's Republic of China on the Prevention and Control of Atmospheric Pollution, Law of the People's Republic of China on Clean Production Promotion, Regulations on Environmental Protection Management of Construction Projects,* etc.

5.1 Environmental Management System

The Group follows the requirements of Good Manufacturing Practice (GMP) and establishes and continuously improves its environmental management system. As of 2019, Shenyang Sunshine, Sunshine Guojian, Zhejiang Wansheng and Sciprogen had all passed the ISO 14001:2015 environmental management system certification. In addition, Zhejiang Wansheng has passed the clean production audit and acceptance of Hangzhou Economic and Information Commission.

The Group formulated the *Environmental Management System* that requires and standardizes environmental management of production bases. The Group set up leading group of environmental protection, which owns competent environmental protection department and executive department responsible for the examination and approval of environmental protection system and management and advancement of environmental protection work. Manager or supervisor of each department is the first responsible person for actively implementing environmental protection responsibility system.

All production bases of the Group are the main bodies of implementing environmental protection responsibilities. As required, they set up Environmental, Health and Safety (EHS) Department, formulated environmental management policies of production bases, and prepared system documents such as the *Environmental, Health and Safety Management Manual*, *Hazardous Waste Management System*, *Emergency Plan for Environmental Emergencies*. All production bases implement management systems in production and operation ensure that environmental risks are effectively controlled. All bases regularly conduct internal audit on environmental impact, and conduct audit by project according to management requirements.

Environmental Impact Analysis

Principal energy directly or indirectly consumed in the Group's production and operation are electricity, natural gas and steam; its consumed water for production and operation mainly comes from municipal water supply, so there is no risk in obtaining applicable water resource. Principal emissions generated by the Group are waste water, exhaust gas, solid waste and greenhouse gases. The Group has achieved better environmental management performance by strengthening environmental management and improving resource use and pollutant discharge in its operations.

In addition to strengthening its own management, the Group also incorporates the concept of green development into the management of suppliers. Starting from 2018, the Group required all suppliers to sign and issue the supplier conformity statement, which put forward requirements on environmental protection responsibilities of suppliers; EHS departments of all production bases have veto power on suppliers based on environmental protection audit and inspection.

Quantity of resource input

Key performance indicators	2019
Water resource	
Water consumption (m^3)	636,932.00
Water consumption density (m^3/RMB10,000)	1.20
Energy	
Power consumption (MWh)	44,722.03
Power consumption density (MWh/RMB10,000)	0.08
Natural gas consumption (m^3)	2,414,169.00
Natural gas consumption density (m^3/RMB10,000)	0.0448
Steam consumption (MWh)	20,086.25
Steam consumption density (MWh/RMB10,000)	0.0378
Self-owned vehicle gasoline consumption (L)	72,514.84
Self-owned vehicle diesel consumption (L)	10,500.00
Packaging materials	
Total packaging materials used for delivery of finished product (ton)	1,578.08

Office Production

R&D Link

Emissions

Key performance indicators	2019
Exhaust gas, waste water	
Exhaust gas emissions (m^3)	58,230,086.00
Industrial waste water discharge (m^3)	227,349.70
COD emissions (ton)	6.86
Ammonia nitrogen emissions (ton)	0.49
Greenhouse gas	
Greenhouse gas emissions (ton CO_2 equivalent)	40,968.29
Greenhouse gas emission density (ton CO_2 equivalent/RMB10,000)	0.067
Waste	
Total quantity of hazardous waste (ton)	526.53
Hazardous waste density (kg/RMB10,000)	0.99
Total non-hazardous waste (ton)	118.29
Non-hazardous waste density (kg/RMB10,000)	0.22

5.2 Response to Climate Changes

The Group pays attention to global climate change and integrates climate change mitigation and adaptation into its social responsibility management by identifying and verifying greenhouse gases generated by the Company in its operation activities and analyzing and managing impact from the Group operation on climate change. The greenhouse gas emissions identified by the Group mainly comes from indirect greenhouse gas emissions generated by purchased electricity. The Group saves resources through practical actions, reduces greenhouse gas emissions caused by energy use, so as to mitigate the impact on climate change.

In order to further strengthen the management of greenhouse gas emissions, in 2019, the Group participated in the climate change questionnaire report of Carbon Disclosure Project ("**CDP**"), where it disclosed the management of greenhouse gases, energy use, and greenhouse gas emissions, and in the end obtained B- rating score (management level).

5.3 Resources Saving

The Group adheres to the principle of green development and adopts equipment and technology transformation, waste heat recovery and reuse and sewage treatment and reuse. It makes continuous efforts in optimizing resource using methods and improving efficiency of resource use, so as to reduce the consumption of water resource, electric energy and natural gas in production and office.

Major Measures and Cases of Energy and Water Saving

Equipment technical transformation	
Adopting energy-saving equipment, such as capacitor compensation cabinets, variable-frequency motors, automatic air-conditioning equipment, and variable-frequency water pumps, to reduce energy consumption in production process	• The exhaust gas tower fan of Zhejiang Wansheng adopts frequency converting control mode to reduce energy consumption. • Sciprogen uses new water-saving cooling towers to reduce water consumption.
Use of energy-saving lamps	
Gradually replacing all existing lamps with LED energy-saving lamps	• Sciprogen has achieved 100% of replacement with LED energy-saving lamps. Every year, lighting power consumption can be saved by 50%, worth more than RMB100,000. • In Zhejiang Wansheng, in some public areas, the lamps use voice control panel to prevent energy waste caused by forgetting to turn off the lamps after leaving.

5.4 Reduction on The Discharge of Pollutants

Wastewater Management

The wastewater generated by the Group mainly comes from domestic sewage, production wastewater and production waste liquid. Production waste liquid is small in quantity and non-toxic and is collected and soda-inactivated by production base and then discharged according to requirements; domestic sewage and production wastewater are treated by the plants or by sewage station in industrial park where plants are located. After recyclable water is reused, the rest is discharged into municipal pipe after being treated according to standards.

Production bases formulate internal pollutant emission control standards based on emission standards. They adopt double-stage control, i.e. source control in the workshop and sewage treatment in back end, to reduce the discharge of wastewater pollutants. On the basis of discharges well meeting national and regional standards, all production bases aim to further keep wastewater emission density of principal indicators under internal control standards that are even stricter.

In 2019, Sciprogen built a new wastewater treatment transfer pool to further reduce the impact of wastewater discharge. Zhejiang Wansheng put its new sewage treatment system into use, which discharges according to standards while reducing total quantity of waste water pollutant, through the optimization of equipment and process.

Wastewater Discharge Standards and Principal Control Indicators

Category	Emission standards	Principal control indicators
Wastewater	*Discharge Standard of Water Pollutants for Pharmaceutical Industry — Bio-pharmaceutical Category* (GB21907-2008) *Integrated Wastewater Discharge Standard* (GB8978-1996) *Shanghai Discharge Standard of Water Pollutants for Biopharmaceutical Industry* (DB31/373-2010) *Liaoning Integrated Wastewater Discharge Standard* (DB21/1627-2008) *Guangdong Water Pollutant Emission Limits* (DB44/26-2001) *Water Quality Standard for Sewage Discharged into Urban Sewers* (CJ343-2010)	BOD_5, chemical oxygen demand (COD_{cr}), suspended matter, ammonia nitrogen, animal and vegetable oil, etc.

Exhaust Gas Management

The Group's main business is biopharmaceuticals, and Zhejiang Wansheng is involved in the production of chemical drugs and Chinese patent drug, with a relatively small business share. Among them, the exhaust gas of biopharmaceutical business line comes from a small quantity of peculiar odor generated in the process of culture liquid discharge and replacement after fermentation, which mainly contains ammonia and alcohol substances. Besides, after filtration and purification, the content of pollutants in exhaust gas is very low, so its impact on external environment is very small. The waste gas of chemical product line is mainly non-methane hydrocarbon and odor, both of which are entrusted to external third party for testing to ensure the emission meets standard. In addition, the group uses boilers, which generates nitrogen oxides, sulfur dioxide and other exhaust gas pollutants. In 2019, through technological transformation, Zhejiang Wansheng was able to collect some of the exhaust gas that was discharged in unorganized manner and discharge it in organized manner, thus reducing emissions of exhaust gas pollutants; Sciprogen has replaced its horizontal boiler with a new low-nitrogen emission steam generator, which has greatly reduced nitrogen oxide emissions.

Exhaust Gas Emission Standards and Main Control Indexes

Category	Emission standards	Principal control indicators
Exhaust gas	*Emission Standard of Air Pollutants for Pharmaceutical Industry* (GB37823-2019) *Integrated Emission Standard of Air Pollutants* (GB16297-1996) *Emission Standard for Odor Pollutants* (GB14554-1993) *Air Quality-Determination of odor-Triangle Odor Bag Method* (GB/T14675-93) *Shanghai Boiler Air Pollutant Emission Standard* (DB31/387-2018) *Guangdong Boiler Air Pollutants Emission Standard* (DB44/765-2010) *Hangzhou Emission Standards of Volatile Organic Compounds for Key Industrial Enterprises* (DB3301T 0277-2018)	Non-methane hydrocarbon ≤120 mg/m^3 Odor ≤2,000 (dimensionless)

Waste Management

The non-hazardous solid wastes generated by the Group include domestic garbage, packaging waste during production process, waste rubber plug, waste aluminum cover, and a small quantity of waste activated carbon generated in water production process and water treatment stations; hazardous wastes include waste organic solution, waste drug residue, waste penicillin bottles, harmful sludge generated by water treatment station, expired raw and auxiliary materials and waste phenol, etc.

The Group properly deals with non-hazardous wastes and hazardous wastes. All production bases declare hazardous waste stored in warehouse every week, and hazardous wastes are regularly handled by qualified organizations; for the defective products discovered in finished product inspection and expired drugs due to long-term storage, the Group will destroy them under the supervision of the Quality Department.

In 2019, Zhejiang Wansheng carried out packaging material recycling, i.e. recycling ethanol packaging plastic buckets generated during production process from manufacturers, thus reducing the use of packaging materials and the generation of solid wastes.

Principal Measures for Waste Treatment

Non-hazardous waste	• Domestic waste: environmental sanitation department handles them • Waste activated carbon is recycled by sales company • The other production waste (waste cardboard, uncontaminated packaging, etc.) are collected and handled by qualified agencies
Hazardous waste	• Hazardous waste (waste drugs generated in production process and inspection process, expired drugs, waste chemical reagents generated in inspection process, toxic reagents generated in production and inspection process, toxic waste packaging materials generated in production and inspection process, active carbon generated by waste gas adsorption, etc.) are handled regularly by qualified agencies

6. Supply Chain Responsibility

How suppliers are selected affects the stability and safety of quality of pharmaceutical products, as well as the economic and environmental sustainability of the Group. The Group pays attention to laws and regulations related to supply chain management and builds responsible supply chain upholding the principle of openness, fairness and justice. The Group aims to, while ensuring smooth operation of all businesses, safeguard the rights and interests of suppliers, help suppliers to grow, improve their sustainable development ability and finally realize common growth with suppliers.

Laws and Regulations Related to Supply Chain Responsibility

Field	Major laws and regulations
Supply chain responsibility	*Good Manufacture Practice of Medical Products*, *Contract Law of the People's Republic of China*, *Sarbans-Oxley Act,* etc.

6.1 Supplier Management System

The Group conducts effective management on suppliers to achieve a good cooperation model that improves product and service quality and reduces cost and cooperation risk. In 2019, the Group updated the *Group Purchasing Management Manual* and established the *Procedures for Purchasing Conference Service*, *Procedures for Purchasing IT Service* and *Procedures for Purchasing Medical Service* to further improve supplier management system. The Group conducts evaluation on suppliers based on management systems such as *Group Purchasing Management Manual* and *Procedures for Purchasing Medical Services*, and implements the management on green purchasing business chain covering from source of goods of suppliers to delivery of goods, for the purpose of realizing the concept of supply chain compliance, quality and safety, environmental protection and the requirements of sustainable development responsibility.

Concepts of Compliance, Quality and Safety, Environmental Protection of Supply Chain Management

Compliance	Purchasing business shall strictly comply with relevant legal requirements, such as *GMP specifications*, *Sarbanes-Oxley Act*, *Contract Law of the People's Republic of China,* etc., to achieve "Sunshine Purchasing".
Quality and safety	Suppliers shall make quality commitment that can get certification from authoritative agencies and suppliers' quality shall be inspected by professionals in the Group, so that safety of drugs can be ensured.
Environmental protection	The Group shall pay more attention to environment protection while it has performed very well in drug production. It also needs to pass on such concept to suppliers to encourage them to use more eco-friendly production, packaging and logistics.

The Group classifies suppliers into four categories based on their products and services, i.e. Class I to IV. The Group requires suppliers of Class I, II, and III to issue a *Supplier Conformity Statement* to demonstrate their commitment to laws, ethics, society, and the environment. In 2019, among all 381 Class I–III suppliers, 365 issued the statement, accounting for about 95.8%. The Group also values long-term technical cooperation with suppliers. The *Group Purchasing Management Manual,* GMP system *Quality Assurance Agreement, Quality Standards* and so on specify the regulations for establishing long-term supply agreements with Class I and Class II qualified suppliers.

Supplier Category

Class I suppliers	Suppliers of raw materials, auxiliary materials, packaging materials and consumables related to production
Class II suppliers	Suppliers of large equipment, bulk non-production materials, large engineering and services
Class III suppliers	Suppliers of small and medium-sized equipment, general non-production materials, small and medium-sized engineering and services
Class IV suppliers	Suppliers other than class I, II, III.

6.2 Supplier Audit and Guidance

The Group continues to strengthen audit and inspection on suppliers and regularly evaluates suppliers in terms of product quality and safety, environmental protection and social responsibility every year. In 2019, the Group conducted environmental, labor, and ethical assessments on 38% of suppliers. In addition, the Group cooperates with Huaxia Dun & Bradstreet and entrusts it with due diligence on the Company's suppliers. In 2019, the Group also used a risk radar system to conduct due diligence and risk monitoring on suppliers.

The Group established a two-way communication with suppliers, and the Group's purchasing department (the "**Purchasing Department**") effectively advances guidance for suppliers by regularly making phone calls to all cooperating suppliers and emailing suppliers. The Group's Purchasing Department explains to all cooperating suppliers the significance of abiding by laws, labor and environment in the Statement by regularly making phone calls to all cooperating suppliers and emailing suppliers; suppliers irregularly make feedback to the designated person of the Group's Purchasing Department to acquire knowledge about abiding by laws, labor, environment and so on, to advance the Group's guidance on suppliers.

Adopting Risk Radar System to Continuously Monitor ESG Performance of Suppliers

In 2019, in order to further strengthen the supervision of suppliers, the Group adopted a risk radar system to conduct long-term monitoring and regular verification on risk of suppliers. This risk radar system can instantly identify the risks of suppliers and their related companies in three aspects of industry and commerce, justice and operation, so it can conduct comprehensive public opinion information analysis, including credit risk, safety events, administrative penalties, environmental protection penalties, labor disputes, etc. With the support of this system, the Group can regularly monitor and analyze risks of suppliers in real time, on a long-term basis, and understand suppliers' ESG performance in a timely manner.

7. Social Contribution Responsibility

Relying on professional ability and rescuing spirit in the pharmaceutical field, the Group is dedicated to making continuous R&D and innovations. It also carries out projects such as drug donation and training grass-roots doctors, to extending the accessibility to drugs and medical services. At the same time, the Group actively participates in the formulation of industry standards and academic exchanges within the industry, for the purpose of boosting the development of this industry and creating long-term welfare for human health.

7.1 Extending Accessibility to Medicines and Medical Services

R&D Innovation

R&D is the original aspiration of the Group. Relying on a professional R&D team composed of more than 300 scientists, the Group is equipped with the only one national engineering research center for antibody drugs approved by National Development and Reform Commission in China. It also set up four R&D bases; Shenyang, Shanghai, Shenzhen and Hangzhou. It created a platform for both biological and chemical pharmaceutical research.

In 2019, the Group continued to increase R&D investment, accelerated the progress of clinical trials, and developed ground-breaking therapies. With the support of strong R&D capabilities and dual platform for R&D of biopharmaceuticals and chemical drug, the Group provides robust support for R&D and industrialization of innovative drugs. Affiliated companies of the Group, Shenyang Sunshine, Zhejiang Wansheng, Sunshine Guojian and NERC have obtained “National High-tech Enterprise” certificates.

As at 31 December 2019, the Group had 32 product candidates, covering five major areas, including oncology, autoimmune diseases and other diseases, nephrology, metabolism and dermatology. Among them, 22 are National New Drugs.

Public Welfare Donation Benefits More Patients

In order to provide more patients with safe, effective and high-quality products, the Group cooperates with public welfare institutions to make public welfare drug donation and carry out free clinic projects. This helps more patients get necessary treatment products and medical services, and to enable more patients to recover as soon as possible.

Progress of Public Donation and Free Clinic projects in 2019

Name	Cooperating Organization	Start time	Progress in 2019
"Guard the Happiness" Bethune TPIAO Charity Donation Project	Beijing Bethune Charitable Foundation	2013	Number of provinces and cities covered: 27 provinces and municipalities Patient groups covered: Patients with immune thrombocytopenia (ITP) and who need recombinant human thrombopoietin injection Number of patients covered: 2,400 people
"Yi+Hope" Bethune • Yisaipu Charity Donation Project	Beijing Bethune Charitable Foundation	2015	Number of provinces and cities covered: 27 provinces and municipalities Patient groups covered: rheumatoid arthritis, ankylosing spondylitis, moderate and severe plaque psoriasis Number of patients covered: 30,000 people

Name	Cooperating Organization	Start time	Progress in 2019
"100% Love • Byetta" Public Welfare Donation Project	Inner Mongolian Health and Family Planning Commission, Hohhot Red Cross; Medical Insurance Department of Liaoning Provincial Human Resources and Social Affairs Department; Xinjiang Third Division of Medical Insurance Department and Yopurga County Government	2018	Total donated medicines in 2019: 3,846 units with each of five micrograms and 9,417 units with each of ten micrograms
"With You on Yi Road" free medical consultation	Hematology Branch Erythro cytology Group of Chinese Medical Association	2017	Two free consultations of "With You on Yi Road", covering 30 national and regional core experts and more than 500 young doctors in hematology, and benefiting about 400 hematology patients

The Third "China Platelet Day" Event

"China Platelet Day" (March 20) was initiated by Beijing Bethune Public Welfare Foundation, ITP (Immune Thrombocytopenia) home — Home of platelet patients, and medical community. This event is organized to promote knowledge of platelet disease to the public and enhance the attention of all sectors to platelet-related diseases and patients. In 2019, the third "China Platelet Day" event was held in Shanghai, and the Group provided sponsorship support for it. The Group invested RMB200 thousand in organizing seven Chinese blood charity events.

7.2 Supporting the Development of Pharmaceutical Industry

Improving the Level of Social Medical Services

The Group aims to build a China-based, leading global bio-pharmaceutical company and is committed to improving social medical services. In 2019, the Group provided online and offline training on patient management and disease knowledge for hospitals and medical staff across the country to strengthen their medical service, thus contributing to the development of medical research. In addition, the Group carried out national ankylosing spondylitis health poverty alleviation project to make contribution to national health and poverty alleviation cause.

"Love E Open Class" Helps to Cultivate Clinicians

In order to expand the coverage of clinician training, the Group launched "Love E Open Class" project that enables more clinical doctors to have lectures from experts all across the country on anemia diagnosis and treatment by shooting and editing videos of multi-disciplinary experts and playing these videos in all departments in hospitals worldwide.

"Tangxiaohu Nurse Project" Helps Nurses Improve their Nursing Skills

In order to equip nurses with more professional patient management knowledge and disease knowledge to better take care of patients, in 2019, the Group carried out the "Tangxiaohu Nurse Project" that taught nurses about disease knowledge and knowledge about Byetta/Bydureon via offline education and online education video competition. This project, aiming to help nurses improve their patient management and nursing knowledge, covered 1,508 nurses in district-level and county-level hospitals.

Actively Responding to National Ankylosing Spondylitis Health Poverty Alleviation Project

Ankylosing spondylitis health poverty alleviation project is a public welfare project of healthy poverty alleviation that is guided by Poverty Alleviation Office of the State Council and National Health Commission, guided by Chinese Peasants and Workers Democratic Party as expert guiding unit, and implemented by China Poverty Alleviation Volunteer Service Promotion Association and China Foundation for Disabled Persons (CFDP). It aims to provide medical treatment for about filed 20,000 poverty-stricken ankylosing spondylitis patients in 832 national poverty-stricken counties. 3SBIO INC. Group actively responded to the call and donated RMB180 million as its contribution to the smooth progress of the project.

Helping the Biopharmaceutical Industry Develop

As a leading biopharmaceutical enterprise integrating R&D, production and sales, the Group is committed to strengthening medical academic exchanges and actively organizing and participating in various academic conferences and forums. Meanwhile, the Group helps the biopharmaceutical industry develop via supporting various scientific research foundations and academic projects.

Academic Exchange in 2019

Project Name	Progress
CSCO (Chinese Society of Clinical Oncology) annual meeting	• Two special sessions, including one tumor-related anemia session and one tumor-related thrombocytopenia session, involving eight chair speakers, 180 hospitals and 230 tumor experts. • One CSCO-CIT young and middle-aged physician debate competition final, involving 14 chair judges, eight debaters, 200 oncologists. • One live super interview of CIT expert, involving four experts, 50 tumor experts, and 150 hospitals through remote technology.
CRPC (Cancer Rehabilitation and Palliative Care Professional Committee of China Anti-Cancer Association) annual meeting	• One special session, involving 80 hospitals and 150 oncologists.
The 4th Multidisciplinary Anemia Management Summit Forum and China Anemia Day Inaugural Meeting	• Jointly launched with “China Anemia Day” activities; it used online video form, involving more than 500 multidisciplinary Key Opinion Leaders; it also connected foreign experts to discuss the progress of multidisciplinary anemia treatment.
CNA (Nephrologist Branch of Chinese Medical Doctor Association), CSN (Nephrology Branch of Chinese Medical Association), ASN (American Nephrology Society), etc.	• 128 doctors registered at CNA conference; the conference also had video contest of “3SBIO INC. Cup” humanity project. • 184 doctors registered at CSN conference; Huizhou-style special exhibition stand; 15,000 person-times in donation tea break; satellite conference; involving HCP 300 people. • For ASN conference 33 attendees sponsored.

Project Name	Progress
The 24th National Rheumatology Annual Meeting of Chinese Medical Association	• About 4,000 rheumatologists from all over the country participated in this academic feast; director of rheumatology department from Beijing PLA General Hospital gave a speech on "Development of Cognition, Diagnosis and Treatment of Ankylosing Spondylitis" for rheumatic colleagues, which was a special topic from 3SBIO INC.. At the same time, at this national rheumatic annual meeting, the special exhibition stand designed by 3SBIO INC. made a wonderful appearance.
2019 Annual Meeting of Rheumatology Branch of Beijing Medical Association	• National top experts gave lectures on annual meeting; the topic of Sunshine Guojian was "From China to the World: Biosimilar's Five Year in Columbia"; Li Shengguang, Tang Fulin, and Zhou Huiqiong chaired the event, and Pedro Santos Moreno gave a lecture, explaining the 5-year progress of Yisaipu, a bio-medicine from China, in Columbia in the field of rheumatic diseases during the process of launching of preparations, as well as safety and management of biological preparations. Through this, domestic and foreign experts had a clearer and more accurate understanding of biological preparations.

"3SBIO INC. TCP Scientific Research Fund for Young and Middle-aged" Supports Basic Research and Clinical Application of TCP

In order to encourage young and middle-aged Chinese physicians to carry out more basic research and clinical application exploration in the field of thrombocytopenia ("**TCP**"), the Group worked with Shenyang Pharmaceutical University to launch the "3SBIO INC. TCP Scientific Research Fund for Young and Middle-aged" (the "**TCP Research Fund**") in 2015.

As of July 2019, the TCP Research Fund had been successfully held for two sessions, which submitted 224 subjects in TCP field and 29 funded subjects and published five high-quality articles. In addition, we can also see important clinical reference evidence and scientific research data in pregnancy ITP treatment application, stem cell mobilization before transplantation and platelet implantation recovery after transplantation.

In 2019, the third the TCP Research Fund was officially initiated, which received 122 bidding documents, with 20 subjects winning the bidding based on estimation. The Group will continue its contributions to clinical data and experience accumulation of TCP diagnosis and treatment and advancing the development of this field.

The Group also actively participates in revising industry standards and expert consensus to advance the development and progress of biopharmaceutical industry. In 2019, Shenyang Sunshine actively gave feedback to laws and regulations, guidelines and standards including *Chinese Pharmacopoeia, Technical Guiding Principles for the Study of Pharmaceutical Changes after Launch of Biological Products, Administrative Measures for Drug Registration, Administrative Measures for Drug Production Supervision,* and *Good Manufacture Practice of Medical Products — Biological Product Appendix.* Shenyang Sunshine also cooperated with National Institutes for Food and Drug Control to complete the EPO N-linked oligosaccharide 2020 Pharmacopoeia method research, verification preparation of EPO charge heterogeneity cooperation tested by capillary isoelectric focusing electrophoresis, and EPO report gene method collaborative verification supplement. Sunshine Guojian participated in the formulation of *General Technical Requirements for the Production of Human Recombinant Monoclonal Antibody Products* and the *Guidelines for Pharmaceutical — Preparation-Related Technologies and Field Inspections,* and proposed solutions and amendments to guidelines based on the Group's R&D and production experience.

8. Data

Environmental Responsibility[1]

Performance indicators	Unit	2017	2018	2019
Use of resources				
Power consumption (Indirect energy)	MWh	25,011.80	39,162.14	44,722.03
Power consumption density	MWh/RMB10,000	0.08	0.08	0.08
Natural gas consumption (direct energy)	m^3	1,730,693.00	2,538,096.50	2,414,169.00
Natural gas consumption density[2]	MWh/RMB10,000	0.0527	0.0528	0.0448
Total steam consumption[3]	MWh	—	—	20,086.25
Steam consumption density[3]	MWh/RMB10,000	—	—	0.0378
Self-owned vehicle gasoline consumption	L	—	78,163.81	72,514.84
Self-owned vehicle diesel consumption	L	—	8,237.00	10,500.00
Water Consumption	ton	507,582.00	583,031.00	636,932.00
Water consumption density	ton/RMB10,000	1.56	1.23	1.20
Total circulating water	m^3	—	5,385.00	5,000.00
Proportion of water circulation and recycled water in total water consumption	%	—	0.92	0.79
Total packaging material used by finished products[4]	ton	60.00	1,578.08	1,483.00

Performance indicators	Unit	2017	2018	2019
Emissions				
Exhaust gas emissions[5]	m^3	25,000,000.00	26,793,008.00	58,230,086.00
Industrial wastewater emissions[6]	m^3	321,521.00	207,077.00	227,349.70
Chemical oxygen demand (COD) emissions[6]	ton	—	11.52	6.86
Ammonia nitrogen (NH_3-N) emissions[6]	ton	—	0.61	0.49
Total hazardous waste[7]	ton	36.96	349.98	526.53
Hazardous waste density	kg/RMB10,000	0.11	0.74	0.99
Total non-hazardous waste[7]	ton	150.62	379.00	118.29
Non-hazardous waste density	kg/RMB10,000	0.46	0.80	0.22
Greenhouse gas emissions[8]	ton of CO_2 equivalent	21,037.17	33,078.95	40,968.29
Category 1 GHG emissions	ton of CO_2 equivalent	3,742.09	5,729.03	5,451.81
Category 2 GHG emissions	ton of CO_2 equivalent	17,295.08	27,349.91	35,516.48
GHG emission density	ton of CO_2 equivalent/ RMB10,000	0.065	0.070	0.067

Note:

1. All density data including power consumption density, natural gas consumption density, and water consumption density in 2017 and 2019 refer to power consumption, natural gas consumption, and water consumption that were made per RMB10,000 operating revenue; density data in 2018 refers to the power consumption, natural gas consumption and water consumption that were made per RMB10,000 output value.

2. In 2019, the unit of natural gas consumption density was adjusted to "MWh/RMB10,000" to stay consistent with other energy types. Data in 2017 and 2018 are adjusted accordingly.

3. In 2019, the Group combed principal types of energy use, and added disclosure of total steam consumption and steam consumption density.

4. The statistical caliber of total packaging materials of finished products in 2017 is Sciprogen; since 2018, it has covered all domestic production bases of the Group.

5. Total exhaust gas emissions in 2017 is the data of Zhejiang Wansheng; total exhaust gas emissions in 2018 is the data of Sunshine Guojian. Zhejiang Wansheng emitted no waste gas due to shutdown of capacity because of relevant infrastructure building; total exhaust gas emissions in 2019 is the data of both Sunshine Guojian and Zhejiang Wansheng.

6. Industrial wastewater emissions, chemical oxygen demand (COD) emissions, and ammonia nitrogen (NH_3-N) emissions are the data of Sunshine Guojian, Sciprogen, NERC, and Zhejiang Wansheng. Shenyang Sunshine is a non-key pollutant discharge enterprise according to local environmental protection supervision requirements, so it was not given online monitoring and data statistics.

7. In 2018, total quantity and density of hazardous waste generated increased, mainly due to the increase in discharge of bio-polluted liquids from Sciprogen; total quantity of non-hazardous waste generated increased, mainly due to the fact that Zhejiang Wansheng is in the status of infrastructure building that generated a large quantity of construction wastes. In 2019, total quantity and density of hazardous waste increased, mainly due to the establishment of basic solution workshop of Sciprogen in 2019 and the commencement of validation in second half of the year.

8. Greenhouse gas emissions are the sum of GHG emissions of category I and II. GHG emissions of category I is calculated based on natural gas consumption, vehicle gasoline and diesel consumption and corresponding emission factors, respectively and GHG emissions of category II is calculated based on power consumption' steam consumption and corresponding emission factors.

Employee Employment

Performance Indicators	Unit	2017	2018	2019
Employment[1]				
Total number of employees	person	4,051	5,047	5,404
Number of male employees	person	2,055	2,536	2,720
Number of female employees	person	1,996	2,511	2,684
Number of employees under labor contracts	person	4,001	4,978	5,316
Number of employees dispatched	person	50	40	47
Number of employees under labor agreement	person	0	19	27
Number of part-time employees[2]	person	0	10	14
Number of employees under the age of 30	person	1,442	1,764	1,952
Number of employees aged 30–50	person	2,524	3,155	3,317
Number of employees over the age of 50	person	85	128	135
Number of employees in Mainland China	person	3,983	4,968	5,327
Number of employees in Hong Kong, Macau, Taiwan and overseas	person	68	79	77
Employee turnover rate[3]	%	20	19	24
Turnover rate of male employees	%	21	21	27
Turnover rate of female employees	%	19	17	22
Turnover rate of employees under the age of 30	%	18	20	23
Turnover rate of employees aged 30–50	%	21	18	25
Turnover rate of employees over the age of 50	%	12	10	13
Turnover rate of employees in Mainland China	%	20	19	25
Turnover rate of employees in Hong Kong, Macau, Taiwan and overseas	%	4	5	3
Employee health and safety				
Number of working days lost due to work injury[4]	day	0	247	45
Number of employees who die due to work	person	0	0	0

Performance Indicators	Unit	2017	2018	2019
Employee training				
Employee training coverage	%	73	76	67
Training coverage of male employees	%	77	75	71
Training coverage of female employees	%	69	76	63
Training coverage of grass-roots employees	%	65	61	60
Training coverage of middle management employees	%	94	100	98
Training coverage of senior management employees	%	93	100	96
Training time per employee	hour	27.0	21.3	15.3
Training time per male employee	hour	31.0	21.6	15.4
Training time per female employee	hour	23.0	20.9	15.2
Average hours of training for grassroots employees	hour	—	20.6	10.8
Average hours of training for middle management	hour	—	23.6	37.5
Average hours of training for senior management	hour	—	27.9	27.4

Notes:

1. Employment data covers management and sales teams of the Group, including Shenyang Sunshine, Liaoning Sunshine, NERC, Sunshine Guojian, Zhejiang Wansheng, Sciprogen, NMV Desen Biotech Co., Ltd., Shanghai Anran, Shanghai Aoxi and Sirton.

2. The number of "part-time employees" disclosed in the 2018 ESG report is subdivided into "number of employees under labor agreement system" and "number of part-time employees" in this report.

3. Employee turnover rate is calculated according to the following formula: employee turnover rate = number of leaving employees of this category during reporting period / (number of leaving employees of this category at the end of reporting period + number of leaving employees of this category during reporting period) × 100%.

4. In 2018 and 2019, the work injury incidents of the Group did not reach the level of work injury identification standards.

Products and Customer Service

Performance Indicators	Unit	2017	2018	2019
Percentage of sold products recalled due to safety and health issues	%	0	0	0
Complaints received for products and services	piece	43	13	47
Complaint handling rate for products and services	%	100	100	100
Total number of violations of laws and regulations on health and safety, labeling of products and services provided	piece	0	0	0

Supply chain Responsibility

Performance Indicators	Unit	2017	2018	2019
Total suppliers	piece	960	1,160	1,003
Number of suppliers in Mainland China	piece	950	1,150	968
Number of suppliers in Hong Kong, Macao and Taiwan and overseas	piece	10	10	35
Number of suppliers subject to environmental, labor, ethical and other assessments	piece	88	522	381
Number of suppliers that passed environmental, labor, ethical, etc. assessments	piece	—	522	365

Anti-Corruption

Performance Indicators	Unit	2017	2018	2019
Number of corruption lawsuits raised by the Company and employees and are concluded	piece	0	0	0
Hours of anti-corruption training per employee	hour	—	—	0.2
Hours of anti-corruption training per board member	hour	—	—	0.2

Social Contribution Responsibility

Performance indicator	Unit	2017	2018	2019
Charity donation	RMB10,000	—	3,622.40	6,367.94
Person-times of voluntary service	person-times	—	640	800
Hours of voluntary service	hour	—	230,400	288,000

9. Index table of Guidelines on Environmental, Social and Governance Reporting of the Hong Kong Stock Exchange

Aspect, general disclosure and key performance indicators		Disclosure section
Main category A. Environmental		
Aspect A1. Emissions		
General disclosure A1	Related to emissions of exhaust gases and greenhouse gases, emissions to water and land, and generation of hazardous and non-hazardous waste: (a) policy; and (b) Information on compliance with relevant laws and regulations that have significant impact on the issuer	Environmental management system Reduction on the discharge of Pollutants
KPI A1.1	Emission type and related emission data	Environmental management system; Data chapter
KPI A1.2	Total GHG emissions (in tons) and (if applicable) density (in unit of production, per facility)	Environmental management system; Data chapter
KPI A1.3	Total hazardous waste (in tons) and (if applicable) density (in unit of production, per facility)	Environmental management system; Data chapter
KPI A1.4	Total non-hazardous waste (in ton) and (if applicable) density (in unit of production, per facility)	Environmental management system; Data chapter
KPI A1.5	Describing emissions reduction measures and fruits achieved	Reduction on the discharge of Pollutants
KPI A1.6	Describing treatment methods of hazardous and non-hazardous wastes, measures to reduce them and the fruits achieved	Reduction on the discharge of Pollutants
Aspect A2. Use of Resources		
General disclosure A2	Policies for the efficient use of resources (including energy, water and other raw materials).	Environmental management system; Resources saving
KPI A2.1	Total consumption (in thousands of KWH)) of direct and/or indirect energy (such as electricity, gas or oil) and density (in unit of production, per facility) by type	Environmental management system; Data chapter
KPI A2.2	Total water consumption and density (in unit of production, per facility)	Environmental management system; Data chapter
KPI A2.3	Describing energy use efficiency plans and fruits achieved	Resources saving
KPI A2.4	Describing problems in obtaining suitable water sources, as well as water efficiency plans and fruits achieved	Resources saving
KPI A2.5	Total packaging materials for finished products (in tons) and (if applicable) per unit of production	Data chapter

Aspect, general disclosure and key performance indicators		Disclosure section
Aspect A3. Environment and Natural Resources		
General disclosure A3	Policies to reduce the issuer's significant impact on environment and natural resources	Environmental management system; Resources saving
KPI A3.1	Describing significant impact of business activities on environment and natural resources and actions taken to manage the impact	Resources saving
Main category B. Social		
Aspect B1. Employment		
General disclosure B1	Related to compensation and dismissal, recruitment and promotion, working hours, holidays, equal opportunities, diversity, anti-discrimination and other benefits : (a) policy; and (b) Information on compliance with relevant laws and regulations that have significant impact on the issuer	Employee rights and benefits
KPI B1.1	Number of total employees by gender, employment type, age group and region	Data chapter
KPI B1.2	Turnover rate of employees by gender, age group and region	Data chapter
Aspect B2. Health and safety		
General disclosure B2	Relate to providing a safe working environment and protecting employees from occupational hazards: (a) policy; and (b) Information on compliance with relevant laws and regulations that have significant impact on the issuer	Occupational health and safety
KPI B2.1	Number and rate of deaths due to work	Data chapter
KPI B2.2	Number of working days lost due to work injury	Data chapter
KPI B2.3	Describing the occupational health and safety measures adopted, and relevant implementation and monitoring methods	Occupational health and safety
Aspect B3. Development and training		
General disclosure B3	Policies to improve knowledge and skills of employees in the performance of their duties. Describing training activities	Talent development and retention

Aspect, general disclosure and key performance indicators		Disclosure section
KPI B3.1	Percentage of employees trained by gender and employee category (e.g. senior management, middle management, etc.)	Data chapter
KPI B3.2	Average training hour per employee by gender and employee category	Data chapter
Aspect B4. Labor standards		
General disclosure B4	Related to the prevention of child or forced labor: (a) policy; and (b) Information on compliance with relevant laws and regulations that have significant impact on the issuer	Employee rights and benefits
KPI B4.1	Describing measures to review recruitment practices and avoid child and forced labor	Employee rights and benefits
KPI B4.2	Describing steps taken to eliminate violations when they are found	No violations
Aspect B5. Supply chain management		
General disclosure B5	Policies for managing environmental and social risks in supply chain	Establishing sustainable supply chain
KPI B5.1	Number of suppliers by region	Data chapter
KPI B5.2	Describing the practices of hiring suppliers, the number of suppliers the Group implements the practices, and the implementation and monitoring methods of the practices	Establishing sustainable supply chain
Aspect B6. Product responsibility		
General disclosure B6	Related to health and safety, advertising, labeling and privacy matters and remedies of products and services provided: (a) policy; and (b) Information on compliance with relevant laws and regulations that have significant impact on the issuer	Providing high quality products; Providing high quality services for customers and patients
KPI B6.1	Percentage of products sold or shipped that must be recovered for safety and health reasons	Data chapter
KPI B6.2	Number of complaints received about products and services, and handling methods	Customer service system
KPI B6.3	Describing practices related to maintenance and protection of intellectual property	Intellectual property management and protection

Aspect, general disclosure and key performance indicators		Disclosure section
KPI B6.4	Describing quality verification process and product recovery procedures	Product recall mechanism
KPI B6.5	Describing consumer data protection and privacy policies and the implementation and monitoring methods	Customer privacy protection
Aspect B7. Anti-corruption		
General disclosure B7	Related to preventing bribery, extortion, fraud and money laundering: (a) policy; and (b) Information on compliance with relevant laws and regulations that have significant impact on the issuer	Formulation of a compliance culture; Anti-corruption and business ethics
KPI B7.1	Number of closed anti-corruption lawsuits raised against issuers or their employees and results during reporting period	Data chapter
KPI B7.2	Describing preventive measures and reporting procedures, as well as the implementation and monitoring methods	Formulation of a compliance culture; Anti-corruption and business ethics
Aspect B8. Community investment		
General disclosure B8	Policies on community involvement to understand the needs of the communities in which the operation is conducted and to ensure that its business activities will take community interests into account	Improving the accessibility to medicines and medical services; Supporting the development of pharmaceutical industry
KPI B8.1	Focusing on contribution area (e.g. education, environmental matters, labor needs, health, culture, sports)	Improving the accessibility to medicines and medical services; Supporting the development of pharmaceutical industry
KPI B8.2	Resources (such as money or time) used for areas of focus	Improving the accessibility to medicines and medical services; Supporting the development of pharmaceutical industry Data chapter

10. Report Preparation Instructions

This report is the fourth corporate ESG report issued by the Company, which discloses to key stakeholders the actions and achievements of the Group in economic, environmental and social sustainable development.

Preparation basis

This report is prepared in accordance with *Guidelines on Environmental, Social and Governance Reporting* (the "**ESG Guidelines**") published by the Stock Exchange.

Report Scope

Scope of organization: this report covers the Company and its subsidiaries, which is consistent with the scope of consolidated financial statements of the annual report. Among them, environmental performance data covers subsidiaries mainly engaged in manufacturing and R&D, including Shenyang Sunshine Pharmaceutical Co., Ltd., Sunshine Guojian Pharmaceutical (Shanghai) Co., Ltd., National Engineering Research Center of Shanghai Antibody Medicine, Zhejiang Wansheng Pharmaceutical Co., Ltd., and Shenzhen Sciprogen Bio-pharmaceutical Co., Ltd., excluding subsidiaries mainly engaged in investment holding and project management.

Reporting period: from 1 January 2019 to 31 December 2019.

Comparison Table of the Names and Abbreviations of Subsidiaries in This Report

Major subsidiaries	Abbreviation in the report
Shenyang Sunshine Pharmaceutical Company Limited	Shenyang Sunshine
Sunshine Guojian Pharmaceutical (Shanghai) Co., Ltd.	Sunshine Guojian
National Engineering Research Center of Shanghai Antibody Medicine	NERC
Zhejiang Wansheng Pharmaceutical Co., Ltd.	Zhejiang Wansheng
Shenzhen Sciprogen Bio-pharmaceutical Co., Ltd.	Sciprogen
Sirton Pharmaceuticals S.p.A.	Sirton

Data Description

Data and cases in this Report are extracted from the Group's original records in its daily operation or the Group's financial reports.

Base currency in this report is Renminbi (RMB).

In case of any inconsistency in financial data between this report and the Annual Report of the Company, the Annual Report shall prevail.

2019 Environmental, Social and Governance Report of 3SBio Inc.

Reporting Principle

This report follows reporting principles of the Stock Exchange's *ESG Guidelines*, including:

- **Materiality Principle**

  Based on this principle, this report determines the issues that need to be responded to through stakeholder survey and materiality analysis. It also focuses on issues that may have significant impacts on investors and other stakeholders in relation to environmental, social and governance issues.

- **Quantitative Principle**

  Based on this principle, this report discloses key quantitative performance indicators, explains the meaning of indicators, and makes clear calculation basis and assumptions.

- **Balance Principle**

  Based on this principle, the contents of this report reflect objective facts, and disclose indicators involving both positive and negative information.

- **Consistency Principle**

  Based on this principle, this report explains the meaning of disclosed ESG key quantitative performance indicators, and makes clear calculation basis and assumptions; meanwhile, indicators used in different reporting periods shall be kept as consistent as possible to reflect the trend of performance level.

  No negative environmental information was found in the retrieval of Shanghai Qingyue's credit database with respect to the Company and its subsidiaries that are involved in this report.