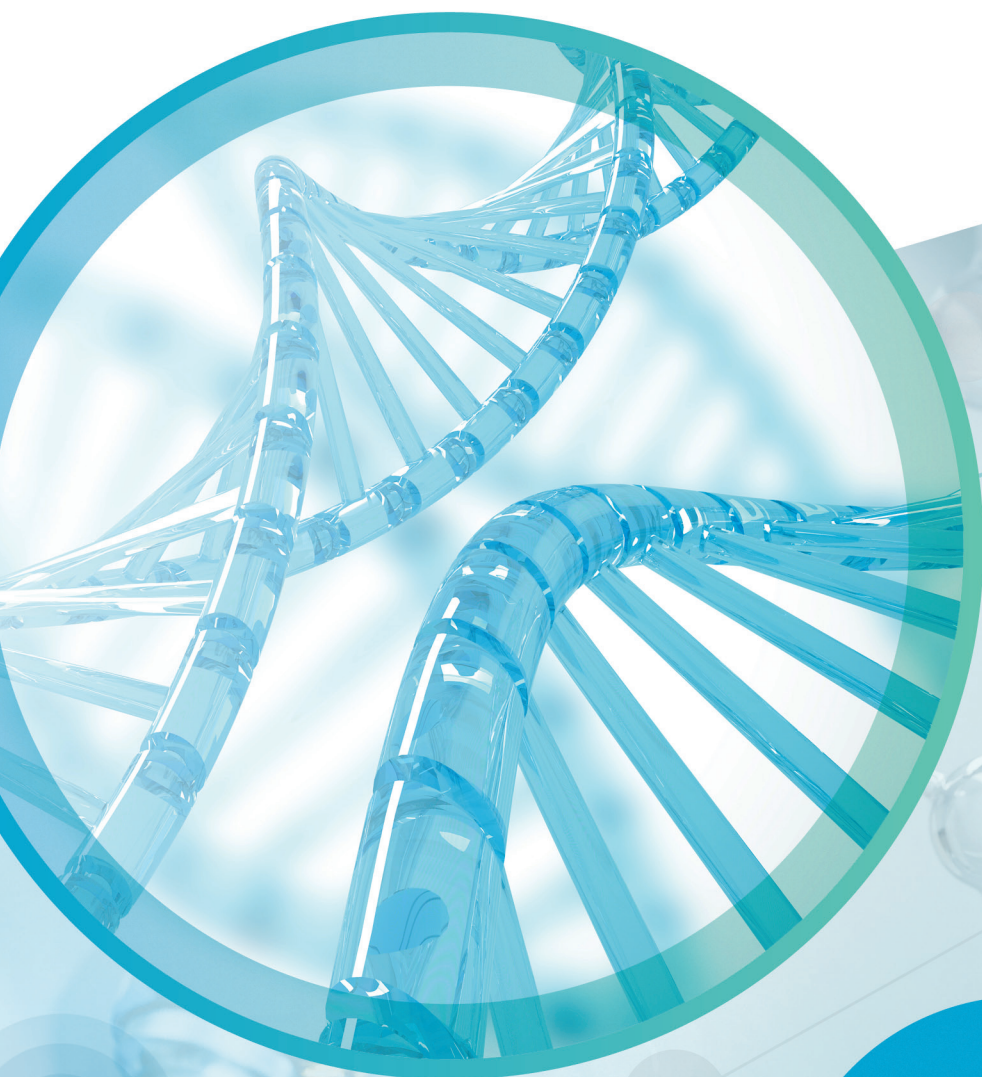




遠大醫藥集團有限公司

GRAND PHARMACEUTICAL GROUP LIMITED

(Incorporated in Bermuda with limited liability)
(Stock Code: 00512)



2022
—
ANNUAL REPORT





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Chairman's Statement

INDUSTRY REVIEW

In 2022, the biopharmaceutical industry, a vital pillar for the nation's economy, has maintained a steady progress in its high-quality development despite a tougher external environment. According to the National Bureau of Statistics of China, the operating revenue of pharmaceutical manufacturing industry in China grew from RMB2.16 trillion as at 2017 to RMB2.91 trillion as at 2022, representing an accumulated growth of 34.7%. Currently, China is developing into a longevity society, and the pharmaceutical and health industry, always driven by the state's frequent roll-out of favorable industrial policies, rising per capita disposable income and further increase in people's health needs, is also moving towards a new period of development dividend. It is worth mentioning that in 2022, China introduced its first five-year bio-economic plan: the "14th Five-Year Plan for Bio-Economic Development", which explicitly proposes to enhance the original innovation capacity of biomedicine for the protection of people's life and health and national biosecurity, where pharmaceutical companies are further encouraged and promoted to pick up the "acceleration rate" of their R&D and production of original drugs. Moreover, the centralized and volume-based procurement of pharmaceuticals, negotiation on the medical insurance catalogue access and reform of DRG/DIP payment methods have been pushed forward and implemented on a continuous basis, and the coverage of commercial health insurance, represented by the inclusive insurance, was also gradually expanded, giving further support for innovative products to benefit more patients and meet urgent clinical needs. Innovation and internationalization have become an important keynote in the development of Chinese pharmaceutical companies. At the same time, China always maintains strict supervision and strong regulation in its regulatory policy on the pharmaceutical and health industry, which also puts higher requirements on enterprises in terms of innovation and research, product commercialization capability and development sustainability.

BUSINESS REVIEW

In 2022, in the face of the complex and volatile external environment, as well as the various pressures and challenges posed by the decline in market supply and demand under the impact of the pandemic, the Group has braved through the adversity and managed to achieve steady growth in revenue and operating profit.

During the year, the Group was committed to its pursuit of "high-quality". With the Company's ever-growing industrial scale, where we have more than 10,000 employees worldwide and dozens of domestic and overseas enterprises, together with a consolidated and enhanced industry chain emphasising on industrialization, refinement, and systematization, our physical operation structure is under continuous improvement, and the Company's comprehensive advantages are always enhancing. The Company has been honored with the title of "National Model Enterprise of Technology Innovation" by the Ministry of Industry and Information Technology of the PRC, ranked 24th on the list of "Top 100 Chemical and Pharmaceutical Companies of China", and won the title of "Most Valuable Pharmaceutical and Medical Company" among Hong Kong listed stocks for seven consecutive years, gradually showing its advantage in value. The Group was determined to actively promote the implementation of its five-year development strategic plan under the development principle of "comprehensive strengths, leading in innovation and global expansion", so as to achieve sustainable and steady development of its business in terms of products, profits, operation and management.

During the year, the Group strengthened the foundation of "stability" and continued to promote the upgrading of products and processes in respiratory, ophthalmology, cerebro-cardiovascular emergency and biotechnology, its traditional areas of strength, so as to consolidate the foundation of advanced manufacturing. The Group has 17 products with annual sales of over RMB100 million. It has established overseas marketing centers for biologics and, on the domestic front, initiated a reform to integrate the provincial/regional marketing system for pharmaceuticals, covering hospitals, pharmacies and third terminal sales networks with a faster pace. The Group has completed one merger and acquisition and introduced 16 amino acid APIs to continuously optimize the layout of its biotechnology industry chain, and pushed forward the commencement of construction/production of three production bases to help strengthen the Company's development foundation.

Chairman's Statement

During the year, the Group maintained the “advancing” momentum. By strengthening the implementation of the diversified business strategy model, we managed to consolidate our core barriers and strengthen the innovative mindset, which aims to build our core competitiveness in the global R&D and innovative scene. During the year, we obtained 13 launch approvals, 17 clinical progresses, 3 international registrations and 15 core patents, successfully introduced 4 innovative products, and established 42 R&D projects. The International R&D Center in Optics Valley, Wuhan, the mRNA R&D Centers in Nanjing, the Grand Pharma — Shandong University Radiopharmaceutical Research Institute (遠大醫藥 — 山東大學放射性藥物研究院) and the Innovative Device R&D and Production Base in Wuhan were officially put into operation, which further enhanced the Group's R&D capabilities in innovative drugs, mRNA technology and nuclear medicine, as well as the capability to localize innovative medical devices and the independent R&D and production capacity. The blockbuster innovative product of the nuclear medicine anti-tumor diagnosis and treatment segment, the Yttrium-90 microsphere injections, was successfully launched to bring a long-awaited blessing to patients with liver cancer and colorectal liver metastases in China. It was a difficult and challenging situation during the pandemic period, but since the launch of Yttrium-90 microsphere injections, through expansion to more hospitals, development of communication channels and provision of training to doctors, it recorded over HK\$60.0 million revenue during the first year of launch. It formed a solid foundation for the nuclear medicine segment and built up a remarkable future. In the meanwhile, there were breakthrough developments in 4 innovative RDC medicines and were ready to launch. In the cerebro-cardiovascular precision interventional diagnosis and treatment segment a global innovative endogenous tissue repair product, aXess, was introduced. Cai Yu® intracranial balloon dilatation catheter and Ti Hu® occlusion balloon catheter, were approved for commercialization, and the first chartered access atrial fibrillation (AF) laser ablation operation in China was successfully completed with our HeartLight X3 laser ablation platform. These strengthen our advantages in the technologically innovative high-end medical devices. In the respiratory and severe disease anti-infection segment, two innovative compound asthma products were successfully launched and included in the China's National Reimbursement Drug List. Innovative product STC3141 for sepsis and ARDS, and innovative oral small molecule 3CL protease inhibitor GS221 achieved substantial clinical development, showing our boldness and courage of being a pioneer in medical development. In the cerebro-cardiovascular emergency segment, we layout three major emergency scenarios and maintain steady development. The first generic of epinephrine hydrochloride injection (pre-filled) was launched and Jext®, a pre-filled epinephrine auto-injector, was licensed in the Guangdong-Hong Kong-Macao Greater Bay Area. In the ophthalmology segment, several innovative drugs recorded significant development progresses. The Group is moving forward along a high-quality development path, enhancing its strengths and accelerating innovation to constantly empower its long-term development.

The Group strongly upholds the value of “Offering Quality Products, Honoring Code of Ethics”, and is firmly committed to the vision of becoming a pharmaceutical company respected by doctors and patients, and making significant contribution to the society.

Prospects

2023 is the inaugural year for the full implementation of the spirit of the 20th CPC National Congress, as well as a crucial linkage for the implementation of the 14th Five-Year Plan. The strategic positioning of safeguarding people's health and the “14th Five-Year Plan for the Development of Biological Economy” both bring unlimited development opportunities to medical and healthcare industry in China in the long run, which indicate that the pharmaceutical industry shall take the path of innovation and high-quality development in the future. For integrated pharmaceutical companies, sustainable development and growth can only be achieved by “striving for internal and external improvement” through polishing their own innovation capabilities and focusing on their existing strengths, while pursuing external innovations with greater differentiation and clinical advantages.

Chairman's Statement

The Group has rich product pipelines and solid foundation in the ophthalmology, respiratory and cerebro-cardiovascular emergency segment, and will be the base of the Group's future development. Following the launch of Yttrium-90 microsphere injections, the Group will continuously work hard for the leading position of global nuclear medicine anti-tumor diagnosis and treatment segment. The Group adheres to the treatment concept of integrated oncology diagnosis and treatment, and is developing the layout covering R&D, production and sales quality supervision. In 2023, after the PRC government's adjustment on pandemic prevention and control policies, which lead to a gradual recovery in the volume of tumor diagnosis, treatment and surgery, more and more outpatients have been enquiring about YiGanTai® treatment, and a number of hospitals have opened YiGanTai® specialized clinics to meet patients' needs. YiGanTai® treatment is expected to achieve a persistent and rapid growth. For the cerebro-cardiovascular precision intervention segment, the Group adheres to the treatment concept of "interventional without implantation" and conducts comprehensive layout in three directions, namely channel management, structural heart disease, electrophysiology and heart failure. Furthermore, given the enhancement of people's living quality and asking more for health, the Group will develop our bio-technology products to the large health industry and aim for developing new driving force.

The Group will seize the future opportunities arising from the high-quality development of the pharmaceutical industry, closely aligning the Company's development direction with national strategies and policy guidance. On the one hand, the Group will focus on the present and continuously enrich its product pipelines, optimise its product structure and strengthen its industrial chain layout, so as to maintain its pace in business expansion and achieve various performance targets with remarkable results. On the other hand, the Group will place more emphasis on stable growth in the mid to long term. By leveraging its comprehensive strengths and driven by technological innovation, the Group will continue to deploy its innovative products and advance its technologies global-wise in a differentiated manner, ensuring that its innovation advances steadily, its operational management is efficient and coordinated, its corporate development and business are prosperous and sustainable, and its industry position improved steadily.

2023 is sure to be a year full of opportunities, which is also crucial to the Group in terms of achieving the strategic goals of its five-year plan. Grand Pharma will redouble its efforts and, with perseverance and determination, remain steadfast to its business goals, lifting the Group to new heights and making new achievements for a healthy China.

I would like to express my sincere gratitude to every shareholder, board members, partners, management and staff for their long-term support and contribution to the Group.

Dr. Tang Weikun

Chairman

Hong Kong, 22 March 2023

Corporate Profile

GROUP POSITIONING

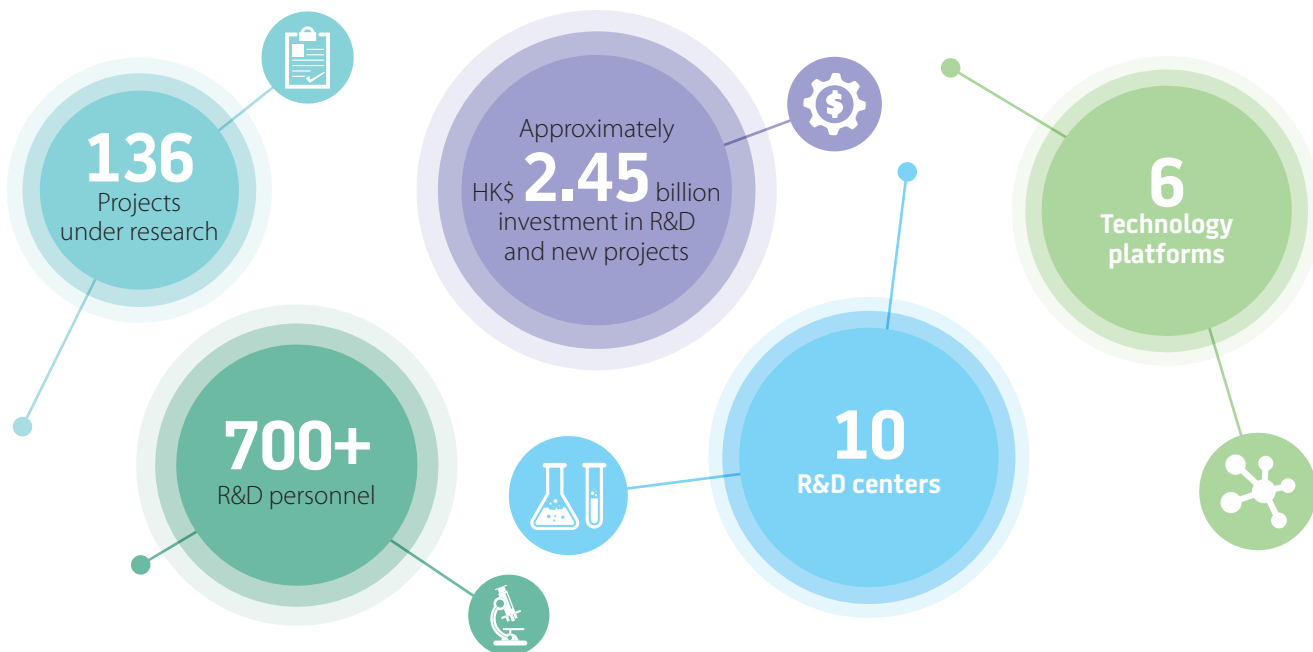
The Group is an international pharmaceutical company of technological innovation. Its core businesses cover three major areas, namely pharmaceutical technology, nuclear medicine anti-tumor diagnosis and treatment and cerebro-cardiovascular precision interventional diagnosis and treatment technology and biotechnology. Based on the pharmaceutical and biological industries, the Group focuses on the needs of patients, and take technological innovation as the driving force. In response to the unmet clinical needs, the Group will increase its investment in global innovative products and advanced technologies, enrich and improve its product pipelines, consolidate and strengthen its industrial chain layout, and fully leverage the Group's industrial strengths and R&D capabilities to provide more advanced and diverse treatment solutions to patients worldwide.

With unremitting efforts in recent years, the Group has laid a more solid foundation for development, consolidated its operation scale, gradually optimized its business structure, continued to improve its operation mode, accelerated its pace of transformation and upgrading, and made various achievements in innovative layout. The Group's profitability continues to improve and help facilitate R&D and innovation; its good ability in mergers and acquisitions and integration continues to consolidate the scale of development; the integration of raw materials and preparations improves the structure of the industrial chain; and the diversification of business and entities has effectively enhanced the comprehensive advantages.

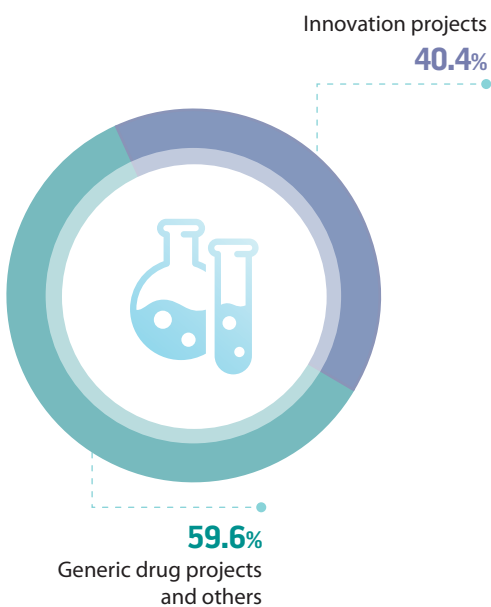
"Maintain stable growth, strive in innovation and strategic planning", the Group will stick with the development concept of "comprehensive strengths, innovation leading and global expansion" and the strategy of "dual-wheel driving development of independent R&D, global expansion and dual-cycle operation", the Group has formed a new pattern of domestic and international cycles that synergize with each other, and is committed to becoming an international pharmaceutical company of technological innovation, delivering on its promises for doctors and patients, and making significant contribution to the society.

Corporate Profile

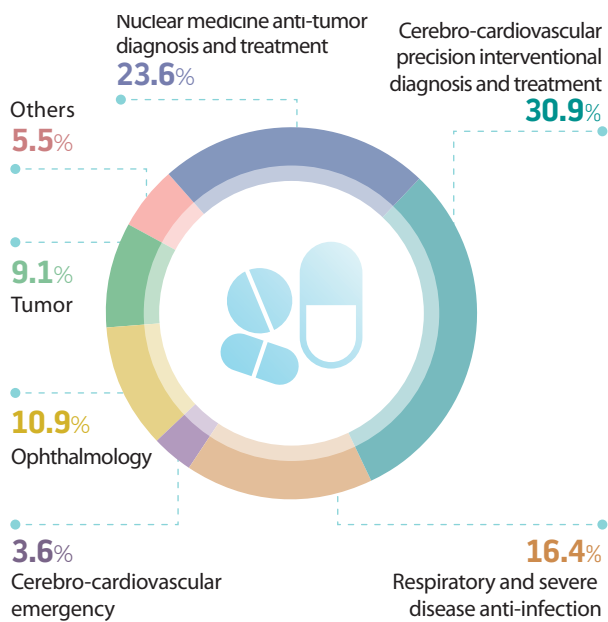
RESEARCH AND DEVELOPMENT



OVERVIEW OF 136 R&D PROJECTS



OVERVIEW OF 55 INNOVATIVE PROJECTS BY THERAPEUTIC AREAS



Corporate Profile

INNOVATIVE PRODUCT PIPELINE STRATEGIC PLAN

As of 22 March 2023, the R&D progress of the Group's innovative product pipelines is as follows:

Field	Sector	Direction	Product	Indication	R&D progress								
					Preclinical	IND/Model Inspection	Phase I	Phase II	Phase III	NDA/Registration	Launch		
Pharmaceutical Technology	Ophthalmology	Ophthalmology	GPN00136 (BRW421)	Dry eye		●			●				
			GPN00153 (CBT-001)	Pterygium					●	●			
			GPN00833	Anti-inflammatory and analgesic		●				●			
			GPN00884	Myopia prevention and control	●	●							
	Respiratory, severe disease and anti-infection	Respiratory	Ryaltris	Allergic rhinitis					●		●		
		Severe disease and anti-infection	STC3141	Sepsis			●						
				COVID-19				●					
				ARDS			●						
				Sepsis		●							
		GS221	Novel coronavirus infection			●							
GPN00085	Parainfluenza	●	●										
Cerebro-cardiovascular emergency	Emergency	GPN00816	Anaphylaxis		●					●			
Anti-tumor	Immunotherapy	A002	HPV-positive head and neck cancer	●				●					
Technologies on nuclear medicine and anti-tumor diagnosis and treatment as well as cerebro-cardiovascular precision interventional diagnosis and treatment	Interventional treatment		Y-90 microsphere injection	Malignant liver tumor							●	●	
			Thermosensitive embolic agent product	Hypervascular parenchymal organs tumor		●							
			Lava	Cerebral aneurysm							●		
			AuroLase*	Prostate cancer							●		
	Radionuclide-drug conjugate (RDC)			TLX591 (177Lu-rosapatumab)	Prostate cancer	●					●		
				TLX591-CDx (68Ga-PSMA-11)	Prostate cancer - diagnosis						●	●	
				TLX599-CDx (99mTc-EDDA/HYNIC-iPSMA)	Prostate cancer - diagnosis	●						●	
				TLX250 (177Lu-girentuximab)	Clear cell renal cell carcinoma	●			●				
				TLX250-CDx (89Zr-girentuximab)	Clear cell renal cell carcinoma - diagnosis			●				●	
				TLX101 (131I-HPA)	Glioblastoma			●		●			
				TOCscan*	Gastroenteropancreatic neuroendocrine tumor - diagnosis	●							●
				ITM-11	Gastroenteropancreatic neuroendocrine tumor			●				●	
				ITM-41	Malignant tumor bone metastases	●			●				
	Cerebro-cardiovascular precision interventional diagnosis and treatment	Access management	Coronary artery vascular intervention	Restore DCB	De novo coronary artery lesions and in-stent restenosis							●	●
				Novasight	Coronary artery imaging and intracavitary interventional surgery							●	●
MLCAD				Moderate/severe coronary artery/peripheral arterial calcification	●								
Peripheral vascular intervention			IAL PAD	Moderate/severe coronary artery/peripheral arterial calcification	●								
			APERTO DCB	Arteriovenous fistula treatment of hemodialysis								●	●
			aXess	Hemodialysis	●			●					
Neurointervention		LEGFLOW DCB	Peripheral vascular disease							●		●	
		Stent retriever	Ischemic stroke							●			
		Intracranial balloon dilatation catheter	Intracranial stenosis									●	
		Guiding catheter	Access								●		
Structural heart disease		Structural heart disease	Microcatheter	Access							●		
			Occlusion balloon	Access							●		
			DCB	Intracranial stenosis	●								
Electrophysiology and heart failure	Structural heart disease	Saturn	Mitral regurgitation	●	●								
	Electrophysiology and heart failure	Heartlight X3	Atrial fibrillation							●	●		
		CoRisma	Heart failure	●	●								

- China
- Overseas

* AuroLase: The Group owns the right of first negotiation for that product

Corporate Profile

MAJOR EVENTS

As of the end of 2022, the Group's major product development and corporate development are as follows:

December

- The Group successfully conducted the clinical trials for GS221, which is an oral small molecule 3CL protease inhibitor against COVID-19 developed by the Group with independent intellectual property rights.
- Grand Decade, a wholly-owned subsidiary of the Group, entered into an equity subscription agreement with Sirtex HoldCo, pursuant to which Grand Decade subscribed for 29,646,627 shares allotted by Sirtex HoldCo for a consideration of US\$35 million. Upon closing, the issued share capital of Sirtex HoldCo is owned as to approximately 42.02% by CDH Genetech, approximately 51.61% by Grand Decade and approximately 6.37% by Natixis.

November

- The Group's RDC drug TLX250-CDx for the diagnosis of ccRCC in the field of nuclear medicine anti-tumor diagnosis and treatment has successfully achieved the clinical endpoint of the overseas phase III clinical study.

October

- The Group's global innovative drug STC3141 in the field of severe disease has reached the clinical study endpoint in the phase Ib clinical trial for the treatment of ARDS in China.
- The China IND application for the Group's RDC drug TLX591-CDx for the diagnosis of prostate cancer in the field of nuclear medicine anti-tumor diagnosis and treatment has been approved by the NMPA.

September

- The China IND application for the Group's RDC drug TLX250-CDx for the diagnosis of ccRCC the field of nuclear medicine anti-tumor diagnosis and treatment has been approved by the NMPA.

August

- The Group disposed, off the market, approximately half of its shareholding (10,000,000 shares) in Telix at a value of approximately AU\$73 million. The Group will not further dispose the remaining 10,947,181 shares it holds in Telix in the coming 12 months.
- The Group entered into an equity acquisition agreement with Hubei Bafeng to acquire 100% equity interests of Hubei Bafeng with no more than RMB270 million. After the completion of the acquisition, the Group would have 24 registration numbers of amino acid APIs, accounting for more than 70% of the registration numbers in the same segment, making it the pharmaceutical company with the most registration numbers for amino acid APIs in China. This further reinforced the Group's leading position in the high-quality amino acid segment.
- The China IND application for the Group's RDC drug TLX591-CDx for the diagnosis of prostate cancer and TLX250-CDx for the diagnosis of ccRCC in the field of nuclear medicine anti-tumor diagnosis and treatment have been officially accepted by the NMPA.

Corporate Profile

July

- The Group's global innovative drug STC3141 in the field of severe disease completed the enrollment and dosing of all patients in the phase Ib clinical trial for the treatment of ARDS in China. The research report was expected to be completed within the next 6 months; and successfully achieved the primary clinical study endpoint in the Phase IIa clinical trial for the treatment of severe COVID-19 conducted in Europe.
- The Group and XELTIS entered into a strategic cooperation agreement on equity investment and product introduction, pursuant to which, the Group will, subject to the fulfillment of relevant conditions, acquire approximately 11% equity interests in XELTIS with EUR15 million in total, in order to obtain aXess, a global first-of-its-kind restorative device, and relevant rights regarding other new products in the field of hemodialysis developed under the same technology platform in the Greater China region. Pursuant to the agreement, the Group had the pre-emptive negotiation right for products of XELTIS developed in other indication areas in the Greater China region.

June

- Beijing Purevalley (an indirect non wholly-owned subsidiary of the Company) and Sirtex Medical entered into a distribution agreement, pursuant to which Sirtex Medical has appointed Beijing Purevalley as Sirtex Medical's exclusive distributor for the resale of the products in the PRC.

May

- The Group has reached a strategic cooperation agreement with Eye Hospital, WMU. The Group would, according to the R&D progress, pay RMB70 million by phases to obtain from Eye Hospital, WMU relevant rights regarding the technology used in the prevention and treatment of myopia and the new ophthalmic preparation (GPN00884) product in the Greater China Region, and subsequently may pay certain sales commission subject to the sales conditions of related products.

April

- Grand Pharma (China), Shanghai Shetai and Wuhan Shetai entered into a capital injection agreement. Grand Pharma (China) and Shanghai Shetai, as the existing shareholders of Wuhan Shetai, agreed to increase the registered capital of Wuhan Shetai by RMB65 million, where Grand Pharma (China) and Shanghai Shetai shall make additional capital contributions of RMB21.45 million and RMB43.55 million, respectively, in proportion to their respective existing shareholdings in Wuhan Shetai.
- The Group's global innovative drug STC3141 in the field of severe disease had been approved in Belgium to conduct a phase Ib clinical study for the treatment of sepsis.
- The multicenter Phase III clinical trial of Ryaltris Compound Nasal Spray, the Group's global innovation drug for the treatment of seasonal allergic rhinitis and rhinoconjunctivitis in patients aged 12 years and above, completed the first patient enrollment in China.

February

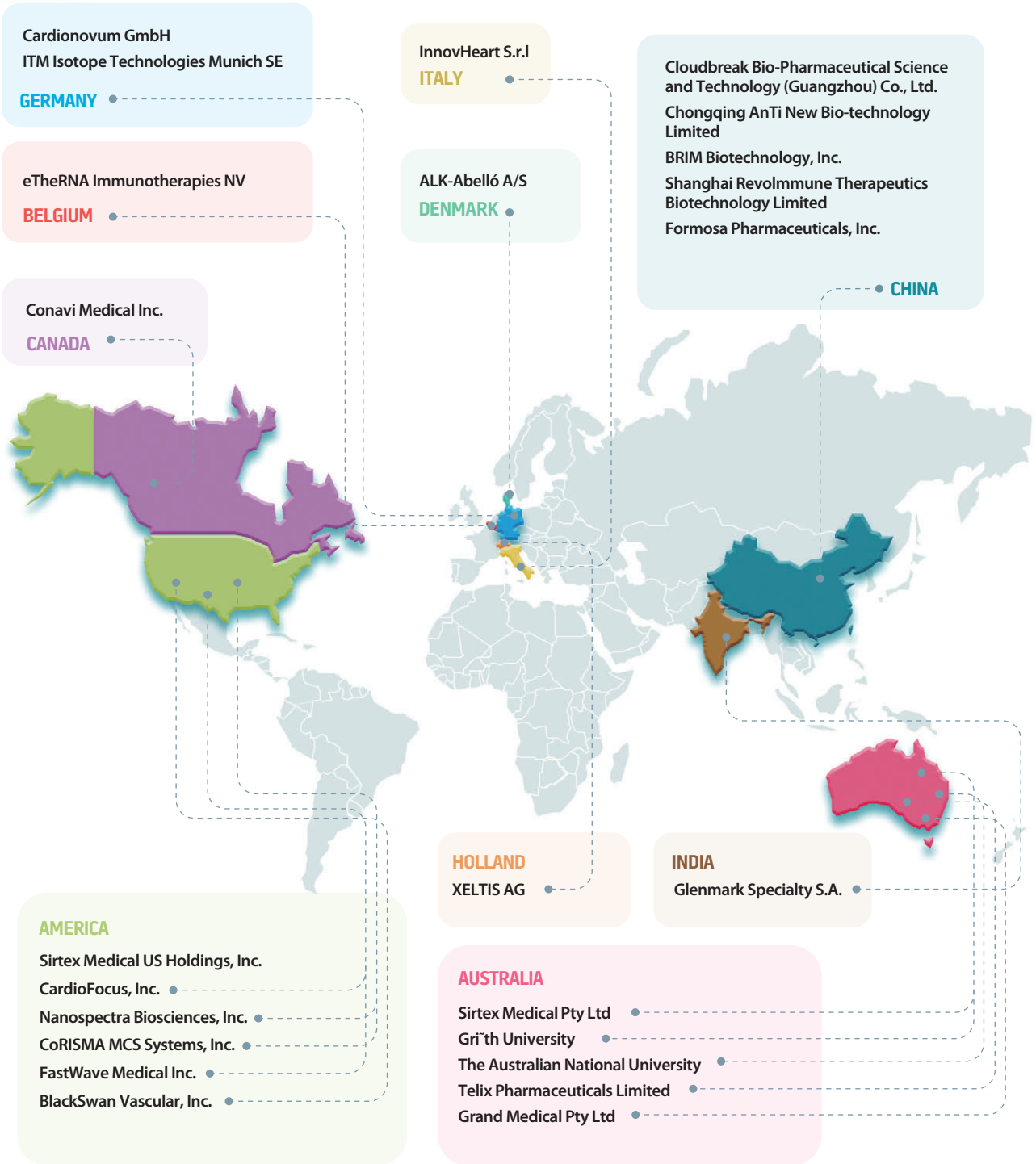
- The Group entered into a product licensing agreement with Novartis, a world-renowned company in Switzerland. The Group would pay Novartis not more than US\$20 million and a certain percentage of the sales commission, to obtain the exclusive commercialization rights of Enerzair® Breezhaler® and Ateectura® Breezhaler®, two global innovative compound preparations for the treatment of asthma from Novartis in mainland China.
- The Group entered into an equity investment agreement with ITM, whereby the Group would subscribe new shares of ITM, representing approximately 1.31% of its enlarged share capital, at a consideration of EUR25 million.

January

- The Group received the approval from the NMPA for commercialization its global blockbuster innovative product, Yttrium-90 microsphere injections, for the treatment of patients with unresectable colorectal liver metastases who have failed standard of care. The product would provide a new and effective treatment modality for patients with liver malignancies in China, offering the opportunity for translational therapy and further surgical resection to achieve clinical cure, bridging the gap in the local treatment of liver metastases from colorectal cancer.

Corporate Profile

THE GLOBAL LAYOUT OF THE GROUP



Corporate Profile

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

Company name and percentage of equity interest	Positioning and functions
Grand Pharma (China) Co., Ltd. 99.84%	Research and development, manufacture and sales of pharmaceutical products
Wuhan Wuyao Pharmaceutical Co., Ltd. 99.18%	Manufacture of pharmaceutical raw materials
Wuhan Grand Hoyo Co., Ltd. 97.67%	Research and development, manufacture and sales of amino acid series products
Hubei Grand Life Science & Technology Co., Ltd. 97.43%	Research and development, manufacture and sales of taurine products
Hubei Grand Biotechnology Co., Ltd. 49.69%	Research and development, manufacture and sales of amino acid series products
Hubei Grand Fuchi Pharmaceutical & Chemicals Co., Ltd. 89.60%	Research and development, manufacture and sales of agrochemicals, fine chemicals and chemical medicine
Hubei Grand EBE Pharmaceutical Company Limited 99.84%	Manufacture and sales of ophthalmic pharmaceutical products
Wuhan Kernel Bio-tech Co., Ltd. 91.56%	Research and development, manufacture and sales of bio-technology products series
Hubei Wellness Pharmaceutical Co., Ltd. 99.84%	Manufacture and sales of pharmaceutical products
Grand Pharmaceutical Huangshi Feiyun Pharmaceutical Co., Ltd. 59.90%	Research and development, manufacture and sales of pharmaceutical products
Wuhan Grandpharma Group Sales Co., Ltd. 99.84%	Sales of pharmaceutical products
Beijing Huajin Pharmaceutical Co., Ltd. 71.88%	Research and development, manufacture and sales of pharmaceutical products
Beijing Grand Jiuhe Pharmaceutical Co., Ltd. 96.84%	Research and development, manufacture and sales of pharmaceutical products
Tianjin Jingming New Technology Development Co., Ltd. 73.18%	Research and development, manufacture and sales of pharmaceutical products
Zhu Hai Cardionovum Medical Device Co. Ltd. 77.89%	Sales of medical devices
Xi'an Beilin Pharmaceutical Co., Ltd. 99.84%	Research and development, manufacture and sales of pharmaceutical products
Wuhan Wuyao Technology Co., Ltd. 99.84%	Research and development
Grand Medical Pty Ltd. 100%	Research and development
Hubei Bafeng Pharmaceuticals & Chemicals Share Co., Ltd. 99.84%	Research and development, manufacture and sales of pharmaceutical products

Corporate Profile

The principal associates of the Group are as follows:

Company name and percentage of equity interest	Positioning and functions
Sirtex Medical Pty Ltd 51.61% (Note)	Research and development, manufacture and sales of pharmaceutical products
Shanghai Xudong Haipu Pharmaceutical Co., Ltd. 55.00%	Research and development, manufacture and sales of pharmaceutical products
Cardionovum GmbH 33.33%	Research and development, manufacture and sales of devices

Note: The Group has entered into total return swap transactions with Natixis (a multinational financial services firm incorporated in France), pursuant to which, among other things, Natixis shall transfer all the economic benefits and exposure of the approximately 6.37% equity interests in Grand Pharma Sphere Pte Ltd. (which wholly owned Sirtex Medical Pty Ltd.) currently held by Natixis to the Company. For details, please refer to the circular of the Company dated 13 September 2021 and the announcements of the Company dated 30 September 2021, 11 August 2021 and 2 July 2021.

Corporate Profile

DEFINITIONS

In this report, unless the context otherwise requires, the following terms shall have the meanings set out below:

"AF"	Atrial Fibrillation
"APERTO® OTW"	Paclitaxel Releasing Hemodialysis Shunt Balloon Dilatation Catheter
"ARDS"	Acute Respiratory Distress Syndrome
"Beijing Purevalley"	Beijing Purevalley Biotechnology Co., Ltd (北京普爾偉業生物科技有限公司), a limited liability company established in the PRC and an indirect non wholly-owned subsidiary of the Company
"ccRCC"	Clear cell renal cell carcinoma
"CDH Genetech"	CDH Genetech Limited, a company incorporated in the Cayman Islands with limited liability
"COVID-19"	2019 novel coronavirus disease
"Grand Decade"	Grand Decade Developments Limited, a limited company incorporated under the laws of the British Virgin Islands and a wholly-owned subsidiary of the Company
"Grand Pharm (China)"	Grand Pharmaceutical (China) Company Limited, a company incorporated in the PRC, being a subsidiary of the Company owned as to 99.84%
"Greater Bay Area"	The Guangdong-Hong Kong-Macao Greater Bay Area
"Greater China Region"	Mainland China, the Hong Kong Special Administrative Region of the PRC, the Macao Special Administrative Region of the PRC, Taiwan of the PRC
"FDA"	United States Food and Drug Administration
"Hubei Bafeng"	Hubei Provincial Bafeng Pharmaceuticals and Chemicals Share Co., Ltd.
"ICS"	Inhaled Glucocorticoid
"IND"	Investigational New Drug Applications
"ITM"	ITM Isotope Technologies Munich SE
"LABA"	Long-acting β 2 agonist
"LAMA"	Long-acting muscarinic antagonist

Corporate Profile

"LEGFLOW® OTW"	Paclitaxel Releasing Peripheral Balloon Dilatation Catheter
"mRNA"	messenger RNA
"Natixis"	Natixis, a limited company incorporated in France
"NMPA"	National Medical Products Administration
"Novartis"	Novartis AG.
"RDC"	Radionuclide-drug conjugate
"RESTORE DEB®"	Paclitaxel Releasing Coronary Balloon Dilatation Catheter
"Ruijin-Hainan Hospital"	Ruijin-Hainan Hospital Shanghai Jiao Tong University School of Medicine (Boao Research Hospital) (上海交通大學醫學院附屬瑞金醫院海南醫院暨博鰲研究型醫院)
"SARS-CoV-2"	COVID-19 virus
"Shanghai Shetai"	Shanghai Shetai Medical Technology Limited, a company established in the PRC with limited liability
"Sirtex"	Sirtex Medical Pty Ltd
"Sirtex HoldCo"	Grand Pharma Sphere Pte Ltd., a company incorporated under the laws of the Republic of Singapore with limited liability, which is owned as to approximately 42.02% by CDH Genetech, approximately 51.61% by Grand Decade and approximately 6.37% by Natixis
"Sirtex Medical"	Sirtex Medical Singapore Pte Ltd., a limited company established pursuant to Singapore laws and a wholly-owned subsidiary of Sirtex HoldCo
"TAVO™"	Tavokinogene Telseplasmid
"Telix"	Telix Pharmaceuticals Limited
"Tianjin Jingming"	Tianjin Jingming New Technology Development Co., Ltd.
"WMU"	WenZhou Medical University
"Wuhan Shetai Medical"	Wuhan Shetai Medical Technology Co., Ltd, a company established in the PRC with limited liability and the shares of which are owned as to 33% by Grand Pharma (China) and 67% by Shanghai Shetai
"XELTIS"	XELTIS AG

Financial Summary

RESULTS

	2022 HK\$'000	Year ended 31 December			
		2021 HK\$'000	2020 HK\$'000	2019 HK\$'000	2018 HK\$'000
Revenue	9,562,285	8,597,975	6,352,919	6,590,635	5,958,355
Profit before tax	2,516,893	2,785,832	2,073,583	1,355,973	883,899
Income tax	(418,642)	(380,800)	(292,374)	(230,485)	(147,460)
Profit for the year	2,098,251	2,405,032	1,781,209	1,125,488	736,439

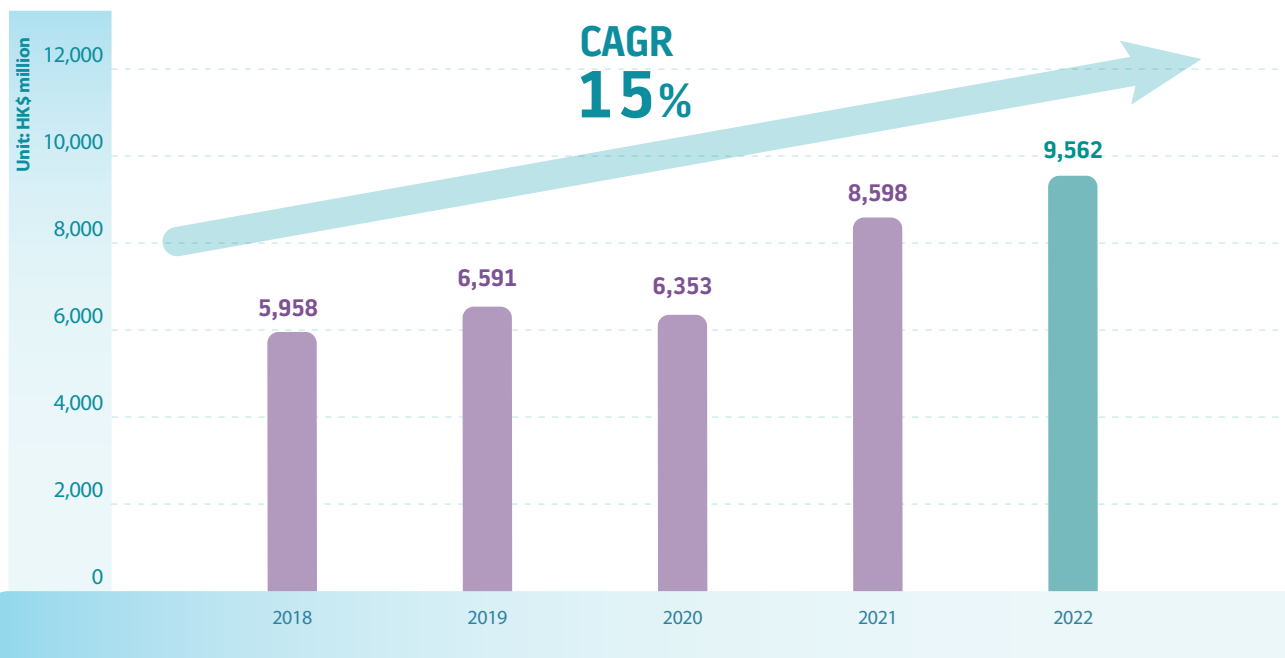
ASSETS AND LIABILITIES

	2022 HK\$'000	As at 31 December			
		2021 HK\$'000	2020 HK\$'000	2019 HK\$'000	2018 HK\$'000
Total assets	22,371,061	21,057,030	16,984,345	13,813,307	13,496,659
Total liabilities	(8,162,401)	(7,614,168)	(5,640,136)	(5,302,300)	(6,062,032)
Net assets	14,208,660	13,442,862	11,344,209	8,511,007	7,434,627

Financial Summary

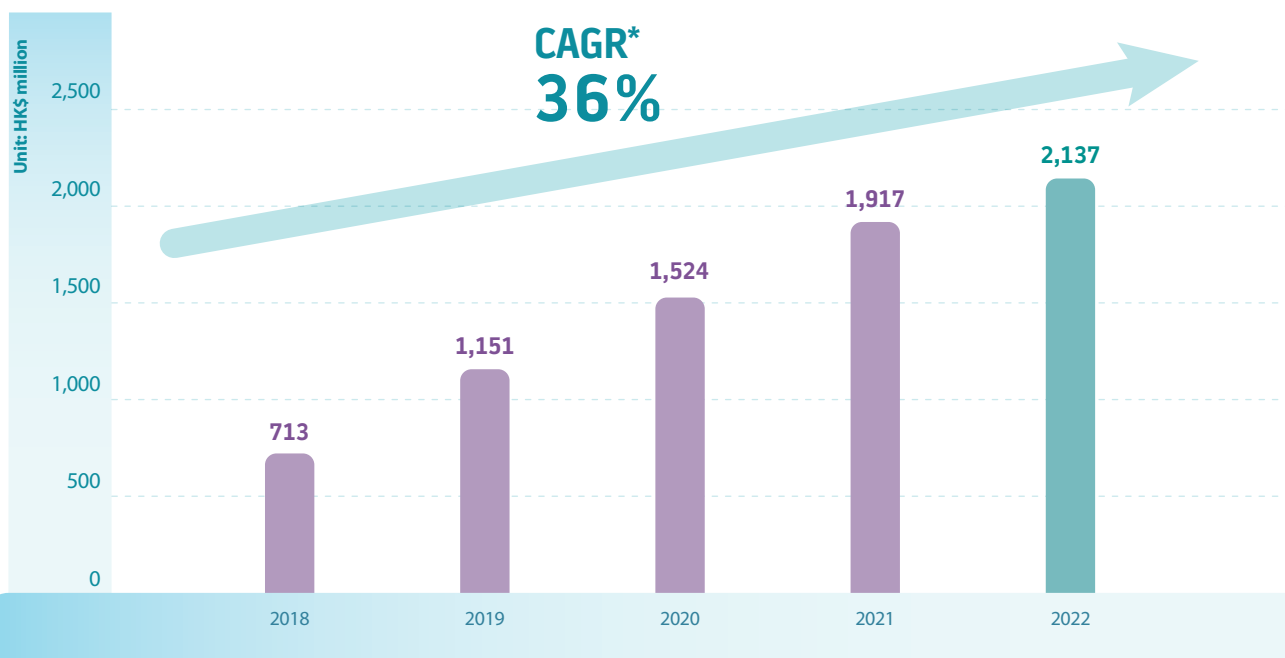
Revenue growth

Table 1.1



Increase rate of net profit attributable to the owners of the Company

Table 1.2



* Excluding the effect of Telix

Management Discussion and Analysis

BUSINESS REVIEW

During 2022 and up to 22 March 2023, the Group had a total of 38 significant milestones, including 25 innovative products, 9 generic products, 3 API products and 1 major merger and acquisition.

Innovative products

Nuclear medicine anti-tumor diagnosis and treatment:

- Yttrium-90 microsphere injections, a blockbuster product of the nuclear medicine anti-tumor segment, was approved for commercialization in China;
- The Investigational New Drug (“IND”) application for the global innovative nuclear medicine product TLX591-CDx was submitted and approved in China;
- The IND application for the global innovative nuclear medicine product TLX250-CDx was submitted and approved in China, and successfully met the clinical endpoint of phase III of an overseas clinical study;
- The IND application for the global innovative nuclear medicine product TLX101 was submitted and accepted in China;
- The IND application for the global innovative nuclear medicine product ITM-11 was submitted and accepted in China.

Cerebro-cardiovascular precision interventional diagnosis and treatment:

- OTW intracranial balloon dilatation catheter Cai Yu® (彩鹈®), a neurointerventional product, was approved for commercialization in China;
- Occlusion balloon catheter Ti Hu® (鵜鹈®), a neurointerventional product, was approved for commercialization in China;
- The application for NOVASIGHT Hybrid, a new medical imaging device for intracavity diagnosis, was accepted for commercialization in China;
- aXess, a global innovative endogenous tissue repair product for hemodialysis, was introduced to expand the R&D product pipeline;
- The application for the commercialization of HeartLight X3 laser ablation platform, a global innovative medical device, has been submitted in China;
- HeartLight X3 laser ablation platform, a global innovative medical device, completed the first chartered access laser ablation operation for the treatment of atrial fibrillation in China at Ruijin-Hainan Hospital of Shanghai Jiaotong University School of Medicine and Boao Research Hospital (“**Ruijin-Hainan Hospital**”).

Management Discussion and Analysis

Respiratory and severe disease anti-infection:

- Enerzair® Breezhaler® and Ateectura® Breezhaler®, the two global innovative compound preparations for the treatment of asthma, were successfully included in the National Reimbursement Drug List (2022 edition);
- The first patient was dosed in the phase III clinical trial of Ryaltris compound nasal spray, an innovative product, in China;
- The phase IIa clinical trial of STC3141, a global innovative drug, for the treatment of severe COVID-19 in Europe successfully met the primary clinical trial endpoint;
- The phase Ib clinical trial of STC314, a global innovative drug, for the treatment of acute respiratory distress syndrome (“ARDS”) in China successfully met the primary clinical trial endpoint;
- STC3141, a global innovative drug, was approved to commence the phase Ib clinical trial for the treatment of sepsis in Belgium;
- The phase Ib clinical trial of STC3141, a global innovative drug, for the treatment of sepsis has completed the enrolment and dosing of all patients;
- The clinical trials of GS221, an innovative oral small molecule 3CL protease inhibitor against COVID-19 virus were successfully conducted and the results showed that GS221 has potential clinical benefits for the patients;
- The IND application for APAD, a global innovative drug for the treatment of sepsis, was submitted and accepted in China;

Ophthalmology:

- GPN00884, a new ophthalmic preparation for myopia control, was introduced to expand the R&D product pipeline;
- The IND application for BRM421, a global innovative drug for the treatment of dry eye, was submitted and accepted in China;
- The IND application for GPN00833, an improved new drug for anti-inflammatory and pain relief after ophthalmology surgery, was submitted and accepted in China;
- CBT-001, an innovative and improved new drug for the treatment of pterygium, was approved by the National Medical Products Administration of China (the “NMPA”) to commence a Phase III clinical study;
- The application for the commercialization of trypan blue ophthalmic anterior capsule staining agent, an innovative device, was submitted and accepted in China.

Cerebro-cardiovascular emergency drug:

- Jext®, a pre-filled epinephrine auto-injector for the treatment of severe allergic reactions, was granted approval for Guangdong-Hong Kong-Macao Greater Bay Area Imported Pharmaceuticals for Urgent Clinical Needs in Mainland China.

Management Discussion and Analysis

Generic products

There were 9 products approved for commercialization, among which, the epinephrine hydrochloride injection (pre-filled) is the first type 3 generic products being approved for commercialization in China.

API products

There were 3 API products passed the CEP registration of the European Union.

Merger and acquisition

In the field of biotechnology, the Group has completed the acquisition of 100% equity interest in Hubei Bafeng Pharmaceuticals & Chemicals Share Co., Ltd. (湖北省八峰藥化股份有限公司) ("**Hubei Bafeng**"). Currently, we have 24 API registration certificates for amino acids, covering more than 70% of registration certificates in the same category, and became the pharmaceutical company with the largest numbers of API registration certificates for amino acids in China.

In addition, the Group has also made significant progress in the construction of its R&D centers and production bases.

R&D centers:

The International R&D Center in Optics Valley, Wuhan, the mRNA R&D Center in Nanjing, Grand Pharma — Shandong University Radiopharmaceutical Research Institute (遠大醫藥 — 山東大學放射性藥物研究院) and the Innovative Device R&D and Production Base in Wuhan were officially put into operation, which further enhanced the Group's R&D capabilities in innovative drugs, mRNA technology and nuclear medicine, as well as the capability to localize innovative medical devices and the independent R&D and production capacity;

The International R&D Center in Optics Valley, Wuhan is used to develop innovative products in the fields of ophthalmology, respiratory and severe disease anti-infection, oncology, cerebro-cardiovascular emergency and other treatments. With a gross floor area of more than 13,000 square meters, the R&D center is equipped with international advanced scientific research equipment and instruments to conduct the research and development of small molecular drugs, polypeptide drugs and high-end complex dosage drugs, and has established special laboratories for new drug efficacy evaluation, process thermal safety evaluation, crystallization process and continuous flow process research. The Group has the qualifications for R&D innovation and technology platforms at the provincial level and above, such as the National Enterprise Technology Center (國家級企業技術中心), the Hubei Provincial Engineering Technology Research Center of Ophthalmic Pharmaceuticals (湖北省眼用製劑工程技術研究中心) and the Hubei Provincial Engineering Technology Research Center of Chemical Pharmaceuticals for Rare Diseases (湖北省罕見病化學藥品工程技術研究中心), and has established the National Postdoctoral Research Station.

The mRNA R&D Centers in Nanjing/Belgium are mainly engaged in the development of anti-tumor and anti-infection drugs based on mRNA technology. Currently, the Group has built a mRNA antigen design and optimization platform, an organ-targeted LNP technology platform, and a pharmacological and toxicological R&D platform, etc., and establishing GMP-level pilot R&D and production center to bridge the important links from technology R&D to production to meet the requirements of all phases of clinical research for therapeutic and preventive mRNA drugs.

Management Discussion and Analysis

The Group and Shandong University has jointly established the Institute of Radiopharmaceutical Research of Grand Pharma and Shandong University, to carry out in-depth cooperation in product development, academic research, resource sharing and talent training in the field of radiopharmaceutical R&D. The Institute will strengthen the Group's R&D capability of its radiopharmaceutical diagnosis and treatment platform, improve the level of preclinical research and patent technology barriers, and provide technical support and material conditions for the development of new products. At the same time, it will facilitate the cultivation of more high-end technical talents in the field of radiopharmaceuticals and help industrialize the scientific research results in the field of radiopharmaceuticals.

The R&D and production base for innovative devices in Wuhan is a domestic R&D and production base, with active devices, for the diagnosis and treatment technology of cardio-cerebrovascular precision intervention. The base, covering an area of about 4,000 square meters, is equipped with class 10k cleanrooms and partial class 10k clean areas, which can meet the production and assembly needs of three types of medical devices.

Production bases:

The amino acid production base in Xiantao City, Hubei Province, China, has officially started construction, and will be officially put into production in 2023. The operation of the production base will further expand the production capacity of a number of high-quality amino acid varieties of the Group and provide sustainable momentum for the Group's amino acid segment to grow profitably in the future. Also located in Xiantao City, the production base of APIs for minority-variety medicines (drugs in short supply) has been officially commenced operation, which will further expand the production capacity and ensure the market supply of minority-variety medicines in short supply.

BUSINESS INTRODUCTION

The Group has strong technological innovation strength, outstanding internationalization strength, solid industrial foundation, complete industrial chain and significant comprehensive advantages in the integration of raw materials and preparations. The Group has more than 90 products included in the National Essential Drug List (2018 version) and more than 200 products included in the National Reimbursement Drug List for Basic Medical Insurance, Work-Related Injury Insurance and Maternity Insurance (2022 version).

PHARMACEUTICAL TECHNOLOGY

With years of experience in the fields of ophthalmology, respiratory and severe disease anti-infection, as well as cerebro-cardiovascular emergency, the Group currently has a number of products with high entry barrier and exclusive products with leading market shares, a strong brand name and a solid market position, and also reserves a number of innovative products.

Through an innovation model combining global technology cooperation and independent R&D, the Group has established the International R&D Center in Optics Valley, Wuhan, the Glycomics R&D Center in Australia, the mRNA R&D Centers in Nanjing/Belgium and the DNA R&D Center in the United States in the field of pharmaceutical technology. These R&D centers and technology platforms will continue to empower and provide continuous technological support for the Group's R&D and innovation in the field of pharmaceutical technology.

Ophthalmology Segment

The Group has nearly 30 products on sale in the ophthalmology segment, covering the anterior segment and fundus of the eye, mainly focusing on major indications such as dry eye, retinal hemorrhage, glaucoma, cataract, anti-inflammation and myopia, covering chemical preparations, Chinese drug preparations and eye health products, including prescription drugs, OTC drugs, medical devices, consumer goods and other major categories, creating a "public eye care ecosystem" by integrating "prevention + treatment + health care". In terms of innovation and R&D, the Group has reserved a few world-wide innovative products for the treatment of "myopia", "dry eye", "pterygium" and "anti-inflammatory and analgesic after ophthalmology surgery". In the future, the field will adhere to the development strategy of "leading by the blockbuster innovative drugs and devices, and based on the products of the public eye care ecosystem", continuously strengthen the influence of the industry, and achieve new breakthroughs in the business field.

Management Discussion and Analysis

Ophthalmology products

The ophthalmology products of the Group include Rui Zhu (polyvinyl alcohol eye drop), He Xue Ming Mu tablets, Fuming series, Bai Nei Ting, Jie Qi, Nuo Ming, etc.

Rui Zhu (polyvinyl alcohol eye drop) is a single-piece preservative-free artificial tear and currently the first-line drug for the treatment of dry eye. It is recommended by experts such as the Expert Consensus on Prevention and Control of Cataract Surgery in China (2021) (《中國白內障圍手術期乾眼防治專家共識(二零二一年)》), the Expert Consensus on Sterily Surgery in China (2020) (《中國乾眼專家共識(2020年)》), the Expert Consensus on Refractive Surgery in Laser Corneal Surgery in China (2019) (《中國激光角膜屈光手術圍手術期用專家共識(2019年)》), and the Expert Consensus on Diagnosis and Treatment of Functional Disorder of Bleaene in China (2017) (《我國驗板腺功能障礙診斷與治療專家共識(2017年)》). Rui Zhu has good brand recognition and was awarded the China Wellknown Trademark in 2017; and was awarded the CPEO Gold Award for seven consecutive years from 2016 to 2022, namely the “Healthy China Brand List”. The Group achieved good results growth in the product promotion of prescription drugs and non-prescription drugs. At the same time, the Group strengthened the academic-driven development of e-commerce platforms to empower sales and maintain the steady growth of Rui Zhu.

He Xue Ming Mu tablet, which is produced by three classical formulae, namely the Siwutang (四物湯), Erzhiwan (二至丸) and Shengpuhuangtang (生蒲黃湯), has the functions of cooling blood hemostasis, moisturising dryness and removing blood stasis, and nourishing liver and eye-brightening, and is mainly used for the treatment of retinal hemorrhage caused by the cloudy liver and the heat-burn winding. Since He Xue Ming Mu tablet has been the exclusive product in China, the State Protected Chinese Medicine, the National Reimbursement Drug List (2022 edition) and the National Essential Drug List (2018 edition) for the last 20 years since its commercialization, the Group has accumulated a large number of clinical research data and application experience in the field of retinal hemorrhage, which has been included in a number of guidelines/consensus such as the Practical Ophthalmic Medicine and the Expert Consensus on Clinical Application of He Xue Ming Mu Tablets for the Treatment of Wet Age-related Macular Degeneration (《和血明目片治療濕性年齡相關性黃斑變性臨床應用專家共識》) and provides valuable reference for clinical use of the products, and the sales of products continue to grow steadily.

Innovative R&D pipeline

While creating a public eye care ecosystem, the Group also reserved four innovative drugs in the direction of clear clinical needs for myopia, dry eye, pterygium and anti-inflammatory and pain relief after ophthalmology surgery:

GPN00153, an improved new drug for the treatment of pterygium (CBT-001):

It is an innovative and improved product, Nintedanib, which is used for the treatment of pulmonary fibrosis. It inhibits neovascularization and tissue fibrosis. Currently, the phase II clinical trial has been completed in the United States with high safety and significant clinical efficacy, which can inhibit the growth of pterygium and control the aggravation of the disease. The global phase III clinical trial for CBT-001 has commenced in June 2022 and its phase III clinical trial in China has been approved to commence by the NMPA in March 2023.

GPN00833, an improved new drug hormone nano-suspension eye drops for anti-inflammatory and pain relief after ophthalmology surgery:

It is a potent glucocorticoid and has efficient local anti-inflammatory and strong capillary contraction effect. Its unique nanopreparation technique effectively eliminates the risk of low bioavailability and safety due to the low water solubility of hormones products. The completed phase III clinical trial in the United States showed that GPN00833 has good treatment results and safety at lower concentrations, and provides faster clearance of post-operative ocular inflammation, rapid and sustained relief of eye pain and fewer side effects than the US standard of care. Currently, the product has submitted an IND application in China, which was accepted by the NMPA in January 2023.

Management Discussion and Analysis

GPN00136, a world-wide innovative drug for dry eye (BRM421):

It is small molecule peptide eye drops that can accelerate the division and proliferation of limbal stem cells, and in turn stimulate the repair of ocular surface. According to the phase II clinical study data completed in the United States, compared to cyclosporine eye drops currently commercialized for the treatment of dry eye, BRM421 has high safety and low irritation, as well as the potential to quickly alleviate the signs and symptoms of dry eye within two weeks. Currently, the product has entered Phase III clinical studies overseas, and has submitted an IND application for registration in China, which was accepted by the NMPA in January 2023.

GPN00884, a new eye preparation for myopia control:

It is an improved new drug jointly developed by the Group and the Eye Hospital of Wenzhou Medical University ("WMU") and is currently in an early stage of development. The Eye Hospital of WMU is one of the largest specialized ophthalmology hospitals in China. As a leader in the field of basic research and clinical prevention and control of refractive errors in China, the Eye Hospital of WMU is the only medical institution that has three national platforms, including the State Key Laboratory of Ophthalmology, Optometry and Vision Science, the National Eye Optometry Engineering Technology Research Center, and the National Eye Disease Clinical Medical Research Center. The strategic cooperation with WMU will lay a good foundation for the Group to further expand its presence in the field of myopia treatment.

Respiratory and Severe Disease Anti-infection Segment

The Group has more than 10 products on sale in the respiratory and severe disease anti-infection segment, covering a wide range of indications such as rhinitis, pharyngitis, bronchitis, pneumonia and asthma. The treatment for COVID-19 patients, in particular, allows for essentially full coverage of the course of disease. The core products, Qie Nuo (Eucalyptol, Limonene and Pinene Enteric Soft Capsules) and Jinsang Series (Jinsang Kaiyin Tablet/Capsule/Pill/Granules, Jinsang Qingyin Tablet/Capsule/Pill/Granules, Jinsang Liyan Tablet/Capsule/Pill/Granules, Jinsang Sanjie Tablet/Capsule/Pill/Granules), Enerzair® *Breezhaler*® and Atectura® *Breezhaler*® are both exclusive products nationwide. A number of products such as Nuo Tong (Xylometazoline Hydrochloride), Li Mei Song (Nimesulide) and Antiviral Oral-Liquid are in the leading position in their respective segments.

The innovative strategic plan in this field focuses on the unmet significant clinical needs, with a number of products under research, covering allergic rhinitis, sepsis, ARDS, parainfluenza and novel coronavirus infection, etc. Among which, the product for the treatment of allergic rhinitis has entered the registration clinical stage. The GS221 clinical trial for the treatment of novel coronavirus infection in China is progressing smoothly. STC3141, a global innovative drug for severe diseases such as sepsis, has received seven clinical approvals in five countries. The Phase Ib clinical study for ARDS in China and the Phase IIa clinical study for severe COVID-19 in Europe have both reached clinical endpoints, while other international global multi-centre clinical trials are also progressing smoothly. The IND application for another global innovative product for the treatment of sepsis, APAD, was submitted and accepted by NMPA. In the future, the Group will continue to adopt the R&D concept of independent R&D and global expansion to create a full-cycle management product cluster for chronic airway diseases and a pipeline of anti-infection products for severe diseases, so as to continuously strengthen the Group's industry position in this field.

Respiratory products

The main products include Qie Nuo, Jinsang Series, Enerzair® *Breezhaler*® and Atectura® *Breezhaler*®, Nuo Tong, Li Mei Song, Antiviral Oral-Liquid etc.

Management Discussion and Analysis

Qie Nuo:

It is a soluble and phlegm-free drug for viscosity, and is suitable for acute and chronic rhinosinusitis as well as respiratory diseases such as acute and chronic bronchitis, pneumonia, bronchial dilation, pulmonary abscess, chronic obstructive pulmonary disease, bacterial infection in the lungs, tuberculosis, and silica lungs. It can also be used for bronchoscopic angiography to facilitate the discharge of contrast medium. It is a national exclusive product independently developed by the Group with two separate types of drugs for adult and children's use and was included in China's National Reimbursement Drug List in 2017 and China's National Essential Drug List in 2018 respectively, and was listed in the Top Brands of the Health Industry in 2022 (二零二二年健康產業品牌銳榜). Currently, there are 11 guidelines and 12 expert consensus recommending the use of viscosity dissolving promoters for clinical use. Among them, 9 guidelines and 5 expert consensus explicitly recommend eucalyptol, limonene and pinene enteric soft capsules or its active ingredients for clinical treatment, such as the Diagnosis and Treatment Guidelines for Cough (2021) (《咳嗽的診斷與治療指南(2021)》), the Guidelines for Rational Use of Drugs for Chronic COPD in Primary Care 2020 (《慢性阻塞性肺疾病基層合理用藥指南(2020)》), the Chinese Expert Consensus — Chinese (2015) on High-secretion Management of Gastrointestinal Adhesion for Chronic Gastropic Diseases (《慢性氣道炎症性疾病氣道黏液高分泌管理中國專家共識 — 中文版(2015)》), etc. In addition, the Beijing Municipal Health Commission has included Qie Nuo in the Catalogue of Drugs for People Infected with Novel Coronavirus (《新冠病毒感染者用藥目錄》). Its clinical status is prominent, and the level of recognition among doctors and patients is high, continuing to lead the market of oral cough relieving and phlegm relieving drugs.

Jinsang Series Products:

They are exclusive products nationwide, covering all the diseases of the throat, among which, Jinsang Sanjie Capsule is used for the treatment of chronic hoarseness disease caused by heat and poisoning storage and airtight blood stasis (vocal nodules, polyp of vocal cords, thickening of mucosa of vocal cords) and the resulting hoarseness. Jinsang Sanjie Capsule has been widely used in clinical application for more than 30 years since its commercialization. Jinsang Liyan Capsule is the only Chinese patent medicine for the treatment of throat diseases caused by intraocular obstruction of liver depression and phlegm and humidification. It is also an ideal medicine for the treatment of pharyngeal symptoms in clinical operation, gastroesophageal reflux pharyngitis, and chronic and thick pharyngitis. Jinsang Kaiyin Capsule is designed for the rapid effect of acute pharyngitis as well as throat redness, swelling, heat, pain and hoarseness caused by acute pharyngitis. Several products have been included in the Guidelines for the Diagnosis and Treatment of Common Diseases in Otorhinolaryngology of China (《中國耳鼻咽喉科常見病診療指南》) issued by the Chinese Association of Traditional Chinese Medicine, the Clinical Drug Guidelines (《臨床用藥指南》) for the diagnosis and treatment of clinicians, the authoritative monographs of the Manual for Common Traditional Chinese Medicine of Otorhinolaryngology (《常見眼耳鼻咽喉科中成藥手冊》) and the Practical Otorhinolaryngology Head and Neck Surgery (《實用耳鼻咽喉頭頸外科學》), etc., and are included in a number of clinical pathways and expert diagnosis and treatment guidelines. In January 2022, the Expert Consensus on the Clinical Application of Jinsang Sanjie Capsules for the Treatment of Vocal Nodules and Polyp of Vocal Cords (《金嗓散結膠囊治療聲帶小結、聲帶息肉臨床應用專家共識》) was issued by the Chinese Association of Traditional Chinese Medicine, which has also provided new support for the evidence-based development of Jinsang Sanjie products. Jinsang Sanjie and Jinsang Kaiyin Capsules are products on the National Reimbursement Drug List. Jinsang Kaiyin and Qingyin are dual cross-over products with both prescription and over-the-counter drugs. Jinsang Kaiyin and Liyan have been included in the list of the third batch of medical supply assurance enterprises and drugs for epidemic prevention and control in Shaanxi Province.

Management Discussion and Analysis

Energair® Breezhaler® (indacaterol acetate, glycopyrronium bromide and mometasone furoate powder for inhalation II) and Atecura® Breezhaler® (indacaterol acetate and mometasone furoate powder for inhalation II, III):

Energair® Breezhaler® is the first triple combination inhalation preparation for asthma indications approved in China for the maintenance treatment of asthma in adults not adequately controlled with the maintenance combination treatment of long-acting beta2-adrenergic agonist (LABA) and inhaled corticosteroid (ICS). The product has clear efficacy, is convenient to use, and has achieved breakthroughs in three aspects: (1) using an optimized drug combination of ICS, LABA and long-acting muscarinic receptor antagonist (LAMA) (i.e. mometasone furoate/indacaterol acetate/glycopyrronium bromide), the three effective ingredients can provide synergy benefit, and compared with the conventional high dose ICS-LABA and high dose ICS-LABA combined with LAMA opened triple combination, Energair® Breezhaler® can effectively improve the clinical symptoms and lung function of patients with moderate to severe asthma, and significantly reduce the risk of acute attacks; (2) dosing once a day, which significantly facilitates the patient and is expected to improve the compliance; (3) using the advanced Breezhaler® inhalation device, which is easy to operate, and provides patients with triple confirmation of dosing as audible, tasteable, and visible, enhancing patients' confidence that the complete dose has been taken. The ARGON phase III clinical study of the product shows that, compared with high dose Salmeterol-Fluticasone powder for inhalation combined with Tiotropium Bromide Spray opened triple combination, Energair® Breezhaler® significantly reduce the annualized rate of moderate exacerbations (based on 24 weeks data) by 43%. Atecura® Breezhaler® is an innovative combination of ICS mometasone furoate and LABA indacaterol acetate for the maintenance treatment of adult and 12 years old above adolescent patients with asthma. Atecura® Breezhaler® also has the characteristics including "visible and controllable, precise inhalation, once a day" etc. It can significantly improve the lung function of patients and reduce the risk of acute attacks, and is a new choice for optimal treatment of asthma patients. The phase III clinical study of the product shows that, compared with the conventional high dose Salmeterol-Fluticasone powder for inhalation, Atecura® Breezhaler® can significantly improve the risk of acute attack in patients, and the risk of severe, moderately severe and all acute attack categories is reduced by approximately 26%, 22% and 19% respectively. Both products were officially included in the category-B medicines management scope in China's National Reimbursement Drug List for Basic Medical Insurance, Work-Related Injury Insurance and Maternity Insurance (2022 version) (《國家基本醫療保險、工傷保險和生育保險藥品目錄(2022年版)》), and provide new treatment method for people receiving long-term asthma treatment.



Nuo Tong:

It is a nasal decongestant to relieve nasal congestion, and is suitable for relieving nasal congestion caused by acute and chronic rhinitis, sinusitis, allergic rhinitis, hypertrophic rhinitis and other nasal disorders. It does not contain hormones or ephedrine and is suitable for both adults and children. Nuo Tong is divided into two dosage forms: nasal drops and nasal spray, of which the nasal spray is the exclusive domestic dosage form and is the leading product among its generic counterparts. The product has been included in clinical guidelines such as Guidelines for the Diagnosis and Treatment of Allergic Rhinitis in China (Revised Edition 2022) (《中國變應性鼻炎診斷和治療指南(二零二二年·修訂版)》), Guidelines for the Diagnosis and Treatment of Allergic Rhinitis in Children (Revised Edition 2022) (《兒童變應性鼻炎診斷和治療指南(二零二二年·修訂版)》), Recommendations for the Diagnosis and Treatment of Sinusitis in Children (《兒童鼻—鼻竇診斷和治療建議》) and Guidelines for the Home Treatment of Novel Coronavirus Patients (《新冠病毒感染者居家治療指南》) issued by the Joint Prevention and Control Mechanism of the State Council.

Management Discussion and Analysis

Li Mei Song:

It is a non-steroidal anti-inflammatory drug with anti-inflammatory, analgesic and antipyretic effects, and is suitable for the treatment for pain of chronic arthritis (e.g. osteoarthritis), pain after surgery and acute trauma, and symptoms treatment of primary dysmenorrhea. Li Mei Song is a product on the National Reimbursement Drug List and is the only product in China that has passed the consistency evaluation of Nimesulide. It was included in various expert consensus and clinical guidelines such as the Chinese Expert Consensus on the Use of Drugs in Super-drug Labels for Rheumatoid Arthritis (2022 Edition) (《類風濕關節炎超藥品說明書用藥中國專家共識(2022版)》), Expert Consensus on Clinical Pharmacotherapy of Osteoarthritis (《骨關節炎臨床藥物治療專家共識》), Expert Consensus on the Diagnosis and Pain Management of Acute Closed Soft Tissue Injury (《急性閉合性軟組織損傷診療與疼痛管理專家共識》) and Anhui Province Guidelines for the Hierarchical Diagnosis and Treatment of Upper Respiratory Tract Infections (2017 Edition) (《安徽省上呼吸道感染分級診療指南(2017版)》). In the symptomatic treatment of COVID-19, Li Mei Song has significant efficacy. A recent study published in "The Lancet" on novel coronavirus drugs showed that oral Nimesulide was more effective in controlling pain and had fewer gastrointestinal side effects when compared to oral ibuprofen.

Antiviral Oral-Liquid:

Antiviral Oral-Liquid, used for wind-heat colds, influenza, is the only product which has sugar free specification that is produced and sold among the TOP10 brands of antiviral oral-liquid market share in retail channels in China. The product was included in 2017, 2019, 2021 and 2022 Edition of China's National Reimbursement Drug List, and was recommended in the Guidelines for the diagnosis and treatment of hand, foot, and mouth disease (2010 Edition) of Ministry of Health of China. It was included in the Expert Consensus on Clinical Application of Antiviral Oral-Liquid in the Treatment of Influenza* (《抗病毒口服液治療流感臨床應用專家共識》) formulated by the expert group related to traditional Chinese medicines in 2020; and was included in the Expert Consensus on the Prevention and Treatment of COVID-19 with Proprietary Chinese Medicines* (《中成藥防治新型冠状病毒肺炎專家共識》) and the Catalogue of Drugs for People Infected with the Novel Coronavirus (《新冠病毒感染者用藥目錄》) issued by the Beijing Municipal Health Commission in 2022.

Innovative R&D pipeline

Based on unmet clinical needs, the Group has reserved five global innovative drugs for the indications of seasonal allergic rhinitis, sepsis, ARDS, COVID-19 and parainfluenza.

Ryaltris, a new compound nasal spray for the treatment of seasonal allergic rhinitis:

Ryaltris is a new glucocorticoid and antihistamine compound nasal spray. Currently, the product has been approved for commercialization in the United States, Australia, South Korea, Russia, the United Kingdom, the European Union as well as other countries and regions. In terms of registration in China, it was approved to commence a phase III clinical trial for the treatment of allergic rhinitis and rhinoconjunctivitis symptoms in patients aged 12 and above in October 2021, in which the first patient was enrolled in April 2022. At present, the clinical trial is progressing smoothly.



GS221, an oral small-molecule 3CL protease inhibitor against novel coronavirus (SARS-CoV-2) infection:

GS221 is an oral small-molecule 3CL protease inhibitor against novel coronavirus infection developed by the Group with independent intellectual property rights. Preclinical studies showed that GS221 exhibits effective inhibition of SARS-CoV-2 and its various variant strains, and animal studies and phase I clinical trials showed a high level of product safety. Compared with other similar oral products against SARS-CoV-2 infection, GS221 shows better metabolic stability and bioavailability. In September 2022, GS221 received the Notice of Approval for Clinical Trial issued by NMPA and three corresponding clinical trial studies were promptly initiated. The results of the currently completed clinical trials showed a high level of post-drug safety and tolerability in subjects, with no adverse events that are material in nature or required discontinuation of medication being observed. The results also showed tendency of improved clinical symptoms, shorter time for negative result in nucleic acid test, and faster viral load reduction, suggesting the potential clinical benefits of GS221 for patients. It is expected that GS221 and STC3141 are able to cover the treatments for patients with mild, moderate and severe case of COVID-19, providing additional therapeutic services to patients with unmet clinical needs.

Management Discussion and Analysis

STC3141, a global innovative drug for the treatment of severe diseases:

STC3141 is a small molecule compound with a novel mechanism of action independently developed by the Group, which can be used to reverse organ damage caused by excessive immune responses by neutralizing extracellular free histones and neutrophil traps and is applicable to multiple severe disease indications. STC3141 is currently in three clinical studies worldwide. Among which, the phase Ib clinical study for the treatment of patients with ARDS received clinical approval in China in early March 2021, which has successfully reached clinical endpoint in October 2022. According to the study results, no potential safety issues that are material in nature or unintended consequences were shown in the overall safety profile, suggesting a high level of safety and tolerability. Compared to standard treatments, STC3141 showed positive signs in terms of mitigating the severity of ARDS, improving the prognosis of ARDS patients, helping ARDS patients off the ventilator and reducing the length of ICU stay among other indicators. The phase IIa clinical trial for the treatment of severe COVID-19 received clinical approval in Belgium, Poland and the United Kingdom from April to October 2021, respectively, and all clinical studies have been currently completed. The results of the study showed that the study of STC3141 for the treatment of severe COVID-19 has achieved the primary endpoint pre-set by the clinical program, with no serious drug-related adverse reactions found and showing a high level of tolerability in patients. The phase Ib clinical study for the treatment of sepsis received clinical approval in Australia and Belgium in May 2020 and April 2022, respectively. The study completed full patient enrollment and started administration in February 2023, and a clinical study report is expected to be released in the second quarter of 2023.

APAD, a global innovative drug for the treatment of sepsis:

APAD is a small molecule compound with a novel mechanism of action independently developed by the Group, which can antagonize a variety of pathogen-related molecules. The preclinical trial data showed that it can play a therapeutic role in sepsis caused by both bacterial and viral infections, and it is complementary to STC3141's mechanism of antagonizing the body's excessive immune response to treat sepsis, which can form a good synergy in the treatment of severe diseases such as sepsis. Currently, the IND application for the product was submitted and accepted by the NMPA in January 2023.

GPN00085, a global innovative parainfluenza drug:

GPN00085 is the world's first small molecule compound based on a protein structure that binds the hemagglutinin-neuraminidase (HN) protein that covers the parainfluenza virus and stops the virus from entering the host cell for replication, inhibits the release of progeny virus from infected cells and reduces the number of parainfluenza virus particles with the aim of alleviating the symptoms of infection, inhibiting the further development of the disease and reducing the wider spread of the virus. It is jointly developed by the Group and Griffith University. Currently, it is at the preclinical development stage.

Cerebro-cardiovascular Emergency Segment

The Group is listed as a "national essential drug production base", an "emergency medicines manufacturer for national ready reserve" and a "national centralized production base and construction unit for minority-variety medicines (drugs in short supply)", etc. with a total of 24 varieties, 14 of which are included in the national emergency drugs catalogue covering 6 major categories, while 16 of which are included in the shortage drugs catalogue covering 6 major categories, which has ranked the top in the industry in terms of product pipeline. The Group's first generic product, epinephrine hydrochloride injection (pre-filled), was approved for commercialization in July 2022. Compared with the epinephrine products packaged in ampoules commercialized in China, the Group's pre-filled product has various features including convenient for operation, accurate medication, avoiding glass chips, and reducing secondary pollution. While optimizing the quality of the product, it can save valuable rescue time for the patients to a great extent. Currently, there are more than 20 products under research in the field of cerebro-cardiovascular emergency. Among which, Jext®, a pre-filled epinephrine auto-injector, can be used for self or family or social treatment for severe allergic reactions, filling the gap in China, and in January 2023, the product has been granted approval for Guangdong-Hong Kong-Macao Greater Bay Area Imported Pharmaceuticals for Urgent Clinical Needs in Mainland China. In the future, the Group will continue to focus on the three major emergency scenarios, namely in-hospital emergency, pre-hospital emergency and social emergency, and allocate and develop emergency products that are in urgent clinical need.

Management Discussion and Analysis

Cerebro-cardiovascular emergency products

The products mainly cover the fields of platelet inhibitors, blood pressure control, and vascular active drugs. The main products include Li Shu An (norepinephrine bitartrate injection, epinephrine hydrochloride injection), Xin Wei Ning (tirofiban hydrochloride and sodium chloride injection), Nuo Fu Kang (methoxamine hydrochloride injection), Neng Qi Lang (coenzyme Q10 tablets), Rui An Ji (fructose sodium diphosphate oral solution) and deslanoside injection, etc.

Li Shu An, the norepinephrine bitartrate injection and epinephrine hydrochloride injection:

It is used for blood pressure control in acute low blood pressure state, and can also be used for blood pressure maintenance after the resuscitation from cardiac arrest. The epinephrine hydrochloride injection is suitable for severe respiratory difficulties caused by bronchospasm, which can quickly relieve the allergic shock caused by drugs, and is a major rescue medication for cardiopulmonary resuscitation of cardiac arrest caused by various reasons. Both products are included in the National Reimbursement Drug List and the National Essential Drug List, and the norepinephrine bitartrate injection passed the consistency evaluation for the first time in China in 2021. As important emergency medicines, the two products are recommended by a number of guidelines and expert consensus, such as the Expert Consensus on the Application of Vasopressors in Emergency Shock (2021) (《血管加壓藥物在急診休克中的應用專家共識(2021)》), the Consensus of Chinese Emergency Medicine Experts on Diagnosis and Treatment of Post-Adult Cardiac Arrest Syndrome (2021) (《成人心臟驟停後綜合症診斷和治療中國急診專家共識(2021)》), the Expert Consensus on Perioperative Management of Elderly Septic Patients (2021) (《老年膿毒症患者圍術期管理專家共識(2021)》), the European Academy of Allergy and Clinical Immunology Guidelines: Guidelines for Anaphylaxis (2021) (《歐洲變態反應與臨床免疫學會指南：嚴重過敏反應指南(2021版)》), European Resuscitation Council Guidelines (2021) (《歐洲復蘇學會指南(2021)》), the Guidelines for the Treatment of Sepsis/Septic Shock in Emergency in China (2018) (《中國膿毒症/膿毒性休克急診治療指南(2018)》), the Expert Consensus on Diagnosis and Treatment of Cardiogenic Shock in China (2018) (《心源性休克診斷和治療中國專家共識(2018)》), the Consensus of Chinese Emergency Medicine Experts on Diagnosis and Treatment of Traumatic Hemorrhagic Shock in China (2017) (《創傷失血性休克診治中國急診專家共識(2017)》), the Guidelines for Diagnosis and Treatment of ESC Urgent and Chronic Heart Failure in 2016 (《2016 ESC急、慢性心力衰竭診斷和治療指南》), and the Guidelines for Rational Use of Medication for Heart Failure (2nd Edition) (《心力衰竭合理用藥指南(第2版)》), and the clinical status of the products is remarkable.

Epinephrine hydrochloride injection (pre-filled):

In July 2022, the “epinephrine hydrochloride injection (pre-filled)” independently developed by the Group was approved for commercialization. As a Class 3 chemical drug, this product is currently the first epinephrine pre-filled preparation being commercialized in China. At present, all the epinephrine products for commercialization in China are packaged in ampoule bottles and are required to be prepared on site for use, resulting in wastage of drug solution and inevitable generation of glass chips and causing the risk of secondary contamination. The Group’s pre-filled packaging products do not need to be prepared and can be used directly, with the characteristics of convenient operation, accurate medication, avoiding the generation of glass chips, and reducing secondary contamination. While optimizing the quality of the products, it can maximize the precious rescue time for patients and provide a more efficient product portfolio for doctors and patients to cope with more complex clinical emergency scenarios.

Management Discussion and Analysis

Nuo Fu Kang, the methoxamine hydrochloride injection:

It is used for the treatment of low blood pressure during general anesthesia and to prevent the occurrence of abnormal heart rate, to treat low blood pressure induced by the internal obstruction of the vertebral tube and to terminate arrays of ventricular hyperactivity. The product is the first generic drug of the Group in China and has been commercialized for more than 30 years. It has been recommended for use by guidelines and expert consensus, including the Guiding Opinions on the Management of Peripheral Anesthesia in Chinese Geriatric Patients (2014/2017/2020) (《中國老年患者圍術期麻醉管理指導意見(2014/2017/2020)》), the Expert Consensus on Anesthesia Management for Cranial Brain Disease Intervention in China (2016) (《中國顱腦疾病介入治療麻醉管理專家共識(2016)》), the Expert Consensus on Perioperative Use of $\alpha 1$ Adrenergic Receptor Agonists (2017 Edition) (《 $\alpha 1$ 腎上腺素能受體激動劑圍術期應用專家共識(2017版)》), the Expert Consensus on Obstetric Anesthesia in China (2018/2020) (《中國產科麻醉專家共識(2018/2020)》), and the Consensus on the Clinical Management of Chinese Experts in the Peripheral Anesthesia Period of Non-cardiac Surgery in Patients with Cardiac Disease (2020) (《心臟病患者非心臟手術圍麻醉期中國專家臨床管理共識(2020年)》).

Neng Qi Lang, the coenzyme Q10 tablets:

It is used to improve myocardial metabolism and energy supply, with the function of promoting oxidization phosphorylation reaction and protecting structural integrity of biological membranes. For patients with chronic cardiac insufficiency, it can significantly improve the symptoms of shortness of breath and fatigue, effectively combine with regular treatment to accelerate the prognosis of patients, and improve their quality of life. For the reduction of coenzyme Q10 synthesis in patients with statin, exogenous and effective supplementation can be achieved to relieve side effects such as muscle pain, and bring better compliance to patients with statin. For the high incidence of cardiotoxicity caused by cancer radiotherapy drugs, Neng Qi Lang can effectively carry out anti-oxidation, relieve the damage and protect the heart. The product has been commercialized for more than 30 years and has been successively included in 20 guidelines and expert consensus, including the Chinese Expert Consensus on the Clinical Application of Drugs to Improve Myocardial Metabolism (2021) (《改善心肌代謝藥物臨床應用中國專家共識(2021)》), the Chinese Expert Consensus on Diagnosis and Treatment of Chronic Heart Failure for the Elderly (2021) (《老年人慢性心力衰竭診治中國專家共識(2021)》), the 2020 Expert Consensus on Prevention and Treatment of Heart Failure after Myocardial Infarction (《2020心肌梗死後心力衰竭防治專家共識》), the Diagnosis and Treatment Advice for Children's Heart Failure (《兒童心力衰竭診斷和治療建議》) and the Expert Advice on the Clinical Management of Myocardial Injury in relation to COVID-19 (《新型冠狀病毒肺炎相關心肌損傷的臨床管理專家建議》).

Rui An Ji, the fructose sodium diphosphate oral solution:

It is mainly used for the treatment of angina pectoris of coronary heart disease, acute myocardial infarction, arrhythmia and myocardial ischemia in heart failure, and viral myocarditis. It is also used for brain ischemic symptoms caused by cerebral infarction and cerebral hemorrhage, and was included in a number of guidelines and expert consensus, such as the Diagnosis and Treatment Suggestions for Children's Heart Failure (2020 Revision) (《兒童心力衰竭診斷和治療建議(2020年修訂版)》), Expert Consensus on Interventional Treatment of Common Congenital Heart Diseases in Children (《兒童常見先天性心臟病介入治療專家共識》), the National Expert Consensus on Prevention and Treatment of Burst and Shock (2020 Edition) (《燒傷休克防治全國專家共識(2020版)》), the Expert Recommendations for the Management of Novel Coronavirus Pneumonia Comorbidity (2020) (《新型冠狀病毒肺炎合併症處置專家建議(2020)》) and the National Prescription Set in China (《中國國家處方集》).

Xin Wei Ning, the tirofiban hydrochloride and sodium chloride injection:

It is the first commercialized platelet surface glycoprotein GP II b/IIIa receptor antagonist in China and the first commercialized intravenous antiplatelet drug in China, which was included in the National Reimbursement Drug List in 2009.

Management Discussion and Analysis

Deslanoside injection:

It is mainly used in patients with acute cardiac insufficiency or acute exacerbation of chronic cardiac insufficiency, and also used to control ventricular rate in patients with atrial fibrillation and atrial flutter with rapid ventricular rate. It was included in a number of guidelines and expert consensus, such as Guideline for Emergency Management of Acute Heart Failure in China (2022) (《急性心力衰竭中國急診管理指南(2022)》), the China Heart Failure Diagnosis and Treatment Guidelines 2018 (《中國心力衰竭診斷和治療指南2018》), the 2020 China Heart Failure Medical Quality Control Report (《2020中國心力衰竭醫療品質控制報告》), the 2021 European Society of Cardiology Guidelines for Acute Heart Failure (《2021歐洲心臟病學會急性心力衰竭指南》) and the Heart Failure Rational Drug Use Guidelines (2nd Edition) (《心力衰竭合理用藥指南(第2版)》).

Innovative R&D pipeline

GPN00816, Jext® pre-filled epinephrine auto-injector:

GPN00816 is a one-off automatic syringe embedded with the sterile solution of epinephrine. By injecting single-dose epinephrine to the outside of the leg muscle (muscle injection), the product can urgently treat sudden and life-threatening anaphylaxis caused by insect bites, food, drugs or exercise. The product has been approved for commercialization in 21 countries or regions such as Spain, the United Kingdom, France, Germany, Korea and Hong Kong, China, etc., and has been launched worldwide for more than 10 years. Its safety and efficacy have been fully verified. At present, the product has been granted approval for Guangdong-Hong Kong-Macao Greater Bay Area Imported Pharmaceuticals for Urgent Clinical Needs in Mainland China in January 2023, and patients can purchase the product in designated medical institutions in the Guangdong-Hong Kong-Macao Greater Bay Area (“**Greater Bay Area**”) of China.



Tumor Segment

In the field of tumor immunotherapy, with mRNA technology as the core, the Group focuses on the development of anti-tumor and anti-infection mRNA drugs. Currently, the Group has completed the establishment of mRNA production technology and LNP delivery technology platform and has carried out scientific cooperation with a number of renowned universities and scientific research institutions. A002, a global innovative mRNA immunotherapeutic product for HPV-positive head and neck cancer is being developed on the platform. The use of the exclusive TriMix mRNA vaccine technology is expected to increase the response rate of tumor patients and improve their clinical prognosis by triggering an adoptive immune response in the body in combination with existing tumor immune checkpoint inhibitor.

NUCLEAR MEDICINE ANTI-TUMOR DIAGNOSIS AND TREATMENT AS WELL AS CEREBRO-CARDIOVASCULAR PRECISION INTERVENTIONAL DIAGNOSIS AND TREATMENT TECHNOLOGY

By fully capitalizing “accurate and stable business development capabilities at home and abroad, the introduction and digestion of international leading technologies, excellent marketing and sales capabilities”, the Group is aiming at the frontier areas of technological innovation and focusing on the layout of the “nuclear medicine anti-tumor diagnosis and treatment” and “cerebro-cardiovascular precision interventional diagnosis and treatment” segments. It has become a leading enterprise in nuclear medicine anti-tumor diagnosis and treatment in China, and a comprehensive cerebro-cardiovascular precision interventional diagnosis and treatment technology platform with international cutting-edge technologies.

Management Discussion and Analysis

Nuclear Medicine Anti-tumor Diagnosis and Treatment Segment

In the nuclear medicine anti-tumor diagnosis and treatment segment, the Group has achieved a comprehensive layout in the fields of R&D, production, sales, regulatory qualifications and established a complete industrial chain. The Group has obtained a series of domestic licenses for the production and operation of radiopharmaceuticals, including the license for the production of radiopharmaceuticals, the license for the operation of radiopharmaceuticals and the license for the safety of radiation, with steady progress of commercialization in China. At the same time, the Group also participated in the formulation of the Technical Guidelines for Clinical Evaluation of Radioactive Therapeutic Drugs (《放射性體內治療藥物臨床評價技術指導原則》) and other regulatory documents to promote the healthy development of the nuclear medicine industry in China.

The nuclear medicine anti-tumor diagnosis and treatment segment is one of the most globalized segments of the Group. Currently, it has more than 400 employees, with over 40% of them holding master's degree and doctoral degree. The Group, together with Sirtex Medical Pty Limited (“**Sirtex**”), cooperated with Telix Pharmaceutical Limited (“**Telix**”) and ITM Isotope Technologies Muncich SE (“**ITM**”) to establish a world-class tumor intervention technology platform and a RDC technology platform. The Group adheres to the treatment concept of integrated oncology diagnosis and treatment. Currently, the Group has 13 innovative products in the pipeline, covering six radionuclides including ^{68}Ga , ^{177}Lu , ^{131}I , ^{90}Y , ^{89}Zr and $^{99\text{m}}\text{Tc}$ as well as eight cancers including liver cancer, prostate cancer and brain cancer. In terms of product types, it covers two types of radionuclide drugs for diagnosis and therapy, providing patients with global leading anti-tumor solutions with multi-indication treatment options, multi-means and integrated diagnosis and treatment. At the same time, the Group and Shandong University jointly established Grand Pharma — Shandong University Radiopharmaceutical Research Institute (遠大醫藥 — 山東大學放射藥物研究院) to jointly carry out the R&D of RDC drugs on the basis of radionuclide research by the Laboratory Nuclear Medicine Research Institute (實驗核醫學研究所) of Shandong University.

With the continuous expansion of the product pipeline, the registration and application of innovative products in China is also progressing smoothly. In 2022, Yttrium-90 microsphere injections has been commercialized successfully, two diagnostic RDC have been approved for clinical trials, and two therapeutic RDC clinical applications have been accepted. The Group has been advancing the construction of Class A qualification nuclide production platform in an orderly manner. In the future, the Group will continue to strengthen the R&D and investment in the nuclear medicine anti-tumor diagnosis and treatment segment, enrich and improve the product pipeline and industrial layout, strive for ten nuclide products to enter the clinical stage within the next three years, realize the pipeline layout of more than twenty-five nuclear medicine anti-tumor diagnosis and treatment products, form a nuclear medicine anti-tumor diagnosis and treatment product cluster with the core of Yttrium-90 microsphere injections, continuously consolidating the Group's global leading position in the field of nuclear medicine anti-tumor diagnosis and treatment.

Core products

Yttrium-90 microsphere injections, the global innovative product:

The Group's global blockbuster innovative product, Yttrium-90 microsphere injections, is the only product in the world for selective internal radiation therapy (SIRT) for colorectal cancer liver metastases. It has been used by more than 150,000 people in over 50 countries and regions around the world. It is also recommended by the treatment guidelines issued by different international authoritative organizations such as National Comprehensive Cancer Network (NCCN), European Society for Medical Oncology (ESMO), European Association for the Study of the Liver (EASL), National Institute for Health and Care Excellence (NICE), etc. and has been included in several authoritative clinical practice guidelines in China, including the “2022 CSCO Guidelines for Diagnosis and Treatment of Primary Liver Cancer” (《二零二二年CSCO原發性肝癌診療指南》), the “Guidelines for Diagnosis and Treatment of Primary Liver Cancer (2022 edition)” (《原發性肝癌診療指南(2022版)》), “Chinese Guidelines for Diagnosis and Comprehensive Treatment of Colorectal Cancer Liver Metastases (2018 edition)” (《中國結直腸癌肝轉移診斷和綜合治療指南(2018版)》), “Clinical Practice Guidelines for Liver Cancer and Liver Transplantation in China (2018 edition)” (《中國肝癌肝移植臨床實踐指南(2018版)》), etc.



Management Discussion and Analysis

In January 2022, the Group received the approval from the NMPA for commercialization of Yttrium-90 microsphere injections, for the treatment of patients with unresectable colorectal liver metastases who have failed standard of care. The product will provide a new and effective treatment modality for patients with liver malignancies in China, offering the opportunity for translational therapy and further surgical resection to achieve clinical cure, bridging the gap in the local treatment of liver metastases from colorectal cancer, improving the long-term treatment outcome of the Chinese patient population with liver cancer, and marking the arrival of a new international precision interventional treatment option in the field of liver malignancies in China.

Based on the huge number of patients with liver cancer, the clinical demand in the field of liver cancer in China is strong, and the commercialization of Yttrium-90 microsphere injections provides an effective weapon for the multi-disciplinary treatment of liver cancer patients in China. Given that the barriers and innovation of this product, the understanding of the management procedures of this product by the clinical regulatory administration in China is gradually thorough. With a highly responsible attitude toward patients, and based on the surgeon supervision and training system approved by China NMPA and U.S. Food and Drug Administration ("FDA"), the Group concentrated global resources to provide comprehensive training to surgeons in China on patient screening knowledge, surgical operation skills, and prognosis assessment methods, helping doctors to master and accumulate clinical experience to ensure a wider, safe and effective applications of the product. With the gradual increase in the number of doctors who have obtained the independent surgical qualifications for Yttrium-90 microsphere injections, the Group is confident to build up such product to be a blockbuster product in the field of liver cancer in China.

In September 2021, relying on the overseas commercialized medical device pilot policy of Boao Lecheng International Medical Tourism Pilot Zone of Hainan Free Trade Port, the Group has successfully carried out the clinical treatment of patients with liver cancer with the licensed access of Yttrium-90 microsphere injections in Boao Super Hospital in Hainan.

In May 2022, Yttrium-90 microsphere injections was officially commercialized in China. The treatment of liver malignancies in China has entered a new "Y-90 era". Since the official commercialization of YiGanTai®, more than 50 hospitals have completed the nuclide transfer procedures, its official surgeries have been carried out in more than 30 hospitals in 17 provinces and cities in China, while 8 surgery, treatment and training centers have been established. The follow-up results showed that the overall response of patients who take YiGanTai® surgery was satisfactory, and most patients achieved favorable clinical therapeutic effect and prolonged survival. As at the date of this announcement, 5 patients have successfully achieved liver cancer tumor downstaging transform and took liver cancer resection, achieving clinical cure. Among patients who could be followed up for 3 months or more, the objective response rate of YiGanTai® for liver cancer was over 50%, and more than half of the patients had achieved tumor size remission. Among them, the symptoms of 5 patients were completely relieved with no resection required, and the disease control rate of the follow-up patients exceeded 95%, showing a remarkable therapeutic effect.

In June 2022, the Group held a commercialization conference for Yttrium-90 microsphere injections in China, gathering a total of 7 academicians from the Chinese Academy of Engineering and the Chinese Academy of Sciences, 30 experts at committee chairperson level to participate 9 conference venues in person, and 500 professors of oncology medicine, interventional medicine, nuclear medicine, surgery and imaging from leading tertiary hospitals in China to attend the meeting. The experts and scholars highly anticipated that Yttrium-90 microsphere injections can be widely used in liver cancer patients in China and achieve clear and significant efficacy. In order to speed up the implementation and popularization of YiGanTai® microsphere injections precise interventional therapy in China, the Group relied on the high-quality reputation and practical experience accumulated overseas for the product over the years, assisted domestic doctors in conducting multiple personalized practical trainings by well-known overseas clinical experts. At present, the Group has trained more than 300 doctors in 70 hospitals on the surgery theory or skills of YiGanTai®, nearly 20 experts have obtained the operation qualification of independent surgery through strict one-to-one training by overseas experts, and many of them will soon obtain the qualification of training instructor, which will further accelerate the clinical popularization of YiGanTai® radioactive interventional operation.

Management Discussion and Analysis

Since June 2022, Yttrium-90 microsphere injection has been included in the inclusive insurance such as Shanghai Hu Hui Bao (上海滬惠保), Nanjing Ning Hui Bao (南京寧惠保), Jiangsu Yi Hui Bao (江蘇醫惠保) and Hainan Le Cheng Special Medical Insurance (樂城特藥險), as well as the global medical device insurances of Taiping Life Insurance Co., Ltd., etc, which covers 11 provinces and 33 cities with a significant increase in the accessibility of such product to patients with liver cancer. In 2023, after the PRC government's adjustment on pandemic prevention and control policies, which lead to a gradual recovery in the volume of tumor diagnosis, treatment and surgery, more and more outpatients have been enquiring about YiGanTai® treatment, and a number of hospitals have opened YiGanTai® specialized clinics to meet patients' needs. YiGanTai® treatment is expected to achieve a persistent and rapid growth.

Yttrium-90 microsphere injection recorded approximately HK\$60.26 million revenue since it was approved for commercialization during the Year.

Innovative R&D pipeline

The products of the nuclear medicine anti-tumor diagnosis and treatment segment are mainly divided into two categories: interventional therapy and RDC.

Interventional therapy:

Yttrium-90 microsphere injections:

Clinical trial of Yttrium-90 microsphere injections on the treatment of primary liver cancer is progressing smoothly in the United States. A real-world study for the treatment of primary liver malignancies in China is expected to commence in 2023.

GPN00289, a global innovative temperature sensitive embolic agent:

GPN00289 is an NMPA innovative medical device approved temperature sensitive embolic material for the treatment of vascular-rich benign and malignant tumors. At room temperature, the gel has good flowability and is delivered to the vasculature of the diseased tissue through a microcatheter. The gel is then solidified in situ at body temperature from the peripheral vessels to the main donor vessel to achieve embolization of the diseased tissue. It is suitable for the embolization of various vascular-rich solid organ tumors, especially benign and moderate malignant tumors in the liver. The product is currently in preclinical development.

Lava™, a global innovative liquid embolic agent:

Lava™ is a peripheral vascular fluid embolization system that is opaque under imaging rays, less prone to artifacts and can be prepared quickly and easily in 3 minutes, saving doctors' preparation time in emergency situations and increasing the probability of patient survival. Currently, the overseas development of the product is progressing smoothly and it is expected to be approved for commercialization in the United States in 2023.

AuroLase®, a global innovative solid tumor ablation therapy:

AuroLase® is a global innovative therapeutic technology for solid tumor ablation that uses a new type of optically tunable nanoparticle, delivered intravenously and enriched in the tumor, to selectively absorb laser energy and convert light into heat, thereby precisely destroying the tumor and the blood vessels supplying it without severely damaging the surrounding healthy tissue. AuroLase® for prostate cancer tissue ablation is expected to be the world's first and currently the only ultra-precise focal therapy that maximizes treatment outcomes while minimizing the side effects associated with surgery, radiation and alternative focal therapies compared to surgery, radiation or traditional alternative focal therapies. Currently, the overseas development of the product is progressing smoothly and the application for commercialization in the United States is expected to be submitted in the first half of 2023.

RDC drugs:

There are currently 9 product candidates under research and a number of products have made important progress during the period.

Management Discussion and Analysis

TLX591/TLX591CDx/TLX599CDx, global innovative products for prostate cancer diagnosis and treatment:

TLX591 is a therapeutic RDC drug targeting prostate-specific membrane antigen (PSMA), while TLX591-CDx and TLX599-CDx are companion diagnostic agents to TLX591, forming an integrated radiotherapy portfolio for prostate cancer. TLX591-CDx was approved for commercialization in Australia in November 2021 and in the United States in December of the same year, and was granted a special license in Brazil for pre-approval sales. At the same time, the applications for the commercialization of TLX591-CDx have also been submitted in 17 countries. In clinical studies, a phase I trial of TLX591-CDx was completed in Japan in February 2022 with 10 subjects. The results of the study showed that TLX591-CDx was safe and well tolerated, with no serious adverse events observed in any of the subjects, and systemic and organ-specific radiation dose measurements and pharmacokinetic data showed no significant differences between Japanese and Western populations. In October 2022, TLX591-CDx was approved by the NMPA for clinical bridging study. The overseas clinical studies of other products are also progressing smoothly, while the implementation in China is also progressing as planned.

TLX250/TLX250CDx, global innovative products for the treatment of clear cell renal cell carcinoma (“ccRCC”):

TLX250 and TLX250-CDx form an integrated radiotherapy portfolio for clear cell renal cell carcinoma (ccRCC). TLX250-CDx was granted a breakthrough therapy by the FDA in July 2020, and the overseas phase III clinical study successfully met clinical endpoints in November 2022. According to the study results, for the patients with renal masses suggested by computerized tomography (CT) or magnetic resonance imaging (MRI) but unable to determine whether it is ccRCC, the sensitivity and specificity of positron emission tomography (PET) imaging with TLX250-CDx in the diagnosis of ccRCC reached 86% and 87% respectively, which far exceeded the preset threshold required by the FDA (both sensitivity and specificity higher than or equal to 70%). Its positive predictive value has reached 93%. For early ccRCC in stage T1a, which is currently difficult to diagnose (the tumor is confined to the kidney with the largest tumor diameter smaller than or equal to 4 cm), the sensitivity and specificity of TLX250-CDx diagnosis reached 85% and 89% respectively. These breakthrough clinical results demonstrate that TLX250-CDx is expected to provide a highly accurate and non-invasive diagnostic solution for ccRCC, and has the potential to become a new clinical diagnostic standard for ccRCC. Moreover, clinical studies of TLX250-CDx on a number of extended indications such as triple-negative breast cancer (TNBC), non-muscle invasive bladder cancer (NMIBC) and Urothelial carcinoma are progressing worldwide. In September 2022, TLX250-CDx was approved by the NMPA to conduct a phase I clinical trial and a confirmatory clinical trial. TLX250 is currently undergoing a phase II clinical study overseas, with registration in China actively underway.

ITM-11/TOCscan®, a global innovative product for the treatment of gastroenteropancreatic neuroendocrine tumors (“GEP-NETs”):

ITM-11 and TOCscan® form an integrated radiotherapy portfolio for GEP-NETs. ITM-11 has received an orphan drug status from FDA and European Medicines Agency (EMA) and is in phase III clinical studies overseas. For the registration in China, the IND application was submitted and accepted by the NMPA in February 2023. TOCscan® has been approved for commercialization in Germany, Austria and France in 2018. Currently, the registration of the product in China is under active progress.

TLX101, a global innovative product for glioblastoma treatment:

TLX101 is a radionuclide-small molecule conjugated therapeutic RDC drug for the treatment of glioblastoma multiforme. It can pass through the blood-brain barrier entering the brain freely, and targets the overexpressed L-type amino acid transporter 1 (LAT-1) in glioblastoma to precisely irradiate cancer cells, and promote their apoptosis to achieve therapeutic effect. The product has been granted orphan drug designation by the FDA and is currently in phase I/II clinical trials in Europe and Australia. In January 2023, the IND application for TLX101 was accepted by the NMPA.

ITM-41, a global innovative product for the treatment of bone metastasis in malignant tumors:

ITM-41 is a therapeutic RDC drug based on radionuclide conjugated technology that targets bone metastasis in malignant tumors by conjugating no-carrier-added ¹⁷⁷Lu with zoledronic acid. The product can precisely target hydroxyapatite at the metastasis site, inhibiting bone metastasis from malignant tumors while minimizing radiation to normal tissues, greatly improving patient survival and potentially further reducing skeletal-related events in patients with severe bone metastases. The product is currently in clinical phase I studies overseas and the registration in China is actively underway.

Management Discussion and Analysis

Cerebro-cardiovascular Precision Interventional Diagnosis and Treatment Segment

The Group adheres to the treatment concept of “interventional without implantation” and conducts comprehensive layout in three directions, namely channel management, structural heart disease, electrophysiology and heart failure, to build a high-end medical device product cluster. At present, the segment has reserved 16 products, of which 4 products in vascular intervention have been approved for commercialization in China, NOVASIGHT Hybrid has been submitted to the NMPA and accepted for commercial registration, and HeartLight X3 laser ablation platform has been submitted for commercial registration in China, while other products are also being actively promoted for clinical registration in China in order to achieve the stage-by-stage commercialization for innovative products in the coming years, driving the business in this segment to achieve leapfrog growth.

The Group has completed the comprehensive construction of the “active + passive” innovative device platform in this segment, and formed the R&D and production layout of two centers in China and multiple overseas bases. Among them, the Active Equipment R&D and Production Base in Optics Valley, Wuhan and the Passive Equipment R&D and Production Base in Changzhou have been put into use. The establishment of overseas R&D centers in Minnesota, the United States, and the construction of R&D bases in Germany, Canada, Italy, etc. are also progressing in an orderly manner. In the future, the Group will commence the construction of the Shanghai R&D Center, which will mainly focus on the innovation and R&D of structural heart disease product line, and is planning for the construction of the Beijing R&D Center, which will mainly focus on the research of the technology of biodegradable recycled materials platform, and gradually apply to the channel field of artificial blood vessels. At present, the Group has carried out technology cooperation with clinical centers or R&D platforms in the United States, Canada, Germany, Italy and Switzerland, and gradually started a new process of globalized R&D. The segment has over 200 employees and more than 50 R&D teams, with over 50% of them holding master’s degrees and doctoral degrees. With a comprehensive background in medicine, pharmacy, materials, machinery, electronics, etc., it helps to achieve stable and long-term development in R&D and innovation. The Group is committed to developing this segment into a leading “cerebro-cardiovascular precision interventional therapy platform” in China and worldwide.

Cerebro-cardiovascular precision intervention diagnosis and treatment products

The Group’s two drug-coating balloons for sale in China, namely RESTORE DEB® and APERTO® OTW adopt the unique patented SAFEPAX technology. Both drug coating products are stable with small decay rate. The products for sale have been recognized by clinical doctors and patients and good market reputation. In July and September 2022, the commercialization of the Group’s self-developed and self-produced innovative global neurointerventional products, including the OTW (Over The Wire) intracranial balloon dilatation catheter Cai Yu® (彩鸚鵡®), as well as the acute ischemic stroke treatment products, occlusion balloon catheter Ti Hu® (鵝鵝®), was approved for commercialization in China.

RESTORE DEB®, a coronary drug-coating balloon:

RESTORE DEB® is the first drug-coating balloon with the dual indications of original coronary artery disease mutation and stent restenosis in China. Its clinical research results were published in the important journal “JACC (Journal of the American College of Cardiology) Cardiovascular Interventions” in the field of cardiovascular disease, and its clinical status was also affirmed in the guidelines and expert consensus such as the Guidelines for Treatment of Percutaneous Coronary Intervention (中國經皮冠狀動脈介入治療指南) and the Chinese Expert Consensus on Clinical Application of Drug Coated Balloon (藥物塗層球囊臨床應用中國專家共識).



APERTO® OTW, a drug coated balloon for dialysis access:

APERTO® OTW is the first drug-coating balloon for the indication of arteriovenous fistula stenosis in dialysis patients. This product has the dual characteristics of high pressure resistance and drug coating. Compared with ordinary high pressure balloon, APERTO® OTW has a significant advantage in the passing rate of target lesions for six months after surgery, which will greatly contribute to the extension of the life time of fistula and the improvement of the quality of life of dialysis patients. Its clinical research results are published in American Journal of Kidney Diseases, an important journal in the field of kidney disease treatment.



Management Discussion and Analysis

Cai Yu® (彩鷗®), an intracranial balloon dilatation catheter:

Cai Yu® (彩鷗®) is the first OTW-designed intracranial balloon dilatation catheter in China, which is suitable for the interventional surgery for patients with non-acute symptom intracranial atherosclerotic stenosis (非急性期症狀性顱內動脈粥樣硬化性狹窄), and can deliver the balloon to the place with distal vascular lesion through guide wire during the surgery, carry out balloon dilatation, restore blood delivery, and thus improve blood flow and perfusion in blood vessels at the lesion. Cai Yu® (彩鷗®) intracranial balloon dilatation catheter has the properties of fast passing and accuracy, which provide high efficiency and convenience for clinical use. With a variety of specifications and unique designs, it provides better compatibility and precision for clinical use while meeting safety requirements.

Ti Hu® (鵝鵝®), an occlusion balloon catheter

Ti Hu® (鵝鵝®) is an occlusion balloon catheter developed by the Group for intracranial ischemic diseases. The main structure of this product consists of a balloon, an inner and outer tube and a catheter holder, wherein the balloon is coaxial. It is one of the products in the overall solution for acute ischemic stroke in the neurointerventional direction of our cardiovascular and cerebrovascular precision interventional diagnosis and treatment section. Ti Hu® (鵝鵝®) is suitable for temporary peripheral vascular or neurovascular occlusion, and can also selectively block or control blood flow. It can be delivered intraoperatively via a guidewire to the proximal vascular of the lesion to be occluded, and the catheter holder is then filled with fluid to dilate the balloon and block or control blood flow. Ti Hu® (鵝鵝®) has high balloon compliance, which allows for a better fit to the vessel wall to block blood flow and reduce embolic escape, striking a balance between safety and efficacy. It also has favorable device compatibility to meet a wide range of clinical options.

Innovative and R&D pipeline

Access management direction:

NOVASIGHT Hybrid, a global innovative intravascular diagnostic imaging device:

NOVASIGHT Hybrid combines intravascular ultrasound and optical coherence tomography and can simultaneously show the ultrasound and optical image with the same direction, axis and phase. It is also the first intravascular ultrasound and optical coherence tomography system approved by the FDA with promising prospect in the field of coronary artery imaging and intracavitary interventional surgery. The product has already been commercialized in the United States, Canada and Japan, and was enrolled in the special review approval process of innovative medical device in 2019 for registration in China. Clinical studies have been completed and the application for the commercialization of the product was accepted in June 2022 and it is expected to be approved for commercialization in China in the first half of 2023.



LEGFLOW® OTW, a global innovative drug-coated balloon:

LEGFLOW® OTW is a drug-coated balloon for the treatment of peripheral arterial stenosis by adopting SAFEPAX patented technology. The product has completed full patient enrollment for registered clinical study, and is expected to submit a commercial registration application in China in the second half of 2023.

IVL CAD/IAL PAD, a global innovative shock wave balloon:

IVL CAD/IAL PAD is an intravascular shock wave calcium treatment system for the treatment of moderate to severe arterial calcification. It utilizes a universal balloon dilatation catheter platform that integrates shock wave lithotripsy and balloon catheter angioplasty to deliver the catheter to the lumen of the lesion in an interventional manner. The shock wave destroys the calcified foci without causing damage to the soft tissues of the vessel wall/intima, reducing the complications of balloon dilatation and stenting. The product is highly versatile and is the latest generation of vascular calcification treatment. The product is currently in preclinical development stage.

Management Discussion and Analysis

LONG, a global innovative neurological stent retriever:

LONG is a stent retriever product against ischemic stroke. With reference of mature interventional technology and stent of coronary and peripheral, neurological stent retriever can extend an ischemic stroke patient's treatment window from 6 hours to 24 hours of drug treatment, becoming a new clinical method for the treatment of cerebral stroke. The product is progressing well and the patient enrollment for registered clinical study has been fully completed. Several other catheter products are already in the registration stage.

aXess, a global innovative endogenous tissue repair product:

aXess is a global innovative endogenous tissue repair product for end-stage renal disease (ESRD) patients with arteriovenous graft (AVGs) for hemodialysis treatment. The product is expected to provide a safer and more effective blood access for dialysis patients by providing a basic structural framework for autologous tissue repair of patients, accelerating the establishment of dialysis access, and reducing the incidence of thrombosis and related complications. aXess can further synergize with APERTO® OTW in the field of hemodialysis. The product is currently in preclinical development stage.

Structural heart disease direction:

Saturn, a global innovative mitral valve replacement system:

Saturn is a global innovative medical device for mitral valve replacement. The product is implanted in an interventional manner via a room septum to minimize surgical trauma and shorten post-operative recovery time, and innovatively combines annular reconstruction technology with valve replacement technology to enhance device adaptability and suitability for all common mitral valve structures. The product is currently in the preclinical development stage.

Electrophysiology and heart failure direction:

HeartLight X3, a global innovative laser ablation platform:

HeartLight X3 is a global innovative laser ablation product for the treatment of atrial fibrillation ("AF") approved by the FDA for commercialization in May 2020, and is the only product in the world that can achieve circumferential ablation of AF through laser. HeartLight X3 adopts direct tissue visualization, adjustable laser energy and compliant balloon technology to achieve precise and continuous energy delivery, taking into account the adjustable energy point-to-point precision ablation characteristics of traditional radiofrequency catheter ablation and the simplicity of cryoablation with short operation time and significantly reduced dependence on the operator, making it the latest generation of AF ablation technology platform. In February 2023, the first chartered-access laser ablation operation for atrial fibrillation in China was successfully completed with the product in Rujin-Hainan Hospital, introducing a new option with world-class precision to the field of atrial fibrillation treatment in China. Meanwhile, the HeartLight X3 laser ablation platform has submitted commercialization registration application.



CoRISMA, a global innovative ventricular assisted device:

CoRISMA is a fully implanted transcatheter ventricular assisted medical device for the treatment of class III and end-stage heart failure. By adopting the world's most advanced energy transmission technology for wireless power supply, it provides a minimally invasive, safe, power-line infection-free and complication-free treatment for patients with end-stage heart failure through minimally invasive surgery. Currently, the Group is working with an innovative medical device company incubated by Yale University on product development.

Management Discussion and Analysis

Biotechnology

The Group pursues the concept of green, low-carbon and sustainable development and promotes high-quality development of the segment with the world's leading innovative technology in synthetic biotechnology. The amino acid products are the core business in the field of biotechnology, and it is positioned as a global premium supplier of high-quality amino acids. The Group's development in the biological field focuses on technological innovation and the construction of high-quality systems, and currently holds more than 100 invention patents and has promoted the formulation of nearly 40 national and industrial standards. It has a complete domestic and international quality system certification, and has won many honors such as the National and Provincial Specialized New Enterprise (國家和省級專精特新企業), the National Intellectual Property Advantage Enterprise (國家級知識產權優勢企業) and the Provincial Hidden Champion Enterprise (省級隱形冠軍企業). The Group has also undertaken the "one-stop" application demonstration project for national industrial strong foundation engineering and high-end amino acid products.

The Group has been cultivating in the field of amino acids for more than 20 years and has always adhered to the spirit of technological innovation, taking synthetic biology as the core, it pioneered a world's leading innovative technology in China based on biotechnology method to produce various amino acids by biological method, which filled the gap in the industry. The Group's core product, Cysteine series, ranks first in the world in terms of market position and production capacity, while Taurine ranks second in the world in terms of production capacity. Benefiting from the continuous expansion of the international business and the general health business, the Group's amino acid segment has continued to maintain a high growth rate in recent years.

The Group has always adhered to the core business philosophy of "new technology, high quality, industrial chain, and internationalization" and has continued to strengthen the expansion of the amino acid industry. Based on pharmaceutical-grade amino acids and by leveraging our industrial advantages, the Group continues to expand into diversified amino acids.

New technology:

With synthetic biology as the core and after years of scientific research, with significant cost and quality advantages. At present, we have built eight technology platforms, including enzyme engineering, fermentation engineering, process engineering, quality research and application transformation, which have formed unique technology leadership in strain construction optimization, metabolic pathway regulation, fermentation control, separation and purification, and product application development, etc. Some of the processes fill the domestic gaps in China. Through the innovation and integration of several sub technology areas, we have built an integrated synergistic system with new product development, new technology engineering, industrialization and application solutions, which provides strong support for continuous technological innovation and industrialization transfer. Among them, the fermentation production process with strain construction optimization as the core and the enzyme conversion production process with immobilized enzymes as the core can not only replace the traditional synthesis process, but also significantly reduce the emission of carbon dioxide during the production process, which fully proves the development concept of energy saving, emission reduction and green environment protection of emission peak and carbon neutrality, showing great economic and environmental benefits. By continuously optimizing the fermentation and isolation purification process, we have achieved the leading position in the industry in terms of key indicators such as production volume and yield. The integrated technology of fermentation and enzymatic process, i.e., industrial microbial fermentation for the production of industrial enzymes, and the patented technology of immobilized enzymes can significantly shorten the time of enzyme conversion, significantly improve the yield and reduce the unit cost of products. Replacing dangerous processes in traditional synthesis routes by bio-enzymatic methods can also significantly reduce synthesis costs and significantly improve production safety. The industrial technology highway built by the Group in the amino acid segment is beginning to take shape and is entering its best harvesting period, which has laid a solid foundation for technological innovation at source and product industrialization.

Management Discussion and Analysis

The Group attaches great importance to the construction of R&D team and the close integration of production and research. At present, the amino acid segment has a core technical team led by talents from the 100 Talents Plan of Hebei Province (湖北省百人計劃), and has established long-term strategic cooperation with many research institutes, including Tsinghua University, Wuhan University and Tianjin University of Science and Technology. There are over 110 R&D personnel with professional backgrounds in cross-disciplinary disciplines such as microbiology, applied chemistry, biochemistry, pharmacology and food science. The innovative model of combining industry, academia, research and application in this segment, as well as the echelon of technical innovation talents with clear division of labor and complementary strengths, has yielded fruitful results with the number of granted invention patents ranking at the leading level in the same industry. The core subsidiaries in the segment have won many honors, such as the National and Provincial Specialized New Enterprises (專精特新企業), the National Intellectual Property Advantage Enterprises (國家級知識產權優勢企業), the China Light Industry Green Manufacturing Engineering Technology Research Centers for Sulfur-containing Amino Acids (中國輕工業含硫氨基酸綠色製造工程技術研究中心), the China Foreign Trade Export Leading Indicator (ELI) Sample Enterprises (中國外貿出口先導指數(ELI)樣本企業) and the Provincial Hidden Champion Enterprises.

High quality:

The Group's amino acid products have a complete quality certification system at home and abroad. Many products have passed the drug/food system certification and registration in Europe, the United States, Japan, Southeast Asia, China and other countries and regions, including European Union GMP certification, the Accreditation certificate of foreign drug manufacturer in Japan, KFDA Registration in Korea, MAPA certification in Brazil, Free Sale Certificate Attestation in Argentina; as well as the ISO quality management system certification, the FSSC22000 food system certification, GRAS certification in the United States, the HALAL certification, the KOSHER certification, etc. Our comprehensive system certification and registration have demonstrated the Group's strong competitiveness for business expansion in overseas markets.

Industry chain:

The Group has nearly 50 types of amino acids and their derivatives, including Cysteine series, Arginine series, Taurine series, etc. It has 24 registered amino acid APIs, covering more than 70% of the registration certificates in the same category and is the pharmaceutical company with the largest number of registered amino acid APIs in China. The rich amino acid product cluster can better meet the customized needs of the downstream market, provide one-stop services of multiple varieties and specifications, and enhance customer adhesion in high-end application scenarios. In addition to raw material products, the Group is also actively expanding its pharmaceutical products. Two functional dietary supplements, namely the U.S. patented citrulline and taurine preparations (which is used to enhance exercise endurance) and the acetylcysteine preparations (which protects respiratory health and enhances immunity) independently developed by the Company have obtained the U.S. FDA approval and was officially commercialized in the United States for sales in 2021.

Internationalization:

The sales network of the Group's amino acid segment covers more than 140 countries and regions worldwide, including mainstream markets in Europe, the United States, Japan, Southeast Asia and China, with overseas business accounting for more than 50% of the total. Among which, some of our amino acid varieties ranking among the top three in terms of market share. Relying on technological breakthroughs and cost advantages, the core products have long served domestic and international high-quality customers including Zambon, Sanofi, Nestle and other Fortune 500 companies, and established long-term and stable cooperative relationships with customers in the upstream and downstream of the industrial chain as well as a high brand awareness and market reputation worldwide, which has laid a solid customer base for the continuous and rapid growth of the segment's performance.

In the future, the Group will continue to rely on its world-leading new bio-method manufacturing process in the field of high-quality amino acids, solid industrial base and industrial accumulation, rich amino acid product clusters, high-standard quality certification systems, strong international registration and commercialization capabilities, with a focus on high-end parenteral nutrition preparations, innovative peptide drugs, cell culture base and other pharmaceutical-related high value-added fields, as well as functional dietary supplements such as sports protection, special medical and infant food, beauty and pet food and other large health consumer areas. The extensive market space and huge development potential of the downstream segment will provide the Group's amino acid segment with strong and sustainable development momentum.

Management Discussion and Analysis

FINANCIAL REVIEW

Revenue and profit

For the year ended 31 December 2022 (the “Year”), the Group maintained stable growth even the Group was affected by the pandemic. For the year ended 31 December 2022, it recorded revenue of approximately HK\$9,562.29 million (2021: HK\$8,597.98 million) and was increased by approximately 11.2% as compared with the same period of last year. If disregarding the exchange rate fluctuation between RMB and HK\$, it was increased by approximately 15.1% as compared with the same period of last year. For the profit attributable to the owners of the Company, if disregarding the impact from fair value change and disposal of investment in Telix, it was approximately HK\$2,137.33 million and was increased by approximately 11.5% as compared with the same period of last year. If disregarding the exchange fluctuation of exchange rate between RMB and HKD, it was increased by approximately 15.4% when compared with the same period of 2021. During the Year the gross profit margin of the Group is approximately 62.2%, while it was approximately 61.0% in 2021.

In 2020 the Group invested in Telix by applying approximately AUD35 million to acquire approximately 20.95 million shares of Telix at AUD1.69 each. In August 2022, the Group disposed 10 million Telix shares (equivalent to approximately half of holdings) at AUD7.25 each and got AUD72.5 million cash. This not only represented that all investment costs have been recovered, but also brought additional AUD37.5 million (equivalent to approximately HK\$200 million) cash return. As a 31 December 2022, share price of Telix is at AUD7.27 each. The Group is still holding approximately 10.95 million shares of Telix and amounted to approximately AUD79.6 million (equivalent to approximately HK\$424 million).

Distribution costs and administrative expenses

For the year ended 31 December 2022, the Group’s distribution costs and administrative expenses were approximately HK\$2,306,520,000 and HK\$1,090,030,000 respectively as compared to approximately HK2,397,850,000 and HK\$909,620,000 respectively for the corresponding period in 2021. The decrease in distribution costs of approximately 3.8% during the Year was mainly due to the sales staffs’ targeted deployment and work during the Year, to promote new product in a more efficient way. The administrative expenses increased by approximately 19.8% as compared to the corresponding period last year, mainly due to the increase in investment in innovative R&D projects.

Finance costs

For the year ended 31 December 2022, the Group’s finance costs were approximately HK\$137,490,000 as compared to approximately HK\$92,960,000 for the corresponding period in 2021. The increase was due to certain financing arrangements in response to business expansion and higher finance costs due to US dollar interest rate hike.

R&D and project investment

For the year ended 31 December 2022, the Group has invested a large amount of capital in the stages of research project and introduction of innovative projects. If including the R&D expenses and also the capitalized R&D expenses, prepayments for new projects and other investments, the Group’s investment in R&D and various projects throughout 2022 would be approximately HK\$2.45 billion.

Receivables and payables

As at 31 December 2022, trade and other receivables of the Group amounted to approximately HK\$2,997,380,000, representing an increase of approximately HK\$335,940,000 as compared to the balance in 2021, mainly due to the increase in trade receivables of approximately HK\$126,150,000 as a result of the increase in business during the Period. Prepayments have increased by approximately HK\$185,690,000, and was mainly related to the prepayment of approximately HK\$138,420,000 for the acquisition of certain shares in a fund. The transfer procedure of such acquisition was not yet completed as at 31 December 2022.

As at 31 December 2022, the Group’s trade and other payables amounted to approximately HK\$2,488,580,000, representing a decrease of approximately HK\$383,180,000 as compared to the balance in 2021.

Management Discussion and Analysis

Research and development

The Group has sufficient innovation pipeline. During the Period, there were accumulatively 136 projects under research and 55 innovation projects, which were in different stages from preclinical to new drug commercialization application. The pipeline layout was reasonable, forming a good echelon effect.

R&D Center

Currently, the Group is involved in and has established a number of R&D technology platforms and R&D centers around the world:

In the field of pharmaceutical technology, the International R&D Center in Optics Valley in Wuhan, China is the main R&D body of the Group in the pharmaceutical technology field in China, providing technical support for the R&D of the Group's high-end preparation products; the Glycomics technology platform is located at the R&D center in Australia, focusing on the development of antiviral drugs; the mRNA technology platform has established R&D centers in Nanjing, China and Belgium, focusing on the development of anti-tumor and anti-infective mRNA drugs, and will further expand into the fields of rare disease and protein replacement therapy in the future; and the DNA technology platform is located at the San Diego R&D Center in the United States, focusing on tumor DNA immunotherapy.

In the segment of nuclear medicine anti-tumor diagnosis and treatment, the Group has two technology platforms, namely the tumor intervention technology platform and the RDC technology platform, consisting of two R&D centers, namely the Grand Pharmaceutical — Shandong University Radiopharmaceutical Research Institute in China.

In the cerebro-cardiovascular precision interventional diagnosis and treatment segment, the Group's high-end medical device R&D technology platform comprises International R&D Center in Optics Valley in Wuhan, China, the Changzhou Device R&D Center in China and the Minnesota R&D Center in the United States.

R&D Team

As a technology-based innovative pharmaceutical enterprise, the Group has long been committed to building a high-end innovative R&D talent system to promote the global development of innovative projects. During the year, the Group, together with its associates, has a total of over 700 R&D personnel (including overseas R&D teams such as Sirtex), of which more than 400 have master's degree and doctoral degree holders, accounting for nearly 60%. All professional leaders and core team members of each segment have academic background in clinical medicine or pharmacy, while some of whom also have overseas education or working experience.

Development of Generic Drugs

During 2022 up to the date of this report, epinephrine hydrochloride injection (pre-filled), tirofiban hydrochloride injection (250ml), amiodarone hydrochloride injection, penethylidine hydrochloride injection have been issued drug registration certificates by the NMPA.

Consistency Evaluation

During 2022 up to the date of this report, tirofiban hydrochloride and sodium chloride injection, amiodarone hydrochloride injection, penethylidine hydrochloride injection, haloperidol injection, succinylcholine chloride (anhydrous) injection, fluorouracil injection, moxifloxacin hydrochloride eye drop, dopamine hydrochloride injection were approved or deemed to have passed the consistency evaluation, and new applications were made for Zuo Xi Meng Dan injection, sodium hyaluronate eye drop, travoprost eye drop, carglumic acid tablet, telmisartan and hydrochlorothiazide tablet, atropine sulfate injection. At present, a total of 23 products of the Group have been approved or deemed to have passed the Consistency Evaluation, and other 11 products are under review.

International Registration

During 2022 up to the date of this report, each of acetylcysteine (non-animal source), carbocysteine (non-animal source) and API products of xylometazoline hydrochloride has passed CEP registration of the European Union.

Management Discussion and Analysis

Intellectual Property Protection

During the period under review, the Group applied for 70 new patents, including 15 core patent applications and 55 peripheral patent applications, and 136 new patents were granted, 71 of which were invention patents, accounting for 52.2%. The Group has accumulated 599 valid patents, including 333 invention patents and 266 utility model patents and design patents. The core patent applications for the project of STC3141 were granted in the United States, and the patent applications in other countries and regions are progressing smoothly. A new PCT patent was filed for APAD, including a core patent application; 6 new PTC patent applications were filed in the biotechnological segment; 7 new patent applications around the core products were filed in the oncological segment.

Commercialization Capability

The Group's performance continued to improve, and the continuous commercialization of innovative products and profit contribution cannot be separated from the continuous improvement of commercialization capabilities. In 2022, the Group had over 3,800 sales personnel and nearly 3,300 sales personnel in the pharmaceutical area, covering over 20,000 hospitals with over 1,000 OTC personnel and more than 260,000 pharmacies in China; the cerebro-cardiovascular precision interventional diagnosis and treatment segment has reached 140 sales personnel, covering more than 1,400 hospitals; the nuclear medicine anti-tumor diagnosis and treatment segment has nearly 230 sales personnel worldwide, with its global sales network covering more than 50 countries and regions. It has also actively carried out the hospital admission and academic promotion of Yttrium-90 microsphere injections in China.

International Standard

The Group continues to accelerate the pace of globalization and has a number of independently operating overseas companies in the fields of nuclear medicine anti-tumor diagnosis and treatment, cerebro-cardiovascular precision interventional diagnosis and treatment, and severe disease anti-infection, etc. The Group has advanced overseas clinical trials of a number of global innovative products and obtained eight clinical approvals in five countries, including the United States, Australia, Belgium, Poland and the United Kingdom, involving a number of indications such as primary liver cancer, novel coronavirus infection and sepsis. Currently, the Group has over 330 employees overseas.

Material Investment, M&A and Cooperation

The Group continued to implement the development strategy of "self-development + global expansion", further exploring high-quality innovative projects around the world to expand the Group's product pipeline and enhance the Group's comprehensive strengths and putting vigorous efforts in transformation towards innovation and internationalization. In 2022, the Group has carried out the following material investment, M&A and cooperation:

- **Entering into of a product licensing agreement with Novartis AG to obtain commercialization rights for two global innovative products for the treatment of asthma**

In February 2022, the Group entered into a product licensing agreement with Novartis AG. ("Novartis", a world-renowned company) in Switzerland. The Group will pay Novartis up to US\$20 million and a certain percentage of the sales as commission, to obtain the exclusive commercialization rights of Enerzair® Breezhaler® and Ateectura® Breezhaler®, two global innovative compound preparations for the treatment of asthma from Novartis in mainland China. Enerzair® Breezhaler® and Ateectura® Breezhaler® products have been commercialized in Europe, Australia and Japan, and were approved by NMPA for commercialization in May 2021 and June 2021, respectively. The cooperation with Novartis is another successful attempt of the Group to join hands with internationally renowned pharmaceutical companies, which will further provide momentum for the Group's medium and long-term development.

Management Discussion and Analysis

- **Capital injection into Wuhan Shetai Medical**

In April 2022, Grand Pharmaceutical (China) Company Limited (“**Grand Pharma (China)**”, an indirect non-wholly owned subsidiary of the Company), Shanghai Shetai Medical Technology Limited (“**Shanghai Shetai**”) and Wuhan Shetai Medical Technology Co., Ltd. (“**Wuhan Shetai Medical**”, which is owned as to 33% by Grand Pharma (China) and 67% by Shanghai Shetai) entered into a capital injection agreement. Pursuant to the capital injection agreement, Grand Pharma (China) and Shanghai Shetai, as the existing shareholders of Wuhan Shetai Medical, agreed to increase the registered capital of Wuhan Shetai Medical by RMB65,000,000, where Grand Pharma (China) and Shanghai Shetai shall make additional capital contributions of RMB21,450,000 and RMB43,550,000, respectively, in proportion to their respective existing shareholdings in Wuhan Shetai Medical.

- **Reaching a strategic cooperation and signed a technology and intellectual property product transfer agreement with the Eye Hospital of Wenzhou Medical University**

In May 2022, the Group entered into a strategic cooperation agreement with the Eye Hospital of WMU. The Group will, according to the R&D progress, pay RMB70 million by phases to obtain from Eye Hospital, WMU the technology and intellectual property rights of the technology used in the prevention and treatment of myopia and the new ophthalmic preparation (GPN00884) product in the Greater China Region (Mainland China, Hong Kong Special Administrative Region of China, Macao Special Administrative Region of China and Taiwan), and subsequently may pay certain sales commission subject to the sales conditions of related products. The Group expects this strategic cooperation to leverage the resources and advantages of both sides in their respective professional fields, strengthen industry-university-research cooperation on common ophthalmic diseases, and jointly promote cutting-edge innovative research and technological achievement transformation in the ophthalmic industry.

- **Introduction of a global innovative endogenous tissue repair product**

In July 2022, the Group and XELTIS AG (“**XELTIS**”) have entered into a strategic cooperation agreement on equity investment and product introduction. The Group will use EUR15 million, after meeting specific terms and conditions, to acquire approximately 11% equity interests in XELTIS, and obtain exclusive development, production and commercialization rights of aXess, a global first-of-its-kind restorative device for patients with End Stage Renal Disease requiring hemodialysis access with Arteriovenous Graft, and other new products in the field of hemodialysis developed under the same technology platform in the Greater China region (Mainland China, Hong Kong Special Administrative Region of China, Macao Special Administrative Region of China, and Taiwan). According to the agreement, the Group also has the pre-emptive negotiation right for products of XELTIS developed in other indication areas, in the Greater China region. This strategic cooperation will deepen the Group’s product layout in the field of hemodialysis in peripheral vascular intervention.

- **Acquisition of 100% equity interest in Hubei Bafeng**

In July 2022, the Group entered into an equity acquisition agreement with Hubei Bafeng, pursuant to which, the Group will acquire 100% equity interest in Hubei Bafeng at an amount of not more than RMB270 million after the relevant conditions as agreed in the acquisition agreement are fulfilled. Upon completion of the acquisition, the Group will own 24 API registration certificates for amino acids, covering more than 70% of registration certificates in the same category, and become the pharmaceutical company with the largest number of API registration certificates for amino acids in China, which will further strengthen the Group’s leading position in the field of high-quality amino acids.

- **Capital injection in Sirtex**

In December 2022, the Group subscribed 29,646,627 shares of Grand Pharma Sphere Pte Ltd. (which wholly owned the equity interests of Sirtex) at the consideration of USD35 million. After the completion of the transaction the equity interests held in it increased to approximately 51.61%. The Group will be able to further increase its shareholding rights in Sirtex and its business of global innovative medical products which will further strengthen the pipeline of products available to the Group, and Sirtex may have a more stable liquidity position to support its continuous development.

Other than stated above, the Group did not have other material acquisition or disposal in 2022.

Management Discussion and Analysis

INVESTOR RELATIONS

The Group has been committing to improving its corporate governance to ensure the long-term development. During the year, the Group published annual reports, annual results announcements, and other announcements and circulars on the websites of the Company and the Hong Kong Exchanges and Clearing Limited, and issued voluntary announcements, so as to disclose the latest business developments of the Group to shareholders and investors.

At the same time, the Group actively maintains close communication with investors through various channels, including securities company roadshows, large-scale telephone conferences, one-on-one meetings and other diversified communication methods, to introduce the Group's business situation, development progress and overseas member companies' businesses to investors, and simultaneously releases the latest business updates through different media channels, aiming to build an open, two-way, transparent and sincere communication platform, so that investors can keep abreast of the Group's business progress and development prospects. During the year, the Group actively communicated with the capital market and investors through new product presentations, results announcements and investor open days, and participated in a number of summits, forums, strategy conferences and special roadshows held by large investment banks and securities companies, attracting 100 institutional investors and analysts. Through communication with investors, the Group hopes to listen to more valuable opinions and extensively collect feedback from investors by establishing an active and efficient information and communication mechanism, so as to further enhance its corporate governance.

The Group's investor relations management is conducive to establishing a high-quality corporate image and delivering the core strategy of technological innovation. It has been highly recognized in the industry in multiple dimensions. In January 2022, it was awarded the "Most Valuable Pharmaceutical and Medical Company" and the "Best IR Team" in the sixth Golden Hong Kong Stocks Awards. In June 2022, it was awarded the "Best Hong Kong Listed Companies in Hubei". In July 2022, it was included in the "2021 China Pharmaceutical Industry Top 100 Series List". In September 2022, it was awarded the Golden Unicorn "Listed Company of Hong Kong and US Stocks with Most Growth Potential" Award by Sina Finance in 2022. In November 2022, it was recognized as a "National Demonstration Enterprise in Technology Innovation" and was included in the "Top 100 Private Enterprises in Hubei Province". In December 2022, it was awarded the "Most Valuable Pharmaceutical and Medical Company" and the "Best IR Team" in the seventh Golden Hong Kong Stocks Awards. In January 2023, it received the "Investment and Customs Pioneer Award" of the Royal Flush Enterprise.

UPDATES ON SIGNIFICANT MATTERS

With reference to the disclosure in the annual reports of the Company between 2016 to 2022, Tianjin Jingming New Technology Development Co., Ltd. (the "**Tianjin Jingming**"), an indirect non-wholly owned subsidiary of the Company, is undertaking certain litigations related to a product quality incident, and it is also claiming the original shareholders of Tianjin Jingming for the indemnification of those possible loss suffered by the Company. Up to 31 December 2022, the court has concluded 72 cases, and 3 cases are under hearing processes at the people's court. Among the final and effective judgements, Tianjin Jingming has paid the compensation and the related legal charges of approximately RMB37,222,231 in according to the court orders. The other related litigations of the product quality incident have not yet been concluded. Given that (1) such product is not the core product of the Group, and (2) according to the terms of the agreement for the acquisition of Tianjin Jingming, the original shareholders of Tianjin Jingming should be responsible for the compensation of such product incident until 30 June 2015, and in April 2021 Grand Pharm (China) had claimed the original shareholders of Tianjin Jingming for the indemnification of those possible loss suffered. According to the final judgment by the court, the original shareholders of Tianjin Jingming should compensate to us approximately RMB27,090,000 as the existing compensate and liquidated damages at the point of the judgment. After the execution of the enforcement order from the people's court, Grand Pharm (China) has got properties and cash at approximately RMB7.27 million in aggregate from the original shareholders of Tianjin Jingming, and the outstanding amount is still under enforcement processes. Also Grand Pharm (China) has the right to raise litigation claiming the original shareholders of Tianjin Jingming for the subsequent payment of the indemnification related to such product quality incident made by Tianjin Jingming. Hence, the Directors are of the view that the said incident and the related litigations do not have material impact to the Group.

Management Discussion and Analysis

According to the terms of the agreement for the acquisition of Tianjin Jingming, the vendors have undertaken to the Group that the net profit after tax (the “**Actual Profit**”) from domestic sales (only include the net profit generated from domestic sales and shall not include the profit generated from the sales of irrigating solutions (灌注射液)) of Tianjin Jingming for the period commencing on 1 January 2015 and ending on 30 June 2015 shall not be less than RMB5,000,000 (the “**Performance Guarantee**”). If the above Performance Guarantee cannot be met, the Group can claim for a refund of part of the share transfer consideration in according to the formula set out in the announcement of the Company dated 22 December 2014. The Group raised a litigation against those vendors in related to the said Performance Guarantee, and after the first trial, second trial and retrial from the court, the court granted the final judgement in December 2020. It was concluded that the Group can get back the RMB10,000,000 share transfer consideration deposited in the bank account jointly controlled by the Group and the vendors. The vendors should also additionally refund approximately RMB11,200,000 share transfer consideration to the Group in according to the terms of the agreement for the acquisition of Tianjin Jingming. Up to now, the Group has followed the judgement from the court and got back the RMB10,000,000 deposited in the bank account jointly controlled by the Group and the vendors.

FINANCIAL RESOURCES AND LIQUIDITY

As at 31 December 2022, the Group had current assets of HK\$6,886.92 million (31 December 2021: HK\$6,778.59 million) and current liabilities of HK\$6,454.60 million (31 December 2021: HK\$5,566.13 million). The current ratio was 1.07 at 31 December 2022 as compared with 1.22 at 31 December 2021.

The Group’s cash and bank balances as at 31 December 2022 amounted to HK\$1,441.01 million (31 December 2021: HK\$1,752.86 million), of which approximately 10.0% were denominated in Hong Kong Dollars, United States Dollars, Australian Dollars, Euro and 90.0% in Renminbi.

As at 31 December 2022, the Group had outstanding bank loans of approximately HK\$3,741.38 million (31 December 2021: HK\$2,849.29 million) were granted by banks in the PRC and Hong Kong. All bank loans were denominated in RMB, USD and HK\$. The interest rates charged by banks ranged from 2.70% to 7.68% (31 December 2021: 2.18% to 6.89%) per annum, in which approximately HK\$1,952.53 million bank loans were charged at fixed interest rates. Certain bank loans were pledged by assets of the Group with a net book value of HK\$167.20 million (31 December 2021: HK\$284.35 million). The gearing ratio of the Group, measured by bank borrowings as a percentage of shareholders’ equity, was approximately 26.5% as at 31 December 2022 while it was also approximately 21.3% as at 31 December 2021.

Since the Group’s principal activities are in the PRC and the financial resources available, including cash on hand and bank borrowings, are mainly in Renminbi and Hong Kong Dollars, the exposure to foreign exchange fluctuation is relatively low.

The Group intends to principally finance its operations and investing activities with its operating revenue, internal resources and bank facilities. The Directors believe that the Group has a healthy financial position and has sufficient resources to satisfy its capital expenditure and working capital requirement. The Group adopted a conservative treasury policy with most of the bank deposits being kept in Hong Kong dollars, or in the local currencies of the operating subsidiaries to minimize exposure to foreign exchange risks. As at 31 December 2022, the Group has a cross currency swap contract to offset the currency exchange risk between HKD and RMB in related to the interests payment of certain bank loans. Save as disclosed above, the Group did not have other foreign exchange contracts, interest or currency swaps or other financial derivatives for hedging purposes.

PRINCIPAL RISKS AND UNCERTAINTIES

The Group’s financial condition, results of operations, and business prospects may be affected directly or indirectly, by a number of risks and uncertainties pertaining to the Group’s businesses. To the best of knowledge and belief, the Directors consider that the following are the key risks and uncertainties identified by the Group as at the date of this report.

Market Risks

Market risk is the risk that deteriorates profitability or affects ability to meet business objectives arising from the movement in market prices, being foreign exchange rates and interest rates. The management of the Group manages and monitors these exposures to ensure appropriate measures are implemented on a timely and effective manner.

Management Discussion and Analysis

Foreign Exchange Rates Risk

The Group mainly operates in the PRC with most of the transactions settled in Renminbi. During the year ended 31 December 2022, save as disclosed above, the Group did not carry out other hedging activity against foreign currency risk. Any substantial exchange rate fluctuation of foreign currencies against Renminbi may have a financial impact on the Group.

Interest Rate Risk

For interest-sensitive products and investments, the Group analyses its interest rate exposure on a dynamic basis and considers managing the risk in a cost-effective manner when appropriate, through variety of means.

Liquidity Risk

Liquidity risk is the potential that the Group will be unable to meet its obligations when they fall due because of an inability to obtain adequate funding or liquidate assets. In managing liquidity risk, the Group monitors cash flows and maintains an adequate level of cash and cash equivalent to ensure the ability to finance the Group's operations and reduce the effects of fluctuation in cash flows.

Operational Risk

Operational risk is the risk of loss resulting from inadequate or failed internal processes, people and systems or from external events. Responsibility for managing operational risks basically rests with every function at divisional and departmental levels. Key functions in the Group are guided by their standard operating procedures, limits of authority and reporting framework. The management will identify and assess key operational exposures regularly so that appropriate risk response can be taken.

Investment Risk

Investment risk can be defined as the likelihood of occurrence of losses relative to the expected return on any particular investment. Key concern of investment framework will be balancing risk and return across different investments, and thus risk assessment is a core aspect of the investment decision process. Proper authorisation system has been set up and detailed analysis will be made before approving investments. Regular updates on the progress of the investments of the Group would be submitted to the Board.

Economic Environment

Most of the Group's facilities, operations and its revenue are located in and derived from Mainland China and Hong Kong, the PRC. The Group's results of operations and financial condition therefore depend on the economies of Mainland China and Hong Kong, the PRC. The economy of Hong Kong is significantly affected by the developments in the Mainland China and the Asia-Pacific region. Mainland China's economy may experience negative economic developments, and other regional economies may also deteriorate.

The Group also has significant business across the PRC and part of its growth strategy is to expand into new regions. These regions have also been adversely affected by the global economic slowdown and any continued slowdown may have an adverse effect on the Group's existing operations in, and planned expansion into, these regions.

Environmental Policies

The Group is committed to contributing to the sustainability of the environment and is committed to building an environmentally-friendly corporation that pays close attention to conserving natural resources. The Group strives to minimize its environmental impact by reducing water consumption and encouraging recycle of office supplies and other materials.

Compliance with Relevant Laws and Regulations

Save as disclosed above, during the year ended 31 December 2022, as far as the Company is aware, there was no material breach of or non-compliance with the relevant laws and regulations by the Group that have a significant impact on the business and operations of the Group.

Management Discussion and Analysis

Key Relationships

(i) Employees

Human resources are one of the greatest assets of the Group and the Group regards the personal development of its employees as highly important. The Group aims to continue to be an attractive employer for committed employees. The Group strives to motivate its employees with a clear career path and opportunities for advancement and improvement of their skills.

(ii) Suppliers

The Group has developed long-standing relationships with a number of suppliers and take a great care to ensure that they share its commitment to quality and ethics. The Group cautiously selects its suppliers and requires them to satisfy certain assessment criteria including experience, reputation and quality control effectiveness.

(iii) Customers

The Group is committed to offer quality products to its customers and keep them informed its latest business developments.

Employees and Remuneration Policy

As at 31 December 2022, the Group employed about 10,172 staff and workers in Hong Kong and the PRC (31 December 2021: about 10,029). The Group remunerates its employees based on their performance and experience and their remuneration package will be reviewed periodically by the management. Other employee benefits include medical insurance, retirement scheme, appropriate training program and share option scheme.

SIGNIFICANT INVESTMENT

Save as disclosed above, there was no other significant investment during the year.

CONTRACTUAL AND CAPITAL COMMITMENTS

As at 31 December 2022, the Group as lessor had operating lease commitments of HK\$0.65 million (2021: HK\$0.21 million).

As at 31 December 2022, the Group had capital commitments of HK\$140.49 million (2021: HK\$180.32 million).

CONTINGENT LIABILITIES

As at 31 December 2022, the Directors were not aware of any material contingent liabilities.

EVENTS AFTER THE REPORTING PERIOD

Save as disclosed above, no subsequent events occurred after 31 December 2022 which may have a significant effect, on the assets and liabilities of future operations of the Group.

APPRECIATION

On behalf of the board of Directors (the "**Board**"), I would like to express my gratitude to our management and staff for their dedication and contribution to the Group, and our shareholders and business associates for their continued support throughout the year.

Dr. Tang Wei Kun

Chairman

Hong Kong, 22 March 2023

Corporate Governance Report

The Company has complied with all the applicable code provisions of the Corporate Governance Code (the “Code Provisions”) as set out in Appendix 14 of the Rules Governing the Listing of Securities (the “Listing Rules”) on the Stock Exchange during the year ended 31 December 2022:

DIRECTORS’ SECURITIES TRANSACTIONS

The Company has adopted the Model Code for Securities Transactions by Directors of Listed Issuers (the “Model Code”) as set out in Appendix 10 of the Listing Rules as its own code of conduct for securities transactions by Directors. Having made specific enquiries of all Directors, the Directors have complied with the required standard set out in the Model Code during the year ended 31 December 2022.

BOARD OF DIRECTORS

The Board is responsible for formulating and reviewing business strategies and directions, overseeing the management and monitoring the performance of the Group. While the management is delegated by the Board to execute these business strategies and directions and is responsible for the daily operations of the Group.

Currently, the Board comprises 4 executive Directors — Dr. Tang Weikun, Dr. Shao Yan, Dr. Niu Zhanqi and Dr. Shi Lin and 3 independent non-executive Directors — Ms. So Tosi Wan, Winnie, Mr. Hu Yebi and Dr. Pei Geng. Dr. Tang Weikun is the Chairman and Mr. Zhou Chao is the Chief Executive Officer. There is no relationship among members of the Board.

The roles of the Chairman and the Chief Executive Officer are clearly defined and segregated to ensure independence and proper checks and balances. Dr. Tang, as Chairman of the Board, with his strategic vision, provides leadership to the Board and gives direction in the development of the Group, which is of added benefit to the check and balance mechanism of the Group. Mr. Zhou, as the Chief Executive Officer, focuses on the day-to-day management of the Group’s business, and leads the management team of the Group.

The Board believes that the balance between executive and non-executive Directors is reasonable and adequate to provide check and balance that safeguard the interests of shareholders and the Group.

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

All Directors are appointed for a term of one year and are subject to retirement by rotation and re-election at the general meetings in accordance with the Company’s Bye-Laws.

BOARD AND SENIOR MANAGEMENT DIVERSITY POLICY

The Company has implemented a board and senior management diversity policy with the aim to set out the approach to achieve diversity in the Board and at the senior management level. The Company sees increasing diversity at Board and senior management level as essential to supporting attainment of its strategic objectives and to achieve sustainable and balanced development. In designing the composition of the Board and the senior management, the diversity has been considered from a number of perspectives, including but not limited to gender, age, cultural and educational background, ethnicity, professional experience, skills, knowledge and length of service. All appointments will be based on meritocracy, and candidates will be considered against objective criteria, having due regard to the benefits of diversity. It should have a balance of skills and experience and a diversity of perspectives appropriate to the requirements of the Company’s business.

The Company recognizes and embraces the benefits of having a diverse Board and senior management team to enhance the quality of its performance. Currently the Board and senior management team comprises 8 male and 2 female.

Corporate Governance Report

TRAINING, INDUCTION AND CONTINUING DEVELOPMENT OF DIRECTORS

Up to 31 December 2022, the Directors complied with the paragraph A.6.5 of the Code Provision on participation in continuous professional training as follows:

	Mode of participation	
	a	b
Dr. Tang Weikun	✓	✓
Dr. Shao Yan	✓	✓
Dr. Niu Zhanqi	✓	✓
Dr. Shi Lin	✓	✓
Ms. So Tosi Wan, Winnie	✓	✓
Mr. Hu Yebi	✓	✓
Dr. Pei Geng	✓	✓

a: Directors received regular briefings and updates from the Company Secretary/the Company's management on the Group's business, operations and corporate governance matters.

b: Directors read technical bulletins, periodicals and other publications on subjects relevant to the Group and/or on their responsibilities and obligations under the Listing Rules and relevant regulatory requirements.

AUDIT COMMITTEE

The Company has established an audit committee with written terms of reference for the purpose of monitoring the integrity of the financial statements and overseeing the financial reporting process and the internal control system of the Group. The audit committee is also responsible for the appointment of external auditors and assessment of their qualifications, independence and performance.

Currently, the audit committee consists of three independent non-executive Directors namely, Ms. So Tosi Wan, Winnie (Chairwoman), Mr. Hu Yebi and Dr. Pei Geng. Ms. So Tosi Wan, Winnie has appropriate professional qualifications as required by 3.10(2) of the Listing Rules.

The audit committee held two meetings during the year ended 31 December 2022 and reviewed the accounting principles and practices adopted by the Group and discussed financial reporting matters including a review of the interim and annual financial statements. The audit committee also met with the external auditors to discuss auditing, internal control, statutory compliance and financial reporting matters before recommending the financial statements to the Board for approval. There was no disagreement between management and the external auditors with regard to the interim and annual financial statements.

Corporate Governance Report

REMUNERATION COMMITTEE

The Company has established a remuneration committee with written terms of reference. Currently, the remuneration committee is chaired by Ms. So Tosi Wan, Winnie with an executive Director Dr. Tang Weikun and an independent non-executive Director Mr. Hu Yebi as members.

The remuneration committee is responsible for making recommendations to the Board on the Company's policy and structure for the remuneration of all Directors and senior management and reviewing specific remuneration package of all Directors and senior management including any compensation payable for loss or termination of their office and appointment. The remuneration should reflect the performance, complexity of duties and responsibility of the individual. The remuneration committee met twice during the year to review the remuneration policy for all Directors and senior management and considered the revised terms of reference of the nomination committee.

The remuneration of Directors and senior management comprises salary, pensions and discretionary bonus. Details of the Directors' emoluments for the year ended 31 December 2022 are set out in note 15 to the consolidated financial statements.

NOMINATION COMMITTEE

The Company has established a nomination committee with written terms of reference. Currently, the nomination committee is chaired by Ms. So Tosi Wan, Winnie with an executive Director Dr. Shao Yan and an independent non-executive Director Mr. Hu Yebi as members.

The nomination committee is responsible for assisting the Board in the overall management of the nomination practices of the Company to ensure that effective policies, processes and practices are implemented in respect of the appointment and removal of Directors. The nomination committee considers the past performance, qualification, general market conditions and the Company's Bye-laws in seeking and recommending candidates for directorship.

The nomination committee held a meeting in 2022 to review the structure, size and composition of the Board, assess the independence of the independent non-executive Directors and other related matters of the Company.

ATTENDANCE RECORD AT MEETINGS

The attendance records of each Director at the various meetings of the Company during the year ended 31 December 2022 are set out as below:

Directors	Annual General Meeting	Meetings Attended/Held			
		Board	Audit Committee	Remuneration Committee	Nomination Committee
Dr. Tang Weikun	1/1	23/23	N/A	2/2	N/A
Dr. Shao Yan	1/1	23/23	N/A	N/A	1/1
Dr. Niu Zhanqi	1/1	23/23	N/A	N/A	N/A
Dr. Shi Lin	1/1	23/23	N/A	N/A	N/A
Ms. So Tosi Wan, Winnie	1/1	23/23	2/2	2/2	1/1
Mr. Hu Yebi	1/1	23/23	2/2	2/2	1/1
Dr. Pei Geng	1/1	23/23	2/2	N/A	N/A

Corporate Governance Report

AUDITORS' REMUNERATION

During the year, the auditors performed the work of statutory audit for the year of 2022. Audit fees for the year under review payable/paid to the auditors of the Company, HLB Hodgson Impey Cheng Limited, amounted to HK\$3,880,000.

FINANCIAL REPORTING

The Board has overall responsibility for preparing the accounts of the Group. In preparing the accounts, the generally accepted accounting policies in Hong Kong have been adopted and the Group has complied with accounting standards issued by the Hong Kong Institute of Certified Public Accountants. Appropriate accounting policies have also been applied consistently. The Directors are not aware of any other material uncertainties relating to events or conditions that may cast doubt upon the Group's ability to continue as a going concern.

RISK MANAGEMENT AND INTERNAL CONTROL

The Board acknowledges that it has overall responsibility for the Group's risk management and internal control systems and for reviewing their effectiveness. The Company has an internal audit team which carries out the analysis and independent appraisal of the adequacy and effectiveness of the Company's risk management and internal control systems and reports to the Board. The Board also ensures that the review of the effectiveness of these systems has been conducted annually. Several areas have been considered during the Board's review, which include but not limited to (i) the changes in the nature and extent of significant risks since the last annual review, and the Group's ability to respond to changes in its business and the external environment (ii) the scope and quality of management's ongoing monitoring of risks and of the internal control systems.

During the year ended 31 December 2022, the Board has conducted its regular and annual review of the effectiveness of our risk management and internal control systems, in particular, the operational and financial reports, compliance control and risk management reports, budgets and business plans provided by the management. The audit committee of the Company also performs regular review of the Group's performance, risk management and internal control systems and discusses with the Board, in order to ensure effective measures are in place to protect material assets and identify business risks of the Group. Such review in the year ended 31 December 2022 did not reveal any major issues and the Board considers our risk management and internal control systems effective and adequate. The Group's review procedures involved in the risk management and internal control mainly included:

- (1) A list of risks was created after the scope of risks was determined and risks were identified.
- (2) The impacts brought by possible financial losses due to risks on operating efficiency, continuous development, and reputation were assessed with reference to possible occurrence of various potential risks and the attention drawn from the management of the Group, based on which the priority of the risks was determined.
- (3) Our risk management measures with respect to material risks were identified, internal control over the design and implementation of risk management measures were assessed, and measures to improve the weaknesses were formulated.
- (4) By assessing internal controls and management's implementation of rectification measures with respect to material risks, the Group regularly reviewed and summarized the risk management and internal control systems to realize the efficient operation and constant improvement of risk management.
- (5) The risk management handbook was formulated to address risk management and internal control, pursuant to which, the terms of reference of the management, the Board, and the Audit Committee with respect to their risk management work were clearly determined, and risk management and internal control systems were monitored on an ongoing basis.
- (6) The management submitted reports to the Audit Committee on regular reviews and assessment results with respect to risk management and internal control systems, material risk factors, and the relevant countermeasures.

Corporate Governance Report

In order to enhance the Group's system of handling inside information, and to ensure the truthfulness, accuracy, completeness and timeliness of its public disclosures, the Group also adopts and implements an inside information policy and procedures. Certain reasonable measures have been taken from time to time to ensure that proper safeguards exist to prevent a breach of a disclosure requirement in relation to the Group, which include:

- (1) The access of information is restricted to a limited number of employees on a need-to-know basis. Employees who are in possession of inside information are fully conversant with their obligations to preserve confidentiality.
- (2) Confidentiality agreements or confidentiality clauses are in place when the Group enters into significant negotiations.
- (3) The executive Directors are designated persons who speak on behalf of the Company when communicating with external parties such as the media, analysts or investors.

CORPORATE GOVERNANCE FUNCTIONS

The Board has adopted the terms of reference on corporate governance functions. The terms of reference of the Board in respect of corporate governance function are summarised as follows:

- to develop and review the Company's policies and practices on corporate governance;
- to review and monitor the training and continuous professional development of Directors and senior management;
- to review and monitor the Company's policies and practices to ensure compliance with legal and regulatory requirements;
- to develop, review and monitor the code of conduct and compliance manual (if any) applicable to employees and Directors; and
- to review the Company's compliance with the Code Provisions and its disclosure requirements in the Corporate Governance Report.

The work performed by the Board on corporate governance functions during the year ended 31 December 2021 included developing and reviewing the Company's policies on corporate governance and review the Company's compliance with the Code Provisions.

COMMUNICATION WITH SHAREHOLDERS AND INVESTORS

The Company establishes different communication channels with shareholders and investors. Printed copies of the annual and interim reports and circulars are sent to shareholders. Shareholders are encouraged to attend general meetings of the Company which allows the Directors to meet and communicate with them.

Corporate Governance Report

SHAREHOLDERS' RIGHTS

Shareholders holding 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 a special general meeting to be called by the Board for the transaction of any business specified in such requisition.

Any number of shareholders representing not less than one-twentieth of the total voting rights of all the shareholders of the Company or not less than 100 shareholders can put forward any proposed resolution or the business to be dealt with at general meetings of the Company by depositing a requisition in writing at the principal office of the Company. The requisition must be signed by the relevant shareholder(s).

Shareholders may at any time send their enquiries and concerns to the Board in writing through the company secretary of the Company whose contact details are as follows:

Unit 3302, The Center,
99 Queen's Road Central, Hong Kong
Email: victor.foo@grandpharm.com

Shareholders may also make enquiries with the Board at the general meetings of the Company.

CONSTITUTIONAL DOCUMENTS

In 2012, the Company adopted certain amendments on the Bye-laws of the Company in order to bring the Bye-laws in line with (i) current amendments made to the Listing Rules came into effect on 1 January 2012 and 1 April 2012; and (ii) amendments of the Companies Act 1981 of Bermuda pursuant to the Companies Amendment (No. 2) Act 2011 in Bermuda which became operative on 18 December 2011. The amended Bye-laws of the Company is available on the websites of the Company and the Stock Exchange.

Environment, Social and Governance Report

This report is prepared by the Company in accordance with the Environment, Social and Governance Reporting Guidelines as set out in Appendix 27 of the Listing Rules. This report covers entities with substantial effect to the financial and actual operational process, mainly being the companies and production plants located in the PRC. Save as otherwise indicated, the data and contents in this report are all in relation to the period from 1 January 2022 to 31 December 2022 and presented in RMB.

THE BOARD'S ESG COMMITMENT

The Board has overall responsibility for the Group's ESG strategy and reporting. The Board is committed to determining the most effective way to integrate ESG considerations into its structure and committees. The Group also evaluates and monitors ESG-related risks and ensures these risks are thoroughly considered in the process of decision making and embedded into the management of risk and opportunities across the Group.

The Group strives to achieve a high level of public transparency by regularly engaging stakeholders and disclosing information in a timely and accurate manner. The Group maintains regular exchanges and dialogues with peers, investors and other stakeholders to share the updates of ESG-related risks and regulatory requirements etc. The Group also tracks existing and emerging regulations to ensure that its ESG policies, processes and disclosures meet expectations.

Legal compliance is an essential pillar for sound corporate governance and underpins sustainable operations. The Group confirmed that it has established appropriate and effective management policies and internal control systems for ESG issues during the Reporting Period, and confirmed that the disclosed contents are in compliance with the requirements of the ESG Reporting Guide.

THE GROUP'S ESG APPROACH

The Board and senior management of the Group are involved in the materiality assessment in identifying material ESG issues that impact the Group's business operation. The management of the Group actively participates in the optimisation of existing operation plans, fully supports various resources and strives to integrate ESG matters into the daily operation and management of the enterprise.

The Group has a vision for its operation practices and the provision of quality products and excellent services. The Group not only abides by strict standards and requirements to ensure the highest quality of its products, but also sticks to develop innovative products to meet the global healthcare demand and improve the quality of life. The Group is committed to becoming a pioneer in core technology, increasing investment in research and development, recruiting talents around the world, maintaining innovation in various business areas, complying with relevant rules and regulations, and continuously improving the quality management system, so as to achieve stable product quality to meet customer requirements.

The Group is well aware that the development, promotion and sale of pharmaceutical products are related to public health. Therefore, the Group's will put the products safety and service quality, including the development, production, testing and after-sales of products, in an important position when setting ESG management objectives. At the same time, the Group will focus on more safe, more effective or more cost-effective innovative drugs to meet the actual needs of patients and maximise social benefits taking into account the unmet medical demands of the international pharmaceutical market. The Group will consider the effect of operational activities on the environment in order to build a green, harmonious and sustainable society with all stakeholders.

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COMMUNICATIONS WITH STAKEHOLDERS

Key stakeholders of the Group include shareholders and investors, government and regulatory authorities, customers, suppliers, employees and communities. The Group strives to communicate with the stakeholders from time to time to understand their opinions and expectations, and assist the Group to continuously improve and enhance the comprehensive management ability and level of the enterprise through effective and diversified communication channels so as to satisfy the needs of the stakeholders. The Group has identified the stakeholders as follows:

Stakeholders	Shared objectives	Communication and feedback channels
Shareholders and investors	<ul style="list-style-type: none"> — Steady growth in return on investments — Asset preservation and appreciation — Explore new markets and opportunities — Prevent operational risks — Safeguard information rights 	<ul style="list-style-type: none"> — General meetings — Annual report and announcement — Investor meetings — Press release
Government and regulatory authorities	<ul style="list-style-type: none"> — Strict compliance with relevant laws and regulations — Safe production — Pay tax in accordance with law 	<ul style="list-style-type: none"> — Email and telephone communication — Tax payment — Implementation of national policies
Customers	<ul style="list-style-type: none"> — Provide premium products — Product safety — Provide sustainable innovative products — Create win-win situation — Offer refined customer service and communication channels 	<ul style="list-style-type: none"> — Corporate website — Technical training and seminar — Product release conference — On-site visit
Suppliers	<ul style="list-style-type: none"> — Product safety — Fair and open procurement — Win-win cooperation 	<ul style="list-style-type: none"> — Evaluation on suppliers — On-site inspection — Daily communication
Employees	<ul style="list-style-type: none"> — Protect employees' benefits and rights — Promote occupational health and safety — Provide equal employment opportunities — Build a platform for growth and diversified development — Work-life balance 	<ul style="list-style-type: none"> — Staff training — Staff care activities — Staff interview — Internal email
Community	<ul style="list-style-type: none"> — Facilitate employment — Enhance local economic development — Strengthen environmental protection and reduce pollution on environment 	<ul style="list-style-type: none"> — Provide employment opportunities — Promote local economic development — Improve infrastructure in locality — Poverty alleviation — Voluntary services

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ENVIRONMENTAL POLICY AND PERFORMANCE

Environmental protection responsibility is a must to an enterprise, which shall ensure the sustainability of the environment and resources through committed efforts during its management and operation process. In this connection, the Group aimed to develop its environmental management system and improve environment-related policies, adopt long-effective environmental management and supervisory means, adhere to the corporate environmental protection principles of placing environmental friendliness as the first priority, taking precaution as the main measure, adopting comprehensive rectification and management and implementing energy-saving and emission reduction in the production process in order to practically assume our corporate social responsibility and achieve the best environmental performance.

The Group strictly abides by and pays close attention to the laws and regulations of the PRC government on energy conservation and environmental protection, such as the Environmental Protection Law of the People's Republic of China, the Water Pollution Prevention and Control Law of the People's Republic of China, the Atmospheric Pollution Prevention and Control Law of the Law of the People's Republic of China, the Solid Waste Pollution Prevention and Control Law of the People's Republic of China, the Soil Pollution Prevention and Control Law of the People's Republic of China, the Emission Standard of Air Pollutants for Pharmaceutical Industry, and we also strictly comply with the relevant pollutant emission standards, such as the Emission Standard of Air Pollutants for Pharmaceutical Industry, the Emission Standard of Air Pollutants for Boiler, the Standard for Pollutant on the Storage and Disposal Site for General Industrial Solid Wastes. We concern about the impact of global climate change on the Group's business and the environment, explore green development methods in depth, improve organizational management and target assessment, and insist on giving priority to environmental protection, prevention, comprehensive management, energy saving and emission reduction in the production process as the corporate environmental protection policy, fulfill corporate social responsibility, establish a green corporate image, and build a green and responsible brand.

During the year, the Group was not aware of any major incidents relating to environmental protection and was not punished by competent environmental protection department. The Group continued to strengthen the control of the source of pollutants, optimised the process of end treatment and reduced pollutant emissions of the enterprise. The Group increased its investment to constantly improve, renovate and upgrade the enterprise protection equipment pursuant to new standards and requirements on safety and environmental protection to ensure wastewater, waste gas and waste discharge are up to standard.

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A1 EMISSION

1.1 Environmental Policies and Performance

(System operation)

Based on the environmental management system, occupational health and safety management system, and national safety production standardization, the Group promulgated the EHS management system framework standard of Grand Pharmaceutical, established the environmental protection, occupational health, and safety production management framework system, and systematized and standardized the EHS work of subsidiaries. Surrounding the overall management of EHS, we have established the following short-term, medium-term and long-term goals.

Time	Short term: 2023	Medium term: 2024~2025	Long-term: 2026~2030
Visions	Legal compliance, one step ahead, disease prevention persistence, procedural control, terminal management technology upgrade, pollution prevention,		
Target progress	In progress	under planning	under planning
Targets	<p>Improve the EHS management system, promote the establishment of EHS management functions in mature business sectors such as the biological sector, and strengthen internal EHS control;</p> <p>Understand the laws and regulations of the regions where overseas business is located, and start the construction of the EHS law library for overseas business;</p> <p>Continuously carry out group enterprise hierarchical control and EHS inspection, and urge subsidiaries to carry out self-examination and rectification follow-up;</p> <p>Improve the EHS risk identification of subsidiaries, and carry out management improvement according to the enterprise risk level;</p>	<p>Standardize the operation of the enterprise EHS system according to business development, and promote the construction of EHS management functions in each sector;</p> <p>Become familiar with the laws and regulations of overseas business locations, and gradually carry out EHS management;</p> <p>Improve the intrinsic safety level of the enterprise, and realize the whole process automation of new projects;</p> <p>Start the construction of the group's EHS management and control platform, and realize the visual real-time inspection of key management areas of the enterprise;</p> <p>Carry out the construction and certification of 3~4 green factories;</p> <p>Through data research and analysis according to the actual situation of the enterprise, set ESG environmental protection and emission reduction goals and the way to achieve the goals;</p>	<p>Standardize the operation of the EHS management system of the enterprise/sector, and expand the EHS management functions;</p> <p>Gradually forms a standardized system of EHS management of overseas business;</p> <p>Complete the construction of green factories of no less than 8 enterprises;</p> <p>Actively guide and assist enterprises to carry out energy saving and emission reduction, clean production, carbon reduction, etc;</p> <p>Continue to promote the detection and evaluation of occupational disease hazards to improve the working environment for employees;</p>

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	<p>Completes the three-year safety action plan acceptance, involves nitrification and other dangerous processes of the production line to achieve full automation; implements safety improvement of newly acquired enterprises; completes the construction of safety and environmental information platform in the enterprise park;</p> <p>Company construction projects: one step ahead, high-standard supporting construction of safety and environmental protection facilities;</p> <p>Promote the construction of green factories in 2 enterprises;</p> <p>Improve the construction of ESG database;</p>		
Quantifiable objectives	<p>No occurrence of serious fires, explosions, occupational poisoning accidents, and a minor injury rate less than the probability of 1/1,000</p> <p>Carry out no less than 10 EHS inspections per year</p>	<p>Achieve zero liability accidents, zero environmental pollution incidents and zero new occupational diseases in the EHS management benchmark companies in each segment;</p> <p>Reduce the total emissions of major pollutants of the companies by 10%</p>	<p>Achieve zero liability accidents, zero environmental pollution incidents, and zero occupational diseases in all companies;</p> <p>Reduce the total emissions of major pollutants of the companies by 15%</p>

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(System certification status)

The group company encourages subsidiaries to establish management systems such as occupational health and safety management systems, environmental management systems, and national safety production standardization, and to pass certification. As of the end of the Reporting Period, the certification status of the subsidiaries of the Group is as follows.

Certification name	Number of subsidiaries
Green factory certification	2
Occupational Health and Safety Management System (OHSAS18001/ISO45001) Certification	9
Environmental management system certification (ISO14001) certification	8
Energy management system (ISO500001) certification	1
National Safety Production Standardization	14

(Law enforcement)

In order to effectively control the discharge of various environmental pollutants generated by the group's subsidiaries during the production and operation process, reduce their impact on the environment, and standardize the Company's environmental protection management, the Group strictly implements the relevant laws and regulations of the countries and regions where each businesses are located and the relevant pollutant discharge standards, such as the Law of the People's Republic of China on Prevention and Control of Water Pollution, the Law of the People's Republic of China on the Prevention and Control of Atmospheric Pollution, and the Law of the People's Republic of China on Prevention and Control of Environmental Pollution by Solid Waste, Air Pollutant Release Standards for Pharmaceutical Industry, Boiler Air Pollutant Emission Standards, General Industrial Solid Waste Storage and Disposal Site Pollutant Control Standards, etc.

(System construction)

The Group establishes effective environmental protection management systems and policies in accordance with the laws, regulations and rules of the countries, localities and related industries in which it operates, and taking into account the circumstances of each of the Group's enterprises. At present, the Group's current environmental protection system policies include Grand Pharmaceutical EHS (Safety, Environmental Protection, Occupational Health) Responsibility System, Grand Pharmaceutical Environmental Protection Management Regulations and Grand Pharmaceutical Environmental Protection Management Standardization Guidelines. The Group insists on giving priority to environmental protection, focuses on prevention, comprehensive treatment, energy saving and emission reduction as the corporate environmental protection work policy in the production process, earnestly fulfills corporate social responsibilities, establishes a green and environmentally friendly corporate image, and creates a green responsible brand. During the 2022 reporting period, the Group did not have any major environmental pollution accidents.

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(Standardize the operation of three waste facilities in companies)

In order to standardize the operation of the three waste facilities of our enterprises, the Group has established an inspection mechanism for the operation of environmental protection facilities, and conducts inspections of the operation of environmental protection facilities for each subsidiary from time to time. 24 inspections on the operation of environmental protection facilities have been carried out throughout the year, and all enterprises have carried out rectification as required, and the completion rate of pollutant discharge data for the three wastes treatment facilities of enterprises is 100%.

(Hazardous Waste Disposal Compliance Remediation)

In 2022, the Group carried out solid waste disposal compliance rectification work, and a total of 10 problems were checked. In response to the problems found in the inventory, the enterprises were urged to make improvements, and the solid wastes of all enterprises were disposed of in strict accordance with the requirements of laws and regulations.

(Environmental Investment)

The Group actively builds and improves various environmental protection facilities and “three wastes” treatment facilities. In 2022, the subsidiaries of the group invested more than RMB30 million to implement and complete more than 10 environmental protection projects, which were used to upgrade and transform the enterprise’s environmental protection facilities and “three wastes” treatment facilities.

(Source emission reduction, resource utilization)

The Group actively adopts methods such as equipment renewal, process optimization, and promotion of corporate environmental protection facilities for collaborative disposal and comprehensive utilization of resources to promote the circular utilization of resources within and between enterprises. During the Year, five key environmental protection emission reduction and technology improvement projects were implemented, reducing the total amount of waste gas pollutants at source by approximately 503 tons, the total amount of waste water pollutants by approximately 3 tons, the generation of solid waste at source by approximately 110 tons, and realizing the resource utilization of solid pollutants by more than 3,000 tons. The main measures of emissions are as follows:

- (1) Beilin Jing River subsidiary upgraded the production equipment in the plant, reducing the total amount of VOC emissions by about 1 ton per year;
- (2) Huachen BioTech has been able to reduce VOC emissions by about 500 tons per year through the upgrade of the exhaust equipment and reuse it in the recycling workshop.
- (3) Fuchi Biotech and Grand EBE collected and treated fugitive emissions in the workshop, and the total annual VOC emission is expected to be reduced by about 1.5 tons;
- (4) Fuchi Chemical implemented the dry slag discharge project, reducing the amount of wastewater produced by about 55,000 tons per year, equivalent to 2.8 tons of total chemical oxygen demand;
- (5) Each member enterprise reduced the water content of solid waste by replacing the plate and frame filter press and flat centrifuge, reducing the generation of solid waste by about 95 tons;

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- (6) Fuchi Biotech uses ammonium chloride, ammonium magnesium phosphate and other by-products containing nitrogen and phosphorus in the production process as fertilizers for comprehensive utilization, and the annual utilization of solid waste is about 2,500 tons;
- (7) The desulfurized gypsum in the production process of Grand Life Technology is used as building materials for comprehensive utilization, and the annual utilization of solid waste is about 300 tons;

(Environmental protection patent)

The Group actively deploys environmental protection patents in terms of pollutant source pretreatment and process optimization and improvement. In 2022, 8 environmental protection patents were authorized, including 3 invention patents, which has consolidated the production barriers of the enterprise.

(New renovation and expansion project)

For each new renovation and expansion project, in accordance with the principle of “standardized procedures, one step faster”, various safety and environmental protection facilities are constructed with high standards. Among them, Xiantao Park is the Group’s new production base in Xiantao City. Each construction project has obtained safety and environmental protection procedures as required, and the environmental protection facilities are designed to be 20% stricter than the national emission standard. Currently, each project is carrying out relevant work according to the schedule. The commissioning of the wastewater treatment facilities supporting the project of Xiantao branch of Kernel reached the standard in the first trial; Wuyao Xiantao minority-variety drug base has adopted flexible modular wastewater treatment facilities; various facilities of Hoyo Xiantao base construction project are under construction simultaneously with the main production facilities; Wuyao has achieved full safety automation.

(New business environmental protection management)

The Group’s emerging businesses are progressing smoothly, the Company’s nuclear drug sales project has obtained a radiation safety license and established a radiation safety management department; the nuclear drug production project has completed the EHS site selection compliance assessment work; the medical device project has been put into operation and the EHS management system has been established.

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1.2 Wastewater discharge

In addition to complying with laws and regulations relating to wastewater discharge, we strictly control the discharge of wastewater to reduce the environmental impacts therefrom. The Group strictly requires its members to carry out proper source control, separate collection and separate treatment over their wastewater. All members shall follow the principle of “Decontamination Triage & Treatment by Properties” in treating wastewater, and only those that meet the standards shall be discharged. All of the Group’s members who generate wastewater pollutant have established the required pre-treatment facilities and integrated treatment facilities for wastewater, of which a total of 41 wastewater treatment facility sets and 14 online monitoring facility sets were built. The construction details of our members’ wastewater treatment facilities are as follows:

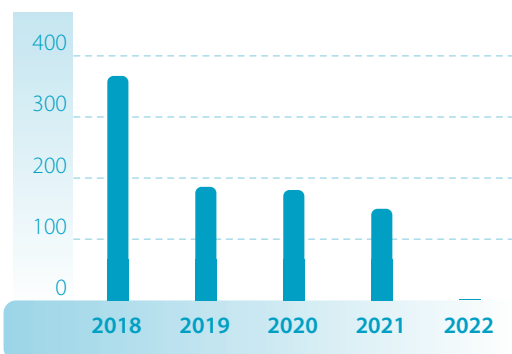
Company Name	Pre-treatment Facility(ies)	Integrated Treatment Facility(ies)	Total Wastewater Treatment Facility(ies)	Online Monitoring
Wuhan Wuyao	5	4	9	Y
Fuchi Chemicals	1	2	3	Y
Fuchi Biotech	1	2	3	Y
Grand Life Technology	/	1	1	Y
Grand Hoyo	5	2	7	Y
Wuhan Kernel	1	2	3	Y
Jiangsu Grand	4	1	5	Y
Bafeng Pharmaceuticals	/	1	1	Y
Huachen BioTech	1	1	2	Y
Preparation Plant	/	1	1	N
Grand EBE	/	1	1	Y
Hubei Wellness	/	1	1	N
Beijing Jiu He	/	1	1	N
Beijing Huajin	/	1	1	Y
Xi’an Beilin	/	2	2	N

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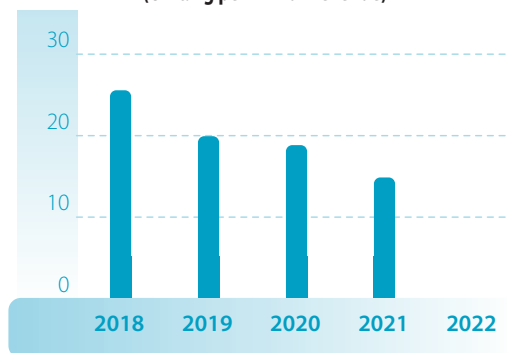
All members have conducted testing, either through online wastewater monitoring facilities or, as required, engaging qualified third-party institutions, on the discharge of wastewater pollutant, whereby they tested and recorded the changes in water quality and quantity at any given moment. All members had a 100% achievement rate in respect of wastewater pollutant discharge. The total quantity and density of major wastewater pollutant discharged are as follows:

Wastewater	2022	2021	2020	2019	2018
Total Wastewater (10 thousand tons)	164.554	128.750	114.660	122.370	218.760
Density of Total Wastewater (tons per million revenue)	172.09	149.74	180.48	185.66	367.17
Chemical Oxygen Demand (tons)	118.966	127.824	119.671	131.385	152.341
Density of Chemical Oxygen Demand (kg per million revenue)	12.441	14.867	18.837	19.934	25.569
Ammonia Nitrogen (tons)	5.434	5.923	4.824	5.326	6.123
Density of Ammonia Nitrogen (kg per million revenue)	0.568	0.689	0.759	0.808	1.028

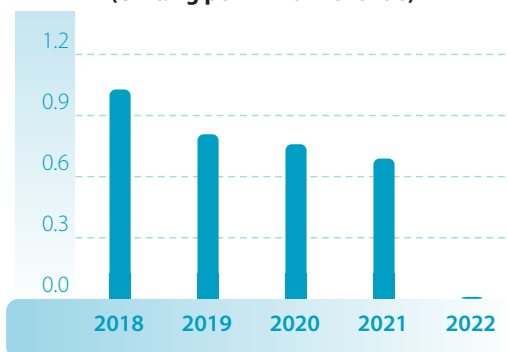
Discharge Intensity of Wastewater
(Unit: tons per million revenue)



Emission Intensity of Chemical Oxygen Demand
(Unit: kg per million revenue)



Emission Intensity of Ammonia Nitrogen
(Unit: kg per million revenue)



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1.3 Waste gas emissions

All 15 pollutant-generating members of the Group have selected, according to the nature of their pollutant, the most suitable and best feasible technologies to effectively treat different exhaust gases, including activated carbon adsorption and desorption, photocatalytic oxidation (UV), regenerative combustion (RTO) and other mature treatment technologies, so as to effectively treat various exhaust gases. A total of 85 waste gas treatment facility sets and 7 online monitoring facility sets were built by our members. The construction details of our members' waste gas treatment facilities are as follows:

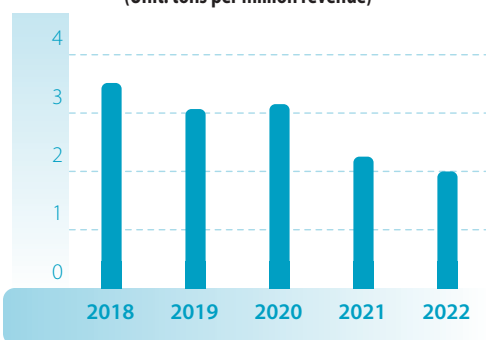
Company Name	Total Waste Gas Treatment Facility(ies) (set(s))	Weather Online Monitoring is Equipped
Wuhan Wuyao	11	Y
Fuchi Chemicals	7	Y
Fuchi Biotech	3	Y
Grand Life Technology	5	Y
Grand Hoyo	25	N
Wuhan Kernel	10	Y
Jiangsu Grand	2	Y
Bafeng Pharmaceuticals	2	N
Huachen BioTech	7	Y
Preparation Plant	3	N
Grand EBE	1	N
Hubei Wellness	1	N
Beijing Jiu He	2	N
Beijing Huajin	4	N
Xi'an Beilin	2	N

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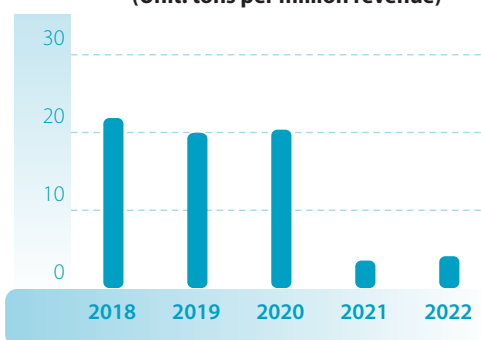
The Group imposes rigid standards over the operation and management of its waste gas treatment facilities, and urges its members to step up the inspection and maintenance of their exhaust gas treatment facilities, with dedicated personnel assigned to operate and maintain each waste gas treatment facility. All members shall establish and operate exhaust gas treatment facilities in strict accordance with the operating procedures. Among the Group's members, there are 7 companies equipped with online exhaust gas monitoring facilities, and the others have engaged qualified third-party institutions to conduct testing on the emissions of exhaust gas pollutant as required. All members had a 100% achievement rate in respect of waste gas pollutant discharge. The total quantity and density of major waste gas pollutant emissions are as follows:

Waste Gas	2022	2021	2020	2019	2018
Volatile Organic Compounds (tons)	19.113	19.369	20.028	20.225	20.947
Density of Volatile Organic Compounds (kg per million revenue)	1.999	2.253	3.153	3.069	3.516
Nitrogen Oxides (tons)	39.128	30.389	129.359	131.412	130.254
Density of Nitrogen Oxides (kg per million revenue)	4.092	3.534	20.362	19.938	21.862
Sulphur Dioxide (tons)	28.972	25.438	32.056	33.426	32.788
Density of Sulphur Dioxide (kg per million revenue)	3.030	2.959	5.046	5.071	5.503
Particulate Matter (tons)	13.529	7.437	10.577	10.112	11.354
Density of Particulate Matter (kg per million revenue)	1.415	0.865	1.665	1.534	1.906

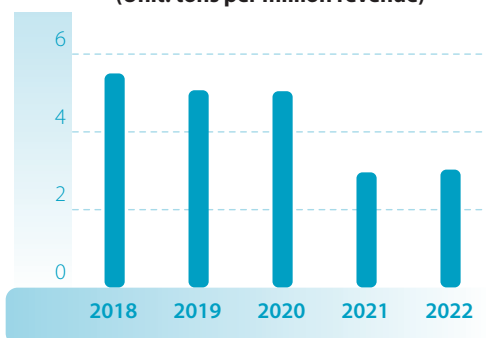
Emission Intensity of Volatile Organic Compounds
(Unit: tons per million revenue)



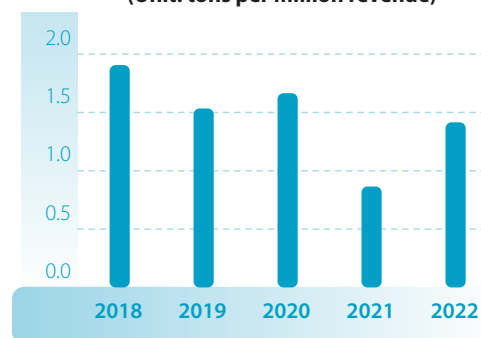
Emission Intensity of Nitrogen Oxides
(Unit: tons per million revenue)



Emission Intensity of Sulphur Dioxide
(Unit: tons per million revenue)



Emission Intensity of Particulate Matter
(Unit: tons per million revenue)



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1.4 Solid waste

The Group strictly complies with the Solid Waste Pollution Prevention and Control Law of the People's Republic of China and other waste-related laws and regulations of the countries and regions where each member operates. All members have entrusted the treatment of hazardous waste to professional institutions qualified in the collection and disposal of hazardous waste. General waste with recycling value was entrusted to competent entities for recycling, while general waste without recycling value was all collected and disposed of by local municipalities, environmental health departments and other entities capable of solid waste disposal.

2022 saw an increase in the disposal capacity of our third-party partners in hazardous waste disposal, who have been cooperating with the Group's members and disposed their hazardous waste temporarily stored when the disposal pipeline was not available. At the same time, the Group launched a compliance overhaul in respect of solid waste disposal, and urged its members to strengthen their control on hazardous waste, strictly complying with the regulatory requirements on the temporary storage of solid waste, keeping and reporting of records and disposal of hazardous waste. The quantity of solid waste disposed by the Group increased in 2022.

	General Solid Waste (tons)	Density of General Solid Waste (tons per million revenue)	Hazardous Waste (tons)	Density of Hazardous Waste (tons per million revenue)
2022	4,502	0.471	6,292	0.658

A2 USE OF RESOURCES

(1) At the Group level, the existing energy management requirements were refined and optimised in terms of operation and maintenance of energy equipment and facilities, energy measurement and analysis, introduction and promotion of technological reform on energy-saving and energy-saving equipment, and introduction of new energy sources, so as to provide a clear direction for the Group's subsidiaries to improve their energy management; (2) in order to enhance our members' initiative to carry out technological reforms on energy-saving, it counts as a bonus point in the assessment over the department managers of our members; (3) we have obtained certain national and industry documents on energy, such as the National Recommended Catalogue of Energy-saving Technology and Equipment in the Industrial and Information Technology Sector, the Catalogue of Industrial Structure Adjustment, the Notice on the Publication of Carbon Peak Implementation Plan in the Industrial Sector (GXBLJ[2022] No. 88) and the Recommended Catalogue of Green Technology, and organised study on them to help our members learn the new developments in national policies and the industry, thereby avoiding to take a wrong path; (4) the Group organises regular meeting to facilitate communication among our members in respect of energy management, whereas problems will be exposed, and solutions discussed, in a view to share information and facilitate common progress among our members; (5) in terms of budget management, the Group is inclined to invest in energy-saving technologies with certain maturity in its budget; (6) the Group specifies the key projects of technological reform on energy-saving for each member at the end of the previous year, and track the progress and assist in implementation if necessary; (7) we continue to bring in external resources to conduct research and exchange on energy-saving technologies and energy management, identify energy-saving projects and improve energy standards, for examples, we have invited Spirax Sarco to conduct research and exchange on the in-depth utilisation of multi-effect condensate, and Hubei Institute of Measurement and Testing Technology to conduct exchanges and study on energy audits; and (8) we remain open in the models of energy cooperation, and encourage to cooperate with qualified suppliers, by way of contractual energy management, in areas such as technological reform on energy-saving and new energy (photovoltaic, energy storage, etc.) to create a win-win situation.

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In 2022, the overall use of resources by the Group's 23 major members is as follows:

	Unit	Total
Coal Consumption	tons per year	55560.19
Natural Gas Consumption	ten thousand m ³ per year	1185.08
Water	ten thousand t per year	352.46
Electricity	ten thousand kWh per year	22254.12
Purchased Steam	t per year	156941.99
Ethanol	tons per year	1854
Plastic for Packaging	tons per year	455.85

The major energy consumers mainly comprise the companies of active pharmaceutical ingredients under the Group, and the comprehensive energy consumption for a unit of product is less than or equals to 10tce/t. Firstly, we have further improved our measuring instruments and strengthened the statistics and analysis of energy source data, so as to guide energy use, evaluation and conservation based on more accurate energy consumption data. Secondly, we have strengthened the inspection of energy equipment and facilities in the parks of our active pharmaceutical ingredients companies, especially those of Fuchi, in order to reduce leakage and damage to insulation, improve the integrity of the energy system equipment and facilities, actively bring in new technologies and equipment (such as upgrading roots blowers to magnetic levitation blowers), enhance energy usage efficiency, strengthen the management of steam used in the Fuchi park, make full use of the capacity of the existing coal-fired boilers and residual heat boilers, reduce the number of peak shaving of natural gas boilers, reduce gas consumption and hence production costs. Lastly, for our members engaged in pharmaceutical preparation, we require those with gas-fired boilers to, by adopting residual heat utilisation and other means, reduce natural gas consumption per unit to the industry standard of around 80m³/t, and those with necessary capabilities are required to conduct research on rooftop photovoltaic systems.

Information on the carbon dioxide emissions of the Group's 23 major members is summarised below:

	Item	Unit	Quantity
Greenhouse Gas Emissions	Direct Emissions	Tons of CO ₂ equivalent per annum	68,362
	Indirect Emissions	Tons of CO ₂ equivalent per annum	133,677

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A3 ENVIRONMENT AND NATURAL RESOURCES

The direct energy used by the Group in the production and operation process is mainly natural gas and fuel coal, while indirect energy includes purchased electricity and steam.

The Group has formulated internal management procedures in accordance with the policies, regulations and standards of the state, local and industry authorities related to energy conservation, such as the Energy Conservation Law of the People's Republic of China and the Law of the People's Republic of China on Promoting Clean Production to improve the utilization rate of energy and resources and reduce the possible waste of energy and resources that may be generated. The Group's member companies reduced energy consumption by means of management improvement and equipment and facilities upgrade. Key measures implemented in 2022 include:

- (1) Grand Life Science has carried out water-saving and emission reduction work on a comprehensive scale, reducing the pollution per ton of product by 1.7%. It has replaced Roots blowers with low energy consumption and efficient magnetic levitation blowers, saving approximately 13,000 kW·h of electricity per year.
- (2) Kernel Company has adjusted the operating mode of its power-consuming equipment by optimising its sewage treatment facilities, saving approximately 670,000 kW·h of electricity per year. Through the optimisation of workshop production processes and the reuse of reclaimed water, it has saved 65,000 tons of water per year. By increasing pipeline insulation and other measures, it has reduced natural gas consumption by 15,000 m³ per year.
- (3) Fuchi Chemicals' sulfate workshop has reduced water consumption by 25.12% as compared with the corresponding period by optimizing operating parameters, while its fine chemical workshop has reduced water consumption by 35.59% as compared with the corresponding period by measures such as steam condensate reuse.

The production processes and related business activities of the Group have not caused significant impacts on the environment and natural resources.

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A4 CLIMATE CHANGE

Climate change has been a common critical challenge in recent years across the globe. The Chinese government firmly committed to reducing greenhouse gas emissions in 2020 and has set a clear timetable to achieve carbon neutrality, namely “peaking CO₂ emissions before 2030 and striving to achieve carbon neutrality before 2060”. The Group has long been concerned with the trend of climate change and the impact of domestic and international regulations on the pharmaceutical industry.

4.1 Impact of climate change

Risk categories	Risk description	Potential impact	Impact evaluation	Opportunity types	Opportunity description	Potential impact	Impact evaluation
Transformation risk	Rise of raw material cost	Operating cost ↑	Medium-term	Resource efficiency	Green factory	Operating cost ↓ Revenue ↑ Asset value ↑	Medium-term
	Investment and transformation of low-carbon technologies	Operating cost ↑	Short-term		Cleantech applications	Operating cost ↓ Revenue ↑	Short-term
	Adjustments in environmental laws and regulations	Operating cost ↑	Short-term	Market	Increased demand for green and low-carbon products	Revenue ↑	Medium-term
Physical risk	Increased extreme weather	Revenue ↓ Operating cost ↑	Short-term	Energy source	Clean energy and renewable energy	Operating cost ↓	Short-term
	Sea level rise	Asset value ↓	Long-term		Carbon trading participation	Revenue ↑	Medium-term

4.2 Planned measures

As at the end of the Reporting Period, the Group’s member companies had formulated measures to address climate change. In the future, the Group’s member companies will try their best endeavor to eliminate the adverse effects of climate change, seize the opportunities brought by climate change, and ensure the stable operation of the company by the following means.

- | | | | |
|----------|--|----------|--|
| 1 | In terms of coping with extreme weather, formulate relevant emergency plans and equip corresponding emergency supplies to reduce the impact of extreme weather on companies; | 4 | Develop and actively carry out the certification of green products, reduce greenhouse gas emissions throughout the life cycle of products, thereby reducing the cost of product export and enhancing product competitiveness; |
| 2 | Develop a green supply chain, strengthen the research of upstream suppliers, actively develop green suppliers, and reduce the impact of relevant policies on the stability and price of raw material procurement of companies; | 5 | Use low-energy-consumption and high-efficiency equipment instead of high-energy-consumption and low-efficiency equipment, and encourage the use of variable frequency equipment, environmental, energy-saving equipment and energy-saving lamps; |
| 3 | Actively conduct certification of green factory, reduce production energy consumption and greenhouse gas emissions, reduce operating costs, and enhance asset value; | 6 | Promote the use of clean energy such as solar panels and photovoltaic power plants in qualified member companies; |

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B1 EMPLOYMENT

The Group actively creates a fair and harmonious employment environment, with no gender discrimination in terms of recruitment and employee promotion. The Group encourages employees to complete their work during working hours in an efficient manner and has completed the work hour registration procedures for employees working irregular hours with the human resources department. It pays efforts in implementing welfare policies such as annual leave and “three periods” protection for female employees. The Group encourages employees to participate in job rotation across different regions, professions, and cultures with subsidy policy in place to show support. It organizes the “Happiness Lies in Your Hands” activity to a broad extent and encourages employees to bring forward rational suggestions, innovate/technological projects with dedicated project rewards provided, creating a connection between the project activities participation and the career development of employees. The Group revises and improves the on-the-job training system and provides special subsidies to employees who obtain professional qualifications or practice certificates (occupational certificates).

The Group has complied with national laws and regulations such as the Labor Law of the People’s Republic of China, Labor Contract Law of the People’s Republic of China, Social Insurance Law of the People’s Republic of China and Production Safety Law of the People’s Republic of China, and committed to proper implementation pursuant to regulatory requirements.

Employment of the Group’s Staff

Indicators	Unit	2022
Total number of employees	Person	10,172
Percentage of female employees	%	45%
Percentage of minority employees	%	2.2%
Percentage of female Board members	%	20%
Number of company executives	Person	10
Percentage of female executives	%	30%
Number of managers (including senior and middle management)	Person	443
Number of female managers (including senior and middle management)	Person	145
Percentage of female managers (including senior and middle management)	%	33%
Number of senior management personnel (including executives)	Person	205
Number of middle management personnel	Person	464
Number of entry-level personnel	Person	9,503
Annual employee turnover rate	%	15%
Number of overseas personnel	Person	333

Number of employees by age

Age group	Staff number	Percentage
Age under 30	2,406	24%
Age between 31 and 35	2,557	25%
Age between 36 and 40	1,970	19%
Age between 41 and 45	1,327	13%
Age between 46 and 50	1,051	10%
Age over 51	861	8%
Total	10,172	100%

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Number of employees by company

Company name	Staff number
Xi'an Beilin Pharmaceutical Co., Ltd.	1,483
Beijing Grand Jiuhe Pharmaceutical Co., Ltd.	1,283
OTC Marketing Centre	771
Wuhan Wuyao Pharmaceutical Co., Ltd., Fuchi Branch	688
Hubei Grand Life Science & Technology Co., Ltd.	597
Wuhan Grand Hoyo Co., Ltd.	461
Grand Pharm (China) Company Limited, Preparation Branch	424
Hubei Grand Fuchi Pharmaceutical & Chemicals Co., Ltd.	313
Wuhan Kernel Bio-tech Co., Ltd.	304
Hubei Grand EBE Pharmaceutical Company Limited	303
Headquarters of Grand Pharm (China) Company Limited	291
Hubei Grand Biotechnology Co., Ltd.	280
Prescription Drugs Marketing Centre	266
Grand Pharmaceutical Huangshi Feiyun Pharmaceutical Co., Ltd.	233
Cangzhou Huachen BioTech Co., Ltd.	232
Jiangsu Grand Xianle Pharmaceutical Co., Ltd.* (江蘇遠大仙樂藥業有限公司)	195
Wuhan Wuyao Pharmaceutical Co., Ltd.	191
Cardionovum Medical Device (Wuhan) Co. Ltd.* (凱德諾醫療器械(武漢)有限公司)	186
Wuhan Wuyao Technology Co., Ltd.	144
Wuhan Shetai Medical Technology Co., Ltd.* (武漢社泰醫療科技有限公司)	138
Grand Pharmaceutical Fuchi Industrial Park	128
Zhejiang Jianju Xianle Pharmaceutical Company Limited	116
Hubei Wellness Pharmaceutical Co., Ltd.	113
Wuhan Grandpharma Group Sales Co., Ltd.	105
Beijing Huajin Pharmaceutical Co., Ltd.	90
Wuhan Kernel Bio-tech Co., Ltd., Xiantao Branch	84
Nanjing AuroRNA Biotech Co., Ltd.	61
Kainowei Medical Technology (Wuhan) Co., Ltd.* (凱諾威醫療科技(武漢)有限公司)	60
Hubei Fubo Chemical Co., Ltd.* (湖北富博化工有限責任公司)	59
Hubei Fuchi Chemical Equipment Co., Ltd.* (湖北富馳化工設備有限公司)	35
Tianjin Jingming New Technology Development Co., Ltd.	34
Huangshi Fuchi Water Affairs Company Limited	25
Beijing Puer Weiye Biotechnology Co., Ltd.	14
Zhejiang Grand Biotechnology Co., Ltd.* (浙江遠大生物科技有限公司)	11
Jiangsu Shenming Medical Technology Co., Ltd.	7
Grand Pharmaceutical Group Limited	5
Hubei Grand Fuyuan Life Technology Co., Ltd.* (湖北遠大富源生命科技有限公司)	5
Zhu Hai Cardionovum Medical Device Co. Ltd.	1
Wuhan Grand Pharmaceutical Group Sales Limited*	423
Australian Research Institute and Belgian Research Institute	13
Total	10,172

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B2 HEALTH AND SAFETY

The Group actively implements a safety production approach of “safety first, prevention-oriented, and comprehensive management”. As the Company rapidly develops, it strictly adheres to the bottom line of legal and compliant operations, and sticks to a safety development concept that is people-oriented and prioritises people’s lives, giving the highest of priority to the protection of workers’ lives and health. The Group has established a prevention system for accidents and potential hazards to prevent and resolve major safety risks from the source and eliminate accidents in the bud. To this end, the Group employs a range of measures, combining engineering technology, administrative management, labor protection, responsibility assessment and other means, starting from system construction, responsibility implementation, safety input, education and training, dual prevention system, etc. to establish a long-term mechanism for safe production, and strive to achieve other production and operation objectives under the premise of ensuring safety.

4.1 Construction of Safety Management System and Implementation of Responsibilities

The Group has established a Group Safety Management Committee, which is the highest decision-making body for EHS matters and is composed of the Group’s President, senior management, persons in charge of each business segment and persons in charge of each functional centre. The EHS Management Committee is responsible for formulating the Group’s occupational health and safety management objectives and targets, guiding and coordinating the safety work of member companies, strengthening the implementation of safety regulations and procedures, and ensuring the achievement of occupational health and safety management objectives and targets. The Group regularly analyses the situation of EHS management, implements relevant national policies, laws, regulations and standards, and organises its member companies to implement the policies of the occupational health and safety management system.

In 2022, the Group further improved and perfected its EHS management system, clarified the EHS responsibilities of various personnel at all levels in accordance with the principle of safety management being a must when managing business, revised the safety and environmental management guidelines, and formed a two-tier EHS filing model of “safety and environmental responsibility system/management system + safety and environmental protection management guidelines”, which provides guidance and institutional basis for the improvement of the systems of member enterprises and the Group’s daily supervision and inspection.

In 2022, the Group established and improved its internal safety and environmental protection regulations database, collecting a total of 1,134 laws, administrative regulations, departmental rules and other relevant information, and classifying them into 28 categories, including general management, occupational health, construction projects “three meanwhiles” and operation management, and providing them to the entire Group and its member enterprises to assist in and support for the further development of compliance awareness.

4.2 Safety and Environmental Protection Awareness/Competency Training

In 2022, the Group strengthened the compliance awareness and capacity building of all employees based on the principles of “strengthening legal compliance, being the first responsible person for safety, and guarding the red line and bottom line of the law”. Trainings with focus on regulations (environmental protection law, solid waste law and criminal law), group systems, professional skills (process safety management, environmental protection facilities operation management) and team safety construction were carried out for major persons in charge of enterprises, persons in charge of functional departments, team leaders and other personnel. A total of eight online safety and environmental protection training sessions (19 lectures) were held, with a total of 2,005 participants. A total of 1,760 participants took the examination using the Grand E Platform, with a 99.8% pass rate. The launch of the training series further strengthened the awareness of safety and environmental protection compliance among employees at all levels, enhanced the professional ability of safety and environmental protection management staff, and ensured the legal and stable operation of enterprises.

All member enterprises have also strengthened their safety and environmental protection training in their daily management. According to statistics, in 2022, a total of 675 training sessions were conducted, with 64,840 participants.

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4.3 Intrinsic Safety Improvement

In accordance with the national three-year action plan for special rectification of safety production, the safety automation upgrade of seven production lines was completed, including the chlorination and ammonia processes of Huachen Biotech, the automation of the storage tank area of Fuchi Biotech, and the nitrosation and sulphonation processes of Wuyao Pharmaceutical. Remediation of 84 major safety hazards at the site has effectively improved the conditions for safe production, and achieved "four zeroes" in terms of safety risk assessment, renovation of automation control equipment, non-compliance with academic qualifications of employees, and relocation and renovation of staff-intensive premises.

4.4 Fu Chi Industrial Park Compliance Accreditation

The management committee of the park has strictly analyzed the gap between the construction plan of the park and its status quo and made positive rectification in accordance with the requirements of the Hubei Province Chemical Industry Park Accreditation Scoring Standard (Trial), according to which, the park has reached its accreditation standards.

4.5 Process Safety Management

In 2022, the Group focused on the development of a process safety management system, inviting external experts and the Group's internal process safety professionals to organise a series of training on process safety management knowledge and skills, and establishing process safety teams in each chemical enterprise to take full responsibility for the development of process safety management in each enterprise.

The Group implemented a process safety management system in key enterprises on a pilot basis. By adhering to the principle of risk control at source, the Group commenced process hazard analysis at the design stage of process installations, completed the process hazard analysis of dimethyl sulfate continuous distillation device and tail gas treatment device of nitromethane production, identified high risks in 13 design schemes, and carried out process hazard analysis of nitromethane production process and dimethyl sulfate production device, identified 12 high risks, and all high risks were controlled by effective measures.

In 2022, the Group established a process safety laboratory equipped with analytical instruments such as Differential Scanning Calorimetry (DSC), Adiabatic Accelerating Rate Calorimetry (ARC) and Reaction Calorimetry (RC1), and began to undertake full-scale reaction risk testing for the Group's member enterprises to ensure that reaction safety risks are controlled from the R&D stage.

4.6 Enhancing Dual Control

(1) Risk identification and control

In 2022, the Group formulated an annual work plan for safety risk identification and graded control to guide and supervise enterprises to carry out risk identification and graded control. At present, 19 enterprises have initially completed this task, with 4,396 risks identified, including 449 higher risks; implemented graded control over enterprises, departments, workshops and work teams; established four-colour charts of enterprise risks, high or higher risks information columns, and post risk information cards, implemented visual management of risks and control, and carried out key control.

(2) Enterprise Graded Safety Inspection

In 2022, the Group launched a graded safety and environmental control evaluation process through the development of a comprehensive checklist. In terms of safety, 8 Level 1 elements, including compliance, responsibilities, daily management, production, operation, equipment, fire prevention and occupational health, and 33 Level 2 elements were identified. In terms of environmental protection, 4 Level 1 elements, including compliance, systematic management, pollution control and on-site management, and 11 Level 2 elements were identified to conduct a comprehensive assessment of the current status of safety and environmental protection. Enterprises with higher risks were subject to focused supervision and control, and were managed in a graded and categorised manner. Throughout the year, the Group organised and completed a total of 19 member enterprises' graded control inspections and evaluations.

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4.7 Activities for All Employees

(1) Safety Month

In June and July 2022, in accordance with the requirements of the relevant circular of the Office of the State Council Safety Committee, and in line with the annual safety priorities of the Group and its enterprises, the Group organized a two-month safety month activity for all member enterprises.

In the overall deployment of the "Production Safety Month" activity, the Group set up a two-tier group activity leadership team around the theme of "Complying with the Production Safety Law and Being the First Responsible Person", and by focusing on the effectiveness of the activities, the Group formulated a detailed activity plan and mobilized employees extensively. Each member enterprise formulated its own activity plans and organised various activities in accordance with the requirements of such activity plans.

Through extensive publicity and mobilisation, the member enterprises organised a series of activities with a total of 510 inspections; 674 training sessions with more than 12,000 participants; 173 drills with more than 3,400 participants, and a series of other special activities, such as knowledge competitions, safety competitions and educational films.

Through the two-month Safety Production Month activity, the awareness of the first responsible person of each enterprise to know and understand the law and abide by the law was further enhanced, and the awareness of the red line and bottom line of legal and compliance operation became more deeply rooted. The enterprises further increased the safety knowledge and skills of all staff and raised the awareness of "I want to be safe" through the launch of informative and diverse activities.

(2) Fire Prevention Week

In November 2022, the Group organised a two-week fire prevention activity for all enterprises under the theme of "Fire Safety for High Quality Development". During the Fire Prevention Week, the Group invited external professional lecturers to organise fire prevention seminars for frontline personnel of each enterprise. Each member enterprise also organised a series of activities in accordance with their respective activity plans. There were more than 57 fire prevention training sessions with more than 2,400 participants; more than 27 fire prevention inspections; and more than 33 emergency drills with 975 participants. In addition, certain enterprises launched special activities such as knowledge competitions, fire prevention competitions and fire prevention responsibility pledges. Through the launch of the Fire Prevention Week, the awareness of fire safety among staff was further enhanced and the "four abilities" of fire safety among staff were improved.

(3) Team Standardization

In 2022, with the theme of "Maintaining and Deepening Achievements", the Group further promoted team safety standardization and continued to improve the coverage and quality of the teams based on the achievements made from 2017 to 2021. The number of standardised safety teams built in each enterprise was further expanded and extended to the building of standardised environmental protection teams. 199 standardised teams were built with an achievement rate of 91.7%. In terms of quality improvement, the range and scope of team education and training were further expanded to include process safety, risk identification and graded control, and management of special operations, in order to improve the quality of the teams from a more technical safety perspective. The promotion of team safety standardisation has effectively raised the safety awareness of the junior management and all staff.

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4.8 Occupational Health

In order to protect employees' health, each enterprise of the Group has carried out occupational health management in an all-round way, organizing occupational health checkups for a total of 2,748 people, with a passing rate of 99.7%. Among them, 9 people had abnormal health problems and will be re-examined or seconded. 813 workplaces were monitored for occupational health hazards, with an achievement rate of 94.9%. All the hazards exceeding the standard were from noise, and the enterprises involved have taken safety protection measures to control such hazards.

During 2022, there were no work-related fatalities in the Group's enterprises and there were two work-related accidents with a total of 84 lost working days.

B3 DEVELOPMENT AND TRAINING

In recent years, the Group has been promoting strategic transformation and accelerating innovation to expand product markets and grow business segments. Enterprises continued to pay attention to the enhancement of standardization and professionalism, and has increased its efforts in research and development training. The talent cultivation programme continues to develop with the echelon cultivation system and core senior management training, and is more inclined to the direction of "professional, rejuvenated and international" talent cultivation.

1. the Group issued the Notice on Grand Pharmaceutical's 2022 "Required Knowledge and Skills", proposing to strengthen the management of required knowledge and skills in segments, focusing on the required knowledge and skills for new business and new projects, gradually improving the system and other management demands for required knowledge and skills, and deepening the implementation of special work for required knowledge and skills. Focusing on the major needs of international management, the Group organised trainings on topics such as "Required knowledge and skills for overseas directors", "Anti-discrimination in overseas recruitment" and "Communication regulations for overseas associates" to enhance the team's international management capability. In addition, focusing on the key functions of compliance, we launched the "Key Positions Compliance Enhancement Project", organised the "One Dose of Medicine to Save Two Lives" learning activity for the quality function, the "Knowing, Understanding and Abiding by the Law" learning activity for the legal function, and the Safety and Environmental Protection Centre launched the annual safety and legal training under the theme of "Know the Law and Abide by the Law, Be the First Responsible Person for Safety and Environmental Protection, and Be a Law-abiding Enterprise", and carried out a comprehensive review and optimisation of the management requirements and processes, personnel recruitment, training, assessment, cadre management and other aspects, so as to meet the development needs of each enterprise in terms of quality assurance, efficiency enhancement, professional upgrading and internationalisation on the basis of compliance requirements.
2. **Building of Talent Echelon**
 - 2.1 The Group started the selection of trainees for the 2022 Grand Pharmaceutical Camp (GPC) in accordance with strategic planning needs, conducted a special talent inventory, mapped out the quantity and quality of existing talent, and used the Group's cadre profile as a blueprint to clarify the GPC's training objectives for future general managers, division/group functional directors and major project leaders. A total of 86 trainees were selected to receive targeted trainings in both practical and instructor-led courses. This year's GPC trainings last for 2.5 years, with intensive training planned for every two months/sections. Currently, the opening ceremony and 2 intensive training sessions were completed. The design and implementation of key training methods, such as practical project follow-up and mentorship, are focused on the training objectives. The training content is designed based on the current development status and staff requirements of the Group, so as to open up the minds of managers and closely integrate with key projects and work.

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- 2.2 The Group's talent echelon cultivation project is a training camp for "professional, rejuvenated and international" young backbones, junior managers and middle managers. On the basis of the two years of experience in the operation of the echelon projects, the Group has continued to think deeply about how to pool resources together and do a better job of collaborative training, further clarify the focus of echelon project implementation, accelerate the training process, strengthen output management, reduce the investment of resources in non-key areas, promote the standardisation of echelon projects, and gradually build a group-based talent training brand project with the characteristics of the Group. In 2022, the Group's business segments started their own project operations according to their respective plans, with a total of 360 trainees participating.
- 2.3 The Group adheres to a talent development strategy that combines internal cultivation and external intellectual input, and attaches great importance to the cultivation of innovative talents for research and development and potential talents for international development. The company has successively issued policies related to the investigation and training of management trainees, with a full tracking and closed-loop management mechanism to pay attention to the growth process of the management trainees, accelerate the probationary period of the management trainees and growth experience, and verify and explore the professional ability and strengths of the management trainees through project work, especially the challenging "four new" projects, so as to quickly match the needs of business development. In addition to the follow-up and consideration of the continuous growth of the management trainees, the Company organized a variety of management training activities in 2022, such as seminars for management trainees. The promotion of the management trainee projects, the sharing of project experience and the instructor-led exchanges all contributed to the integration and exchange between the Group's instructors and the management trainees and between local management trainees themselves.
- 2.4 Based on the consideration of further deepening the implementation of R&D SOP, the Group's R&D management centre intends to build a professional training management system around the R&D quality system and introduce the eCollege system as an informatized system for R&D SOP training and professional training, which will gradually cover the relevant personnel of the R&D management centre and the R&D functions of the Group's subordinate enterprises. In 2022, the number of participants was 255, with a total of 847.2 hours of learning, 170 online training courses were uploaded, and more than 2,000 training tasks were issued for mandatory courses, with a completion rate of 99.8% and a timely completion rate of 90.8%.
- 2.5 In order to promote the organic growth of talents, strengthen their ability and experience, and assist in business development, the Group has launched a talent inventory and training for financial and human resources professionals, and rolled out the financial reserve training program (involving 141 trainees) and the "HRBP Strengthening Project" (54 trainees per session) respectively. Through course sharing, case discussions, and action plan follow-ups, etc., high potential financial/human resources talents were guided to actively understand the frontline business situation, gain insight and judgement on business needs and key issues, and accelerate the cultivation of high potential reserves.
3. Among those trained in major training programmes, the percentage of male and female trainees was 68% and 32% respectively, and the percentage of senior managers and middle managers was 13% and 33% respectively;
4. In 2022, especially in the second half of the year when the pandemic had a greater impact, training was more often conducted both online and offline, with the average training hours for male and female employees being 85 and 76 respectively, and the average training hours for each senior and middle manager being 71 and 89 respectively.

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B4 LABOUR STANDARDS

The Group has clearly stipulated that it does not recruit employees under the age of 18 when recruiting and hiring; strictly implements labour protection measures for workplace operations; raises the safety awareness of employees through organising activities such as shift safety and safety month; increases maintenance of and investment in safety facilities; and continuously improves operating conditions and the working environment.

The Company has been implementing the requirements of the Labour Law of the People's Republic of China, the Labour Contract Law of the People's Republic of China and the Safety Production Law of the People's Republic of China.

B5 SUPPLY CHAIN MANAGEMENT

The majority of the Group's suppliers are located in the PRC and only less than 1% of them are from overseas. The Group has formulated a series of procurement management system and procurement control procedure, and has strictly selected suppliers and monitored the procurement process in accordance with the Drug Administration Law of the People's Republic of China, Good Manufacturing Practice and the Patent Law of the People's Republic of China. In selecting suppliers, a due diligence will be performed. The Group may visit the production plants if necessary and investigate the credit performance as well as the company's nature and background, providing that there should be no risk of infringement of the intellectual property rights of others and violation of relevant laws and regulations in relation to their supplies. The samples provided are required to pass the testing and trial production before such suppliers could become the Group's qualified suppliers. Procurement staffs have also conducted regular visits to suppliers to maintain close liaison and good cooperation relations with them. Meanwhile, the quality notices made by suppliers have been regularly monitored to ensure all of the raw materials used by the Group are in compliance with the standard requirements and ready for use.

At present, the international situation and the global pandemic are still unstable. The Group has strengthened the information construction in the supply chain management, such as the supply chain information management system and the online shopping mall for procurement, etc. At the same time, it has also strengthened the management of the medium and long-term supply chain, such as the management of strategic suppliers, the nationalisation of imported materials and the acquisition/nurturing of the upstream supply chain, etc. to ensure the stability and continuous supply of the procurement supply chain system.

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B6 PRODUCT LIABILITY

The production and sales of the Group's pharmaceutical products comply with the provisions of the Drug Administration Law of the People's Republic of China, the Patent Law of the People's Republic of China, Regulations on the Implementation of the Drug Administration Law of the People's Republic of China, Good Manufacturing Practices for Pharmaceutical Products, Good Agricultural Practice for Chinese Crude Drugs, Good Supply Practice for Pharmaceutical Products and Good Pharmacovigilance Practice and other relevant laws and regulations. The Group has a comprehensive quality control system for its production and operation, and its manufacturing and sales enterprises have all passed the GMP/GSP compliance inspection by the State Drug Administration, fully implementing the primary responsibility for quality and safety of pharmaceutical product marketing licensees. The Group has introduced the concept of risk management throughout the life cycle of pharmaceutical products and promoted a quality culture of maximising the benefits to patients to ensure product quality through enhancing the quality awareness of all staff, a professional and efficient training system, multi-level on-site dynamic control and continuous optimisation and improvement of product quality. We attach importance to investment in technological research and development and bring in various professional and high-end talents to continuously develop drugs with proven clinical efficacy. We attach importance to the protection of intellectual property rights, and set standards for the maintenance of patent assets, the monitoring and identification of patent risks, and the resolution and handling of patent disputes, so as to ensure that there are no infringement disputes over products. We established a comprehensive MAH pharmacovigilance system, proactively conducting post-marketing safety studies and strengthening social responsibility for drug safety practices. By using modern information tools and multi-channel approaches, we collect drug safety information, consultation and complaints, and conducted data analysis to continuously improve the quality of medicines to ensure that they are safe, effective, and are of consistent and stable quality, so that patients can use them safely.

The Group has established a management system and procedure for drug safety information, consultation and complaints, assigned professional staff for complaint handling and follow-ups, utilised modern information means and multi-channel approaches to ensure that drug safety information and customer consultation and complaints can be promptly understood, identified and satisfied, provided satisfactory answers or reasonable solutions to customers' queries within the shortest possible time, and continuously followed up with feedback. In 2022, we have a customer satisfaction rate of 100%. We regularly analysed and evaluated customer needs and the system and procedures they complained about, and continuously improved the handling mechanism to enhance the quality of products and services. In 2022, 277 complaints were received.

We have established product quality standards, product inspection operation procedures, product release procedures, and clearly defined the quality control procedures during the whole process from material entry, product production, product release, as well as the product quality standards and daily monitoring requirements for each link to ensure that product quality meets the national statutory standards. Through QA inspections, regular self-inspections, quality system management and management assessment mechanisms throughout the production process, we ensure that products are produced consistently and in accordance with the requirements of laws and regulations. We established a drug recall procedure and a drug traceability system, and conducted regular drug recall drills to ensure that all products on sale can be recalled promptly in the event of quality problems with products already on the market.

In 2022, there were no products sold or shipped that had to be recalled for safety and health reasons.

We established a patent application and patent alert procedure, and currently, our patent alert analysis basically covers a wide range of products on the market and under development, further protecting our products on the market and under development from infringement of third party intellectual property rights. A patent management system has also been set up for patent applications to enable timely patent protection for innovations and technological improvements and to safeguard the Company's patent assets.

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B7 ANTI-CORRUPTION

- (1) The Group has continuously strengthened its corporate internal control mechanism and institutional supervision, and has always operated with integrity and strictly complied with the rules of fair competition. The Group is determined to refuse commercial bribery, bribery and other improper business practices, and has formulated and published a compliance management system, which specifies the prohibition of commercial bribery and all integrity-related regulations and management mechanisms, and has put in place a management system and measures for the management of funds to prevent money laundering.
- (2) We strictly abide by the laws and regulations such as the Law Against Unfair Competition of the People's Republic of China, the Criminal Law of the People's Republic of China and the Company Law of the People's Republic of China.
- (3) There were no corruption proceedings against the Group during the reporting period.
- (4) The Group has established a professional and high-quality compliance management team to supervise and manage the commercial bribery, bribery and other improper business practices of the Company, especially in key areas and key projects of overseas operations to specify compliance management institutions or assign full-time personnel; put into practice an undertaking system aiming at preventing commercial bribery against key personnel in key areas prone to corruption and employees in key positions were required to sign the compliance undertaking with the Company; carried out regular or irregular inspections on the compliance management of each department of the Company to trace the root causes and identify defects; strengthened accountability for violations and improved the punishment mechanism for violations by linking with performance appraisals to effectively prevent risks. The Company conducts anti-corruption supervision and management in strict compliance with relevant national laws and regulations and the Company's internal policies, establishes an internal anonymous compliance reporting channel to timely discover, prevent and deal with employees' violations of disciplines and regulations, and timely reports to relevant departments for those suspected of committing crimes.
- (5) The Group has always focused on the strategic work of building a culture of integrity, and we regularly organize anti-corruption trainings to enhance our employees' understanding of job-related crimes and the study of relevant laws and regulations, and incorporate the study of internal compliance management system into the normalized and institutionalized training mechanism to enhance our employees' compliance awareness and cultivate corporate compliance culture.

In 2022, the Group provided four training sessions on anti-corruption topics, each lasting 2 to 3 hours, covering all employees of the Group's head office and its subsidiaries; prepared monthly compliance reports and annual compliance management reports; and held an annual meeting on corporate compliance to discuss ideas and directions for corporate compliance.

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B8 COMMUNITY INVESTMENT

1. On 6 August 2022, the Group made a cash donation of RMB20,000 to the village of Daobazui in Wuxiang County, Shanxi Province to help build the village.

The Group has never forgotten the villagers of Daobazui Village because this family-like friendship is invaluable to us. Although we are thousands of miles apart, our hearts are still connected. With love and responsibility, the Group hopes to make a new contribution in supporting the revitalisation and development of the village. In order to help build the village, Grand Pharmaceutical donated a total of RMB20,000 to the villagers of Daobazui Village.

2. On 23 August 2022, the Group donated RMB400,000 to the Fuchi Town Education Fund in Yangxin County, Hubei Province.

On the evening of 23 August, an education fund charity gala was held in the People's Square in Fuchi Town, Yangxin County, Huangshi, Hubei Province, a way to celebrate the 20th National Congress of the Communist Party of China. The Group donated RMB400,000 to Fuchi Yucai Education Foundation, which was a warm gesture to give back to Fuchi people and a model demonstration of love education and gratitude education.

3. On 29 December 2022, Xi'an Beilin Pharmaceutical subscribed for 5,000 jin of celery in Gaoling District.

Farmers in He Cun Community, Tongyuan Street, Gaoling District ushered in a bumper harvest of celery, but affected by the pandemic, the sale of celery was faced with difficulties and vegetable farmers were at a loss. On 29 December 2022, led by Gaoling District Government, the management committee of the park joined hands with the enterprise in that area, contacted the vegetable farmers, and organized supporting activities to help them. The Group actively purchased 5,000 jin of celery on the spot, a modest contribution that could help the vegetable farmers get out of the plight, showing the responsibility a pharmaceutical enterprise should take.

Report of the 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 2022.

PRINCIPAL ACTIVITIES

The Company is an investment holding company. Details of the principal activities of its principal subsidiaries and associates are set out in notes 22 and 20 to the consolidated financial statements respectively.

BUSINESS REVIEW

The business review of the Group for the year ended 31 December 2022 is set out in the section "Management Discussion and Analysis" on pages 17 to 46 of this annual report.

Description of principal risks and uncertainties that may be faced by the Group can be found in the section "Management Discussion and Analysis — Principal Risks and Uncertainties" on pages 44 to 46 of this annual report.

An analysis of the Group's performance during the year using financial key performance indicators is set out in the section "Management Discussion and Analysis — Financial Resources and Liquidity" on page 44 of this annual report. In addition, discussions on the Group's environmental policies and compliance with relevant laws and regulations which may have a significant impact on the Group are set out in the section "Management Discussion and Analysis — Environmental Policies" and "Management Discussion and Analysis — Compliance with Relevant Laws and Regulations" separately on page 45 of this annual report.

RESULTS

The results of the Group for the year ended 31 December 2022 and the state of affairs of the Group at that date are set out on pages 100 to 222.

DIVIDEND POLICY

The Company has adopted a dividend policy, in considering the payment of dividends, to allow shareholders of the Company to participate in the Company's profits whilst retaining adequate reserves for future growth of the Group.

The Board shall consider the following factors before recommending or declaring dividends:

- i. The Company's actual and expected financial performance;
- ii. Retained earnings and distributable reserves of the Company and each of the members of the Group;
- iii. The Group's working capital, capital expenditure requirements and future expansion plans;
- iv. The Group's liquidity position;
- v. General economic conditions, business cycle of the Group and other internal or external factors that may have an impact on the business or financial performance and position of the Company; and
- vi. 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 Bermuda and the Company's Bye-laws. The Board will review the dividend policy from time to time and there can be no assurance that dividend will be paid in any particular amount for any given period.

Report of the Directors

DIVIDEND

The Board recommends the payment of final dividend of approximately HK\$496,940,000 at 14 HK cents per share (2021: HK\$390,450,000 at 11 HK cents per share) for the year ended 31 December 2022. No interim dividend was declared during the year (2021: Nil).

RESERVES

Details of the movements in reserves of the Group and of the Company during the year are set out in the consolidated statement of changes in equity and note 41 to the consolidated financial statements respectively. As at 31 December 2022, the Company's reserves available for distribution, calculated in accordance with the relevant laws and regulations of Bermuda, amounted to approximately HK\$7,143.16 million (2021: approximately HK\$7,035.31 million).

SHARE CAPITAL

Details of the movements in share capital of the Company during the year are set out in note 38 to the consolidated financial statements.

PRE-EMPTIVE RIGHTS

There are no provisions for pre-emptive rights under the Company's bye-laws or the laws of Bermuda which would oblige the Company to offer new shares on a pro-rata basis to its existing shareholders.

SUBSIDIARIES AND ASSOCIATES

Particulars of the Company's subsidiaries and associates at 31 December 2022 are set out in notes 22 and 20 to the consolidated financial statements respectively.

PROPERTY, PLANT AND EQUIPMENT

Details of the movements in property, plant and equipment of the Group during the year are set out in note 16 to the consolidated financial statements.

BANK BORROWINGS

Particulars of bank borrowings of the Group during the year are set out in note 32 to the consolidated financial statements.

DIRECTORS

The Directors who held office during the year and up to the date of this report are:

Executive Directors

Dr. Tang Weikun
Dr. Shao Yan
Dr. Niu Zhanqi
Dr. Shi Lin

Independent Non-executive Directors

Ms. So Tosi Wan, Winnie
Mr. Hu Yebi
Dr. Pei Geng

Report of the Directors

Pursuant to bye-law 87(1), Dr. Shao Yan, Dr. Shi Lin and Dr. Pei Geng will retire from office at the forthcoming annual general meeting. Dr. Shi Lin and Dr. Pei Geng, being eligible, offer themselves for re-election of the forthcoming annual general meeting. Dr. Shao Yan will not offer himself for re-election.

DIRECTORS' SERVICE CONTRACTS

There is no unexpired service contract which is not determinable by the Company within one year without payment of compensation other than statutory compensation. Each of the independent non-executive Directors has been appointed pursuant to a letter of appointment for a term of one year, which is renewable automatically for successive terms of one year after the expiry of the term of appointment, unless terminated by not less than three months' notice in writing served by either party.

DIRECTORS' RIGHTS TO ACQUIRE SHARES OR DEBENTURES

At no time during the year was the Company or its subsidiaries a party to any arrangements to enable the Directors or chief executive of the Company to acquire benefits by means of acquisition of shares in, or debentures of, the Company or any other body corporate.

DIRECTORS' INTERESTS IN TRANSACTIONS, ARRANGEMENTS OR CONTRACTS

No transactions, arrangements or contracts of significance in relation to the Group's business to which the Company or its subsidiaries was a party and in which a Director had a material interest, whether directly or indirectly, subsisted at the end of the year or at any time during the year.

COMPETING INTEREST

Save Dr. Niu Zhanqi, an executive director, who is the president of Pharmaceutical Management Headquarters of China Grand and a director of Huadong Medicine, and thus may have interest in businesses which competes or is likely to compete, either directly or indirectly, with the business of the Group, so far as the Directors are aware of, no Directors or the management shareholders of the Company (as defined in the Listing Rules) had an interest in a business which competes or may compete with the business of the Group.

RELATED PARTY TRANSACTIONS

For the year ended 31 December 2022, the related party transactions entered by the Group are all disclosed note 42 in the consolidated financial statements and in the section "Continuing Connected Transactions" in the report of the Directors below, and had complied with the relevant requirements under Chapter 14A of the Listing Rules. Save as mentioned in these 2 sections, there were no other discloseable non-exempted connected transactions or non-exempted continuing connected transactions under the Listing Rules. To the extent of the related party transactions as disclosed in note 42 to the financial statements constituted connected transaction or continuing connected transaction, the Company had complied with the relevant requirements under Chapter 14A of the Listing Rules during the year.

Report of the Directors

CONTINUING CONNECTED TRANSACTIONS

For the year ended 31 December 2022, the Group has entered the following continuing connected transactions which are subject to the reporting and announcement requirements under Chapter 14A of the Listing Rules:

- (1) On 30 June 2020, Grand Pharm (China) entered into an agreement (the “Huadong Medicine Supply Agreement”) with Huadong Medicine. Pursuant to the Huadong Medicine Supply Agreement, Grand Pharm (China) or its related companies shall supply pharmaceutical preparations, raw materials and related services to Huadong Medicine or its related companies and the maximum annual amount of products to be sold by the Group to Huadong Medicine for each of the periods commencing from the date where the terms of the Huadong Medicine Supply Agreement become effective until 31 December 2020 and for the two years ending 31 December 2022 are RMB160.0 million, RMB165.0 million and RMB169.0 million respectively (the “Huadong Medicine Supply Caps”). In 2022, the transaction amount under Huadong Medicine Supply Agreement is approximately RMB111.2 million.
- (2) On 30 June 2020, Grand Pharm (China) entered into an agreement (the “China Grand Supply Agreement”) with China Grand. Pursuant to the China Grand Supply Agreement, Grand Pharm (China) or its related companies shall supply pharmaceutical preparations, raw materials and related services to China Grand or its related companies and the maximum annual amount of products to be sold by the Group to China Grand for each of the periods commencing from the date where the terms of the China Grand Supply Agreement become effective until 31 December 2020 and for the two years ending 31 December 2022 are RMB26.0 million, RMB27.0 million and RMB28.0 million respectively (the “China Grand Supply Caps”). In 2022, the transaction amount under China Grand Supply Agreement is approximately RMB3.8 million.
- (3) On 30 June 2020, Grand Pharm (China) entered into the purchase agreement (the “Baoding Jiufu Purchase Agreement”) with Baoding Jiufu Biochemical Co., Ltd (the “Baoding Jiufu”), and a supplemental agreement on 16 July 2021 (the “Baoding Jiufu Purchase Supplemental Agreement”). Pursuant to the Baoding Jiufu Purchase Agreement and Baoding Jiufu Purchase Supplemental Agreement, Grand Pharm (China) or its related companies shall purchase raw materials from Baoding Jiufu or its related companies for the production of amino acid products and other pharmaceutical products. The maximum annual amount of products to be purchased by the Group from Baoding Jiufu for each of the periods commencing from the date where the terms of the Baoding Jiufu Purchase Agreement become effective until 31 December 2020 and for the two years ending 31 December 2022 are RMB41 million, RMB212 million and RMB431 million respectively (the “Baoding Jiufu Purchase Caps”). In 2022, the transaction amount under Baoding Jiufu Purchase Agreement and Baoding Jiufu Purchase Supplemental Agreement is approximately RMB213.5 million.
- (4) On 30 June 2020, Wuhan Kernel Bio-Tech Co., Ltd. (an indirect non-wholly owned subsidiary of the Company) (the “Wuhan Kernel”) entered into the sub-contracting agreement (the “Baoding Jiufu Sub-Contracting Agreement”) with Baoding Jiufu. Pursuant to the Baoding Jiufu Sub-Contracting Agreement, Wuhan Kernel or its related companies shall engage Baoding Jiufu for the provision of processing services for the production of antibiotics which can be applied in animal feeds. The maximum annual amount of products to be subcontracted by the Wuhan Kernel to Baoding Jiufu for each of the periods commencing from the date where the terms of the Baoding Jiufu Sub-Contracting Agreement become effective until 31 December 2020 and for the two years ending 31 December 2022 are RMB48 million, RMB50 million and RMB52 million respectively (the “Baoding Jiufu Sub-Contracting Caps”). In 2022, the transaction amount under Baoding Jiufu Sub-Contracting Agreement is zero.

Report of the Directors

- (5) On 9 December 2021, Cangzhou Huachen BioTech Co., Ltd. (an indirect non-wholly owned subsidiary of the Company) (the "Huachen BioTech ") entered into an agreement (the "Huachen BioTech Supply Agreement") with Hebei Huayang Biological Technology Co., Ltd. (the "Hebei Huayang "). Pursuant to the Huachen BioTech Supply Agreement, Huachen BioTech or its related companies shall supply glycine, other raw materials for pharmaceutical use and related services, to Hebei Huayang or its related companies and the maximum annual amount of products to be sold by the Group to Hebei Huayang for each of the periods commencing from the date where the terms of the Huachen BioTech Supply Agreement become effective until 31 December 2021 and for the two years ending 31 December 2023 are RMB200.0 million, RMB700.0 million and RMB1.0 billion respectively (the "Huachen BioTech Supply Caps"). In 2022, the transaction amount under Huachen BioTech Supply Agreement is approximately RMB75.8 million.
- (6) On 2 June 2022, Beijing Purevalley Biotechnology Co., Ltd. (an indirect non-wholly owned subsidiary of the Company) (the "Beijing Purevalley") entered into an agreement (the "Beijing Purevalley Distribution Agreement") with Sirtex Medical Singapore Pte Ltd. (the "Sirtex Medical "). Pursuant to the Beijing Purevalley Distribution Agreement, Sirtex Medical has appointed Beijing Purevalley as Sirtex Medical's exclusive distributor for the resale of the SIR-Spheres® Y-90 microspheres and the accessories of their delivery systems in the PRC and the maximum annual amount of products to be sold by the Sirtex Medical to Beijing Purevalley for the year ended 31 December 2022 is RMB120 million (the "Beijing Purevalley Distribution Cap"). In 2022, the transaction amount under Beijing Purevalley Distribution Agreement is approximately RMB21.2 million.

As Huadong Medicine and Baoding Jiufu are regarded as connected persons of the Company since they are associates of the China Grand (which is a substantial shareholder of the Company), and the subject matters of each of the Huadong Medicine Supply Agreement, China Grand Supply Agreement, Baoding Jiufu Purchase Agreement, Baoding Jiufu Purchase Supplemental Agreement and Baoding Jiufu Sub-Contracting Agreement (collectively known as "China Grand Continuing Connected Transaction Agreements") are similar in nature, pursuant to Rule 14A.81 of the Listing Rules the transactions between the Group and each of these companies would be aggregated. As the aggregated amount of the Huadong Medicine Supply Caps, the China Grand Supply Caps, Baoding Jiufu Purchase Caps and Baoding Jiufu Sub-Contracting Caps exceed HK\$10,000,000 per annum, the transactions contemplated under the China Grand Continuing Connected Transaction Agreements are subject to the reporting, announcement and Independent Shareholders' approval requirements under Chapter 14A of the Listing Rules.

Huachen BioTech is owned as to 80% by the Group and 20% by Hebei Huayang. Accordingly, Hebei Huayang is a connected person of the Company. As the amount of the Huachen BioTech Supply Caps exceed HK\$10,000,000 per annum, the transactions contemplated under the Huachen BioTech Supply Agreement are subject to the reporting, announcement and Independent Shareholders' approval requirements under Chapter 14A of the Listing Rules.

Sirtex Medical is owned as to 43.15% by CDH Genetech Limited, which is wholly-owned by CDH Fund V, L.P. (a substantial shareholder of the Company). Sirtex Medical is an associate of CDH Genetech Limited and CDH Fund V, L.P., and thus Sirtex Medical is a connected person of the Company. As the amount of the Beijing Purevalley Distribution Cap exceed HK\$10,000,000, the transactions contemplated under the Beijing Purevalley Distribution Agreement are subject to the reporting, announcement and Independent Shareholders' approval requirements under Chapter 14A of the Listing Rules.

Report of the Directors

The independent non-executive Directors have reviewed and confirmed that these transactions were entered into:

- (i) in the ordinary and usual course of the business of the Group;
- (ii) either on normal commercial terms or, if there are no sufficient comparable transactions to judge whether they are on normal commercial terms, on terms no less favourable to the Group than those available to or from independent third parties; and
- (iii) in accordance with the China Grand Continuing Connected Transaction Agreement, Huachen BioTech Supply Agreement and Beijing Purevalley Distribution Agreement governing them on terms that are fair and reasonable and in the interests of the shareholders of the Company as a whole.

The Auditors of the Company have reviewed the continuing connected transactions and confirmed in a letter (the "Letter") to the Board (a copy of which has been provided to the Stock Exchange). The Auditors of the Company have:

- (i) found that the continuing connected transactions have received the approval of the Board of Directors of the Company;
- (ii) obtained the relevant agreements governing each of the continuing connected transactions from management;
- (iii) found that the prices charged for each of the transactions selected were in accordance with the pricing terms set out in the relevant agreements governing such transactions or where the related agreement did not clearly specify a price, the prices charged were consistent with the prices charged for comparable transactions that were identified by management; and
- (iv) found that the continuing connected transactions have not exceed the cap amounts disclosed in previous announcements dated 30 June 2020, 16 July 2021, 9 December 2021 and 2 June 2022 made by the Company in respect of each of the continuing connected transactions.

SHARE OPTION SCHEME

During the year ended 31 December 2022, the Company did not adopt any share option scheme and no outstanding share options.

No share options were granted or exercised under any share option scheme during the year ended 31 December 2022 and 2021 and there were no outstanding share options as at 31 December 2022 and 2021.

SHARE AWARD SCHEME

On 1 September 2021, the Company has adopted the Share Award Scheme ("Scheme") to recognise the contributions from participants and provide them with incentives in order to retain them for the continual operation, growth and development of the Group, in which the Group's employees, directors or consultants will be entitled to participate. The Scheme became effected on 30 September 2021 for ten years. Details of the Scheme are set out in the Company's announcement dated 1 September 2021.

In 2022 and 2021, the Group has paid to the trust established for the Scheme HK\$30.0 million HK\$155.0 million respectively, together with the dividend income distributed by the Shares owned, the Group applied approximately HK\$187.5 million to purchase 30,300,000 Shares as part of the trust fund and such Shares are held by the trustee for the benefit of the eligible participants under the trust.

Save for the aforesaid, as at the date of this report, the Board neither granted any awards nor caused to pay the trustee the trust fund for purchase nor subscription of Shares.

Report of the Directors

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

As at 31 December 2022, the Directors and the chief executive of the Company, and their respective associates had the following interests in the shares and underlying shares of the Company and its associated corporations (within the meaning of Part XV of the Securities and Futures Ordinance (the "SFO")) which were required to be notified to the Company and the Stock Exchange of Hong Kong Limited (the "Stock Exchange") pursuant to Divisions 7 and 8 of Part XV of the SFO (including interests or short positions which they are taken or deemed to have under such provisions of the SFO) or which were required, pursuant to section 352 of the SFO, to be entered in the register referred to therein 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"):

Long positions in the shares of the Company:

Name of Director and chief Executive of the Company	Capacity	Number of ordinary shares held	Approximate percentage of the Company's issued share Capital
Tang Weikun	Beneficial owner	60,000	0.00%
Shao Yan	Interests in spouse (Note)	6,019,600	0.17%
Zhou Chao	Beneficial owner	56,000	0.00%

Note: Dr. Shao Yan, a Director, is the spouse of Ms. Tian Wen Hong who is the holder of the above shares. By virtue of the SFO, Dr. Shao Yan shall be deemed to be interested in such 6,019,600 shares.

Apart from the foregoing, none of the Directors and chief executive of the Company or any of their spouses or children under eighteen years of age has interests or short positions in shares, underlying shares or debentures of the Company, any of its holding company, subsidiaries or fellow subsidiaries, as recorded in the register required to be kept under section 352 of the SFO or pursuant to the Model Code for Securities Transactions by Directors of Listed Issuers contained in the Listing Rules or required to be notified to the Company and the Stock Exchange pursuant to Divisions 7 and 8 of the SFO.

PERMITTED INDEMNITY PROVISION

The articles of associations of the Company provides that the Directors or other officers of the Company shall be entitled to be indemnified out of the assets of the Company against all losses or liabilities incurred or sustained by him/her as a Director or other officer of the Company in defending any proceedings, civil or criminal, in which judgment is given in his/her favour, or in which he/she is acquitted.

The Company has arranged appropriate insurance cover or other relevant arrangement in respect of potential legal actions against its Directors and senior management members as well as directors of the subsidiaries of the Group.

Report of the Directors

SUBSTANTIAL SHAREHOLDERS

As at 31 December 2022, the following persons (other than the Directors or chief executive of the Company) had an interest or short position in the shares or underlying shares of the Company which are required to be disclosed to the Company and the Stock Exchange under the provisions of Divisions 2 and 3 of Part XV of the SFO, or required to be entered in the register maintained by the Company pursuant to Section 336 of the SFO.

Long and short positions in the shares of the Company:

Name of Shareholders	Notes	Number of the shares interested	Nature of interests	Approximate percentage or attributable percentage of shareholding (%)
Outwit Investments Limited ("Outwit")	1	1,671,671,149 (L)	Beneficial owner	47.09 (L)
Grand (Hongkong) International Investments Holdings Limited ("Grand Investment")	1	1,671,671,149 (L)	Interest of controlled corporation	47.09 (L)
China Grand Enterprises Incorporation ("China Grand")	1	1,671,671,149 (L)	Interest of controlled corporation	47.09 (L)
Shanghai China Grand Asset Finance Investment Management Co., Limited ("Shanghai Finance")	2	286,039,153 (L)	Beneficial owner/Interest of controlled corporation	8.06 (L)
East Ocean Capital (Hong Kong) Company Limited ("East Ocean")	2	224,373,091 (L)	Beneficial owner	6.32(L)
Mr. Hu Kaijun ("Mr. Hu")	1 & 2 & 3	1,999,230,302 (L)	Interest of controlled corporation	56.32 (L)
Ms. Chau Tung	1 & 2 & 3	1,999,230,302 (L)	Beneficial owner/Interest in spouse	56.32 (L)
CDH Giant Health I Limited ("CDH Giant")	4	356,648,142 (L)	Beneficial owner	10.05 (L)
CDH Fund V, L.P. ("CDH Fund")	4	356,648,142 (L)	Interest of controlled corporation	10.05 (L)
CDH V Holdings Company Limited ("CDH V")	4	356,648,142 (L)	Interest of controlled corporation	10.05 (L)
China Diamond Holdings V Limited ("China Diamond V")	4	356,648,142 (L)	Interest of controlled corporation	10.05 (L)

Report of the Directors

Name of Shareholders	Notes	Number of the shares interested	Nature of interests	Approximate percentage or attributable percentage of shareholding (%)
China Diamond Holdings Company Limited ("China Diamond")	4	356,648,142 (L)	Interest of controlled corporation	10.05 (L)
CNCB (Hong Kong) Investment Limited	5	208,750,000 (L)	Owned security interests in shares	5.88 (L)
China CITIC Bank Corporation Limited	5	208,750,000 (L)	Interest of controlled corporation	5.88 (L)
CITIC Limited	5	208,750,000 (L)	Interest of controlled corporation	5.88 (L)
CITIC Group Corporation	5	208,750,000 (L)	Interest of controlled corporation	5.88 (L)
Assicurazioni Generali S.p.A	6	179,173,959 (L)	Interest of controlled corporation	5.05 (L)
Li Zhenfu	6	179,173,959 (L)	Interest of controlled corporation	5.05 (L)
Lion River I N.V.	6	179,173,959 (L)	Interest of controlled corporation	5.05 (L)
GL Partners Capital Management Ltd.	6	179,173,959 (L)	Interest of controlled corporation	5.05 (L)

(L) denotes long position

Report of the Directors

Notes:

1. Outwit is the beneficial owner of 1,671,671,149 Shares. Grand Investment, being wholly-owned by China Grand, held 99.85% equity interests of Outwit, and Ms. Chau Tung, spouse of Mr. Hu, held the remaining 0.15% equity interests. Grand Investment and China Grand are therefore deemed to be interested in 1,671,671,149 Shares pursuant to the SFO.
2. Beijing Yuanda Huachuang Investment Co., Ltd. (北京遠大華創投資有限公司), a company wholly owned by Mr. Hu, owned 70% of the equity interests of Shanghai Finance. Shanghai Finance is the beneficial owner of 61,666,062 Shares. East Ocean, a wholly owned subsidiary of Shanghai Finance, also holds 224,373,091 Shares. Shanghai Finance is therefore deemed to be interested in 286,039,153 Shares pursuant to the SFO.
3. China Grand is controlled and ultimately and beneficially owned by Mr. Hu. Ms. Chau Tung, spouse of Mr. Hu, is also the beneficial owner of 41,520,000 Shares. Mr. Hu and Ms. Chau Tung are therefore deemed to be interested in 1,999,230,302 Shares pursuant to the SFO.
4. CDH Giant is the beneficial owner of 356,648,142 Shares. CDH Giant is wholly-owned by CDH Fund, and pursuant to the SFO CDH Fund is therefore deemed to be interested in the 356,648,142 Shares. CDH Fund is controlled by CDH V, which in turn held as to 80% by China Diamond V. China Diamond V is in held as to 100% by China Diamond.
5. CNCB (Hong Kong) Investment Limited owns a security interest in 208,750,000 Shares.

China CITIC Bank Corporation Limited owns 99.05% interests in CNCB (Hong Kong) Investment Limited. China CITIC Bank Corporation Limited is owned by CITIC Limited by approximately 65.97%. CITIC Limited is owned by CITIC Group Corporation by approximately 58.13%. Pursuant to the SFO these three companies are therefore deemed to be interested in the 208,750,000 Shares.

6. GL Trade Investment Limited owns 99,438,959 Shares, and GL China Long Equity Opportunities Fund SPV LP owns 79,735,000 Shares.

Lion River I N.V. owns 49% interests of GL Trade Investment Limited and approximately 80.13% interests in GL China Long Equity Opportunities Fund SPV LP. Assicurazioni Generali S.p.A owns 100% interests of Lion River I N.V.. Pursuant to the SFO these two companies are therefore deemed to be interested in the 179,173,959 Shares. GL Partners Capital Management Limited and Li Zhenfu also declare to have the same interests in Shares through the control and/or interests in the above companies.

Save as disclosed above, as at 31 December 2022, the Directors or chief executive of the Company were not aware of any other person (other than the Directors or chief executive 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 to the Company under the provisions of Divisions 2 and 3 of Part XV of the SFO or, who is, directly or indirectly, interested in 5% or more of the nominal value of any class of share capital carrying rights to vote in all circumstances at general meetings of any other members of the Group, or any other substantial shareholders whose interests or short positions were recorded in the register required to be kept by the Company under Section 336 of the SFO.

MANAGEMENT CONTRACTS

No contract concerning the management and administration of the whole or any substantial part of the business of the Company was entered into or existed during the year.

MAJOR CUSTOMERS AND SUPPLIERS

For the year ended 31 December 2022, the five largest customers of the Group accounted for less than 30% of the Group's total revenue while the five largest suppliers accounted for less than 30% the Group's total purchases.

PURCHASE, SALE OR REDEMPTION OF SHARES

Save as disclosed above, neither the Company nor any of its subsidiaries purchased, sold or redeemed any of the Company's listed securities during the year ended 31 December 2021.

Report of the Directors

SUFFICIENCY OF PUBLIC FLOAT

Based on information that is publicly available to the Company and within the knowledge of the Directors, the Company has maintained a sufficient public float as required under the Listing Rules during the year ended 31 December 2022 and as at the latest practicable date prior to the issue of this annual report.

TAX RELIEF AND EXEMPTION

The Company is not aware of any tax relief and exemption available to shareholders by reason of their holding of the Company's securities.

CORPORATE GOVERNANCE

Principal corporate governance practices adopted by the Company are set out in the Corporate Governance Report on pages 47 to 52.

AUDITORS

The consolidated financial statements for the year ended 31 December 2022 have been audited by HLB Hodgson Impey Cheng Limited which shall retire and, being eligible, offer itself for re-appointment at the forthcoming annual general meeting. A resolution to re-appoint HLB Hodgson Impey Cheng Limited and to authorize the Board of Directors to fix its remuneration will be proposed at the forthcoming annual general meeting.

On behalf of the Board

Dr. Tang Weikun

Chairman

Hong Kong, 22 March 2023

Biographical Details of Directors and Senior Management

EXECUTIVE DIRECTORS

Dr. Tang Weikun, aged 38, joined Grand Pharma (China) Co., Ltd. (a major subsidiary of the Group) (“Grand Pharma (China)”) in 2012 and worked for several companies of the Group. He has been the assistant of the president of Grand Pharma (China) since April 2019, and was appointed as the president of Grand Pharma (China) with effect from 1 June 2021. Dr. Tang has overall responsible for the operation of Grand Pharma (China) and being the officer of its strategic decision committee. Dr. Tang completed his life science and technology undergraduate education at Wuhan University in 2007, and obtained his doctoral degree in microbiology from the College of Life Sciences, Wuhan University in 2012.

Dr. Shao Yan, aged 60, was appointed as an executive Director in October 2008. Dr. Shao joined the Company in March 2008 and is the Chief Executive Officer of the Company. Dr. Shao currently focus on the business development and investment of the Company. Dr. Shao has over 30 years of experience in corporate management and venture capital investment. Dr. Shao holds a master degree in Business Administration from Guanghua School of Management of Peking University and a doctor degree (PhD) in Management from School of Politics and International Studies of Beijing Normal University.

Dr. Niu Zhanqi, aged 56, was appointed as an executive Director in November 2016. Dr. Niu has more than 10 years’ experience in pharmaceutical research and development. He is currently the president of the Pharmaceutical Management Headquarters of China Grand. He also is a director of Huadong Medicine since June 2016. Dr. Niu holds a bachelor’s degree in science from Nankai University and a doctoral degree (PhD) in pharmaceutics from Shenyang Pharmaceutical University.

Dr. Shi Lin, aged 59, joined the Group in 2019 and is currently the deputy president and chief pharmaceutical officer of Grand Pharma (China). Before joining the Group, she had been the EU Registration Leader in Global Regulatory Affairs (GRA) Neuroscience of Janssen R&D in Belgium. Dr. Shi has over 30 years of clinical and research experience in the pharmaceutical industry, with significant experience working with global multifunctional matrix teams to drive forward complex projects. She led various applications for clinical trials (Clinical Trial Applications (CTA) and Investigational New Drug Applications (IND)) in different countries in Europe and the United States, particularly in relation to strategic assessments in first clinical trials and innovative research paths. Dr. Shi obtained her doctoral degree in medical sciences from Vrije Universiteit Brussel in 2005. She has been appointed as visiting professor and visiting fellow in various universities, such as Tongji Medical College affiliated to Huazhong University of Science and Technology (華中科技大學同濟醫學院) in Wuhan. Dr. Shi was awarded as “2014 Top Ten Chinese Technology Leaders in Europe” (2014度歐洲華人十大科技領軍人才*) by the Federation of Chinese Professional Association in Europe (全歐華人專業協會聯合會*). She is also a director of OncoSec Medical Incorporated, a company listed in NASDAQ (trading symbol: ONCS).

Biographical Details of Directors and Senior Management

INDEPENDENT NON-EXECUTIVE DIRECTORS

Ms. So Tosi Wan, Winnie, aged 60, was appointed as an independent non-executive Director in March 2005. Ms. So is a fellow member of the Association of Chartered Certified Accountants and a practicing member of the Hong Kong Institute of Certified Public Accountants. She is a partner of an accounting firm.

Mr. Hu Yebi, aged 59, was appointed as an independent non-executive Director in December 2018. Mr. Hu received his Master of Business Administration from Netherlands International Institute for Management in the Netherlands and a Postgraduate Diploma in Management Engineering from Beijing Institute of Technology in Beijing, the PRC. Mr. Hu has more than twenty years of experience in securities and financial services, mergers and acquisitions and corporate finance. Mr. Hu is the founder and chairman of Vision Finance Group Limited. Mr. Hu is currently a non-executive director of Beijing Sports and Entertainment Industry Group Limited (stock code: 1803) and was an executive director of Beijing Enterprises Medical and Health Industry Limited (stock code: 2389) and Beijing Properties (Holdings) Limited (stock code: 925), but already resigned in October 2018 and November 2018 respectively. All these companies are listed on The Stock Exchange of Hong Kong Limited.

Dr. Pei Geng, aged 63, was appointed as an independent non-executive Director in May 2011. Dr. Pei holds a bachelor degree in Medicine and clinically became a neurosurgeon after graduation from Beijing Capital University of Medicine, China. Dr. Pei also holds a licentiate degree in Medical Sciences from Uppsala University, Sweden and a PhD degree in neuroscience from University of Würzburg, Germany. Dr. Pei is currently working in Multiway Trading Intl., USA and its Beijing branch.

SENIOR MANAGEMENT

Mr. Zhou Chao, aged 33, has been the executive deputy officer of the Company since June 2019, and is also a director of certain associated company of the Group. Mr. Zhou is responsible for overall internal management of the Group. Prior to joining the Company, Mr. Zhou was the legal manager, senior legal manager and business director of the department of legal security management of China Grand Enterprises Incorporation (a substantial shareholder of the Company), and he is also directors of certain local and overseas companies, including being a director of OncoSec Medical Incorporated, a company listed in NASDAQ (trading symbol: ONCS) since February 2020. Mr. Zhou graduated from the Law School of Ocean University of China in 2011, and obtained his Master of International Economic Law Degree from the University of International Business and Economics. Mr. Zhou led and participated several local and overseas transactions in related to large scale merger and acquisition projects and introduction of various types of products.

Mr. Foo Tin Chung, Victor, aged 54, joined the Company in September 2011 as a company secretary of the Company. Mr. Foo holds a bachelor degree in Accounting and Information System in the University of New South Wales in Australia and a master degree in Business Administration in Australia Graduate School of Management. He is a member of the Australia Society of Certified Practising Accountants and an associate member of the Hong Kong Institute of Certified Public Accountants. Mr. Foo is the company secretary and chief financial officer of Justin Allen Holdings Limited (stock code: 1425) since April 2018, which is listed on the Stock Exchange.

Mr. Shi Xiaofeng, aged 56, joined the principal subsidiary Grand Pharm (China) since 2003 and is the chairman of the board of directors of Grand Pharma (China). Mr. Shi is responsible for overseeing the entire operations and management of Grand Pharm (China), and has over 20 years of experience in the pharmaceutical industry management. Mr. Shi used to work for Schering-Plough and Pharmacia as senior management before joining the Group. Mr. Shi holds a medical degree from Medical School of Southeast University and a EMBA certificate at China Europe International Business School.

Independent Auditors' Report



國衛會計師事務所有限公司
HODGSON IMPEY CHENG LIMITED

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**INDEPENDENT AUDITORS' REPORT
TO THE SHAREHOLDERS OF
GRAND PHARMACEUTICAL GROUP LIMITED**

(Incorporated in Bermuda with limited liability)

OPINION

We have audited the consolidated financial statements of Grand Pharmaceutical Group Limited (the "Company") and its subsidiaries (collectively referred to as the "Group") set out on pages 100 to 222, which comprise the consolidated statement of financial position as at 31 December 2022, and the consolidated statement of profit or loss and other comprehensive income, the consolidated statement of changes in equity and consolidated statement of cash flows for the year then ended, and notes to the consolidated financial statements, including a summary of significant accounting policies.

In our opinion, the consolidated financial statements give a true and fair view of the consolidated financial position of the Group as at 31 December 2022, and of its consolidated financial performance and its consolidated cash flows for the year then ended in accordance with Hong Kong Financial Reporting Standards (the "HKFRSs") issued by the Hong Kong Institute of Certified Public Accountants (the "HKICPA") and have been properly prepared in compliance with the disclosure requirements of the Hong Kong Companies Ordinance.

BASIS FOR OPINION

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

KEY AUDIT MATTERS

Key audit matters are those matters that, in our professional 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.

Independent Auditors' Report

KEY AUDIT MATTERS *(Continued)*

Key audit matter

How our audit addressed the key audit matter

Impairment assessment of pharmaceutical business

Refer to notes 3, 21 and 23 to the consolidated financial statements

The Group had goodwill and intangible assets of approximately HK\$644,047,000 and HK\$1,397,992,000 respectively relating to the cash generating units engaged in business of manufacture and sales of pharmaceutical preparations and medical devices, biotechnology products and health products, specialised pharmaceutical raw materials and other products mainly, in the People's Republic of China as at 31 December 2022. There is an indicator of impairment for goodwill and intangible assets and hence the management of the Group performed impairment assessment of pharmaceutical business. An impairment loss on goodwill of approximately HK\$36,442,000 was recognised for the year. This conclusion was based on value-in-use model that required significant management judgement with respect to the discount rate and the underlying cashflows, in particular future revenue growth. Independent external valuation reports were obtained in order to support management's estimates.

Our procedures in relation to management's impairment assessment included:

- Evaluating of the independent external valuer's competence, capabilities and objectivity;
- Assessing the appropriateness of methodologies used and the key assumptions based on our knowledge of the pharmaceutical business and using our valuation experts;
- Challenging the reasonableness of key assumptions based on our knowledge of the business and industry; and
- Checking, on sampling basis, the accuracy and relevance of the input data used.

We found the management judgement and estimates used in impairment assessment were supported by the available evidence.

Independent Auditors' Report

KEY AUDIT MATTERS *(Continued)*

Key audit matter

How our audit addressed the key audit matter

Impairment assessment of trade and other receivables and amounts due from related companies

Refer to notes 3, 5(b)(iv), 28 and 34 to the consolidated financial statements

As at 31 December 2022, the Group had gross trade and other receivables and amounts due from related companies of approximately HK\$1,376,363,000 and HK\$34,288,000, respectively. The provision for impairment of trade and other receivables and amounts due from related companies are approximately HK\$91,774,000 and HK\$541,000, respectively.

In general, the credit terms granted by the Group to the customers ranged between 30 to 180 days. Management applied judgement in assessing the expected credit losses ("ECL"). Trade and other receivables relating to counterparties with known financial difficulties or significant doubt on collection of trade receivables are assessed individually for provision for loss allowance. ECL are also estimated by grouping the remaining trade receivables based on shared credit risk characteristics and collectively assessed for likelihood of recovery, taking into account the nature of the customer, its business and its ageing category, and applying ECL rates to the respective gross carrying amounts of the trade receivables. The management assessed the recoverability of amounts due from related companies based on these counterparties' capability of repayment. The ECL rates on these receivables are determined based on the Group's historical default rates taking into consideration forward-looking information that is reasonable and supportable available without undue costs or effort. At every reporting date, the historical observed default rates are reassessed and changes in the forward-looking information are considered.

We focused on this area due to the impairment assessment of trade and other receivables and amounts due from related companies under the ECL model involved the use of significant management judgements and estimates.

Our procedures in relation to management's impairment assessment of the trade and other receivables and amounts due from related companies as at 31 December 2022 included:

- Understanding and evaluating the key controls that the Group has implemented to manage and monitor its credit risk, and validating the control effectiveness on a sample basis;
- Checking, on a sample basis, the ageing profile of the trade and other receivables and amounts due from related companies as at 31 December 2022 to the underlying financial records and post year-end settlements to bank receipts;
- Inquiring of management for the past due status of each of the material trade and other receivables and amounts due from related companies as at year end and corroborating explanations from management with supporting evidence, such as performing public search of credit profile of selected customers, understanding on-going business relationship with the customers based on trade records, checking historical and subsequent settlement records of and other correspondence with the customers; and
- Assessing the appropriateness of the ECL provisioning methodology, examining the key data inputs on a sample basis to assess their accuracy and completeness, and challenging the assumptions, including both historical and forward-looking information, used to determine the ECL.

We found that the management's judgement and estimates used to assess the recoverability of the trade and other receivables and amounts due from related companies and its impairment provision were supported by the available evidence.

Independent Auditors' Report

KEY AUDIT MATTERS *(Continued)*

Key audit matter	How our audit addressed the key audit matter
<p>Interests in associates</p> <p>Refer to note 3 and 20 to the consolidated financial statements</p> <p>As at 31 December 2022, the carrying amounts of interests in associates amounted to approximately HK\$7,704,161,000 which represented approximately 34.4% of the Group's total assets.</p> <p>Included in the interests in associates, the Group had 57.98% interest in Grand Pharma Sphere Pte Limited ("Grand Pharma Sphere") which was accounted for under the equity method. The Group's share of loss from Grand Pharma Sphere for the year ended 31 December 2022 was approximately of HK\$40,991,000 and the Group's share of net assets of Grand Pharma Sphere was approximately HK\$5,074,390,000 as at 31 December 2022, which represented approximately 22.7% of the Group's total assets.</p> <p>Grand Pharma Sphere's revenue amounted to approximately HK\$1,223,111,000 for the year ended 31 December 2022. Revenue was generated from sale of SIR-Spheres Y-90 resin microspheres, a targeted radiotherapy for liver cancer. Revenue is recognised when control of the product has transferred to the customer, being when the product is delivered to the distributor or medical facility and when the customer has sole discretion over the use of the product and there are no unfulfilled obligations that could affect the customer's acceptance of the product.</p>	<p>Our procedures in relation to the i) the audit work performed on interest in Sirtex; and ii) management's impairment assessment of interests in associates included:</p> <p>i) The audit work performed on the Group's interest in Sirtex:</p> <p>Sirtex Medical Pty Ltd. ("Sirtex") is a wholly owned subsidiary of Grand Pharma Sphere and was audited by non-HLB auditors ("the Sirtex Auditors"). We discussed with the Sirtex Auditors their audit approach and result of their work and reviewed their working papers. We discussed the key audit matters relating to Sirtex with Group's management and evaluated the impact on our audit of the consolidated financial statements.</p> <p>We reviewed and discussed with the Sirtex Auditors their report in accordance with our group audit instructions, and thus we found that the Group's share of results and net assets of Grand Pharma Sphere were supported by the available evidence.</p>

Independent Auditors' Report

KEY AUDIT MATTERS *(Continued)*

Key audit matter	How our audit addressed the key audit matter
<i>Interests in associates (continued)</i>	
Refer to note 3 and 20 to the consolidated financial statements <i>(continued)</i>	
<p>Management determines at the end of each reporting period the existence of any objective evidence through which the Group's interests in all associates may be impaired. The assessment of indicators of impairment and where such indicators exist and the determination of the recoverable amounts requires significant management's judgement.</p>	<p>ii) Management's impairment assessment of interests in associates included:</p> <ul style="list-style-type: none"> — Evaluating of the Group's assessments as to whether any indication of impairment exist by reference to the available information in the relevant market and industries; — Assessing the appropriateness of methodologies used and the key assumptions based on our knowledge and using our valuation experts; — Challenging the reasonableness of key assumptions based on our knowledge; and — Checking, on a sample basis, the accuracy and relevance of information included in the valuation of interests in associates. <p>We found the management judgement and estimates used in management impairment assessment on interests in associates were supported by the available evidence.</p>

OTHER INFORMATION

The directors are responsible for the other information. The other information comprises the information included in the annual report, but does not include the consolidated financial statements and our auditors' report thereon (the "Other Information").

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.

Independent Auditors' Report

RESPONSIBILITIES OF THE DIRECTORS AND THE AUDIT COMMITTEE FOR THE CONSOLIDATED FINANCIAL STATEMENTS

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

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

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

AUDITORS' 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 auditors' report that includes our opinion solely to you, as a body, in accordance with Section 90 of the Companies Act 1981 of Bermuda, 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 HKSAAs 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 HKSAAs, we exercise professional judgement and maintain professional skepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the consolidated financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Group's internal control.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by the directors.

Independent Auditors' Report

AUDITORS' RESPONSIBILITIES FOR THE AUDIT OF THE CONSOLIDATED FINANCIAL STATEMENTS

(Continued)

- 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 auditors' report. However, future events or conditions may cause the Group to cease to continue as a going concern.
- Evaluate the overall presentation, structure and content of the consolidated financial statements, including the disclosures, and whether the consolidated financial statements represent the underlying transactions and events in a manner that achieves fair presentation.
- Obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the Group to express an opinion on the consolidated financial statements. We are responsible for the direction, supervision and performance of the group audit. We remain solely responsible for our audit opinion.

We communicate with 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, actions taken to eliminate threats or safeguards applied.

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 director on the audit resulting in this independent auditors' report is Tien Sun Kit, Jack.

HLB Hodgson Impey Cheng Limited

Certified Public Accountants

Tien Sun Kit, Jack

Practising Certificate Number: P07364

Hong Kong, 22 March 2023

Consolidated Statement of Profit or Loss and Other Comprehensive Income

For the year ended 31 December 2022

	Notes	2022 HK\$'000	2021 HK\$'000
Revenue	7	9,562,285	8,597,975
Cost of sales		(3,610,806)	(3,350,737)
Gross profit		5,951,479	5,247,238
Other revenue and income	8	211,572	349,016
Distribution costs		(2,306,519)	(2,397,848)
Administrative expenses		(1,090,032)	(909,617)
Reversal/(provision) of expected credit losses, net		23,017	(353)
Impairment loss recognised in respect of goodwill		(36,442)	–
Net (loss)/income from financial assets at fair value through profit or loss	9	(94,623)	484,848
Fair value change on derivative financial instruments		39,720	(8,350)
Share of results of associates		(43,786)	113,862
Finance costs	10	(137,493)	(92,964)
Profit before tax		2,516,893	2,785,832
Income tax expense	11	(418,642)	(380,800)
Profit for the year	12	2,098,251	2,405,032
Other comprehensive (loss)/income, net of income tax			
<i>Items that will not be reclassified to profit or loss:</i>			
Fair value change of investment in equity instruments at fair value through other comprehensive income		(70,706)	28,641
Share of other comprehensive loss of associates		(31,311)	(12,047)
<i>Item that may be reclassified subsequently to profit or loss:</i>			
Exchange difference on translating foreign operations		(788,439)	274,095
Other comprehensive (loss)/income for the year, net of income tax		(890,456)	290,689
Total comprehensive income for the year, net of income tax		1,207,795	2,695,721
Profit for the year attributable to:			
— Owners of the Company		2,079,419	2,402,563
— Non-controlling interests		18,832	2,469
		2,098,251	2,405,032
Total comprehensive income/(loss) attributable to:			
— Owners of the Company		1,182,143	2,696,069
— Non-controlling interests		25,652	(348)
		1,207,795	2,695,721
Basic and diluted (HK cents)	14	58.70	67.72

The accompanying notes form an integral part of these consolidated financial statements.

Consolidated Statement of Financial Position

As at 31 December 2022

	Notes	2022 HK\$'000	2021 HK\$'000
Non-current assets			
Property, plant and equipment	16	3,505,138	3,409,183
Right-of-use assets	17	436,764	392,528
Investment properties	18	175,112	167,151
Interests in associates	20	7,704,161	8,066,669
Equity instruments at fair value through other comprehensive income	25	567,320	145,685
Goodwill	21	644,047	596,746
Intangible assets	23	1,397,992	1,009,764
Deferred tax assets	24	24,585	24,608
Prepayments	28	1,029,022	466,107
		15,484,141	14,278,441
Current assets			
Inventories	27	1,340,466	1,117,156
Trade and other receivables	28	2,997,384	2,661,450
Loan receivables	19	–	113,190
Amounts due from related companies	34	33,747	13,320
Financial assets at fair value through profit or loss	26	1,038,582	1,112,968
Derivative financial instrument	39	31,370	–
Pledged bank deposits	29	1,357	7,645
Cash and cash equivalents	29	1,444,014	1,752,860
		6,886,920	6,778,589
Current liabilities			
Trade and other payables	30	2,488,127	2,871,759
Contract liabilities	31	318,824	202,106
Bank and other borrowings	32	3,243,126	2,116,471
Lease liabilities	33	9,785	5,728
Amounts due to related companies	34	22,670	4,831
Amount due to the immediate holding company	36	2,331	2,331
Derivative financial instrument	39	–	8,350
Income tax payable		369,738	354,549
		6,454,601	5,566,125
Net current assets		432,319	1,212,464
Total assets less current liabilities		15,916,460	15,490,905

Consolidated Statement of Financial Position

As at 31 December 2022

	Notes	2022 HK\$'000	2021 HK\$'000
Non-current liabilities			
Bank and other borrowings	32	1,162,288	1,510,070
Lease liabilities	33	60,083	13,306
Deferred tax liabilities	35	220,148	197,849
Deferred income	37	265,281	326,818
		1,707,800	2,048,043
Net assets			
		14,208,660	13,442,862
Capital and reserves attributable to owners of the Company			
Share capital	38	35,496	35,496
Reserves		14,104,842	13,357,135
Equity attributable to owners of the Company			
		14,140,338	13,392,631
Non-controlling interests			
		68,322	50,231
Total equity			
		14,208,660	13,442,862

The consolidated financial statements on pages 100 to 222 were approved and authorised for issue by the board of directors of the Company on 22 March 2023 and are signed on its behalf by:

Tang Wei Kun
Director

Shao Yan
Director

The accompanying notes form an integral part of these consolidated financial statements.

Consolidated Statement of Changes in Equity

For the year ended 31 December 2022

	Attributable to owners of the Company											Non-controlling interests	Total
	Share capital	Share premium	Contribution surplus reserve	Statutory reserve	Safety fund reserve	Translation reserve	Other reserve	FVTOCI reserve	Treasury shares	Retained profits	Total equity attributable to owners of the Company		
	HK\$'000	HK\$'000	HK\$'000	HK\$'000 (Note a)	HK\$'000 (Note b)	HK\$'000	HK\$'000 (Note c)	HK\$'000	HK\$'000 (Note d)	HK\$'000	HK\$'000	HK\$'000	HK\$'000
As at 1 January 2021	35,496	6,523,049	121,273	479,682	28,825	163,044	(98,116)	11,871	-	3,974,380	11,239,504	104,705	11,344,209
Profit for the year	-	-	-	-	-	-	-	-	-	2,402,563	2,402,563	2,469	2,405,032
Other comprehensive income/(loss) for the year, net of income tax	-	-	-	-	-	-	-	-	-	-	-	-	-
Change in fair value of FATOCI	-	-	-	-	-	-	-	28,641	-	-	28,641	-	28,641
Share of other comprehensive loss of associates	-	-	-	-	-	-	-	(12,047)	-	-	(12,047)	-	(12,047)
Exchange difference on translation of foreign operations	-	-	-	-	-	276,912	-	-	-	-	276,912	(2,817)	274,095
Total comprehensive income/(loss) for the year	-	-	-	-	-	276,912	-	16,594	-	2,402,563	2,696,069	(348)	2,695,721
Release of FVTOCI reserve upon disposal	-	-	-	-	-	-	-	(25,419)	-	-	(25,419)	-	(25,419)
Purchase of treasury shares	-	-	-	-	-	-	-	-	(143,503)	-	(143,503)	-	(143,503)
Capital contribution from non-controlling interest	-	-	-	-	-	-	300	-	-	-	300	17,594	17,894
Acquisition of subsidiaries	-	-	-	-	-	-	-	-	-	-	-	16,659	16,659
Acquisition of additional interest in a subsidiary (Note 22)	-	-	-	-	-	-	16,130	-	-	-	16,130	(79,150)	(63,020)
Dividend paid	-	-	-	-	-	-	-	-	-	(390,450)	(390,450)	(9,229)	(399,679)
Transfer	-	-	-	65,392	-	-	-	-	-	(65,392)	-	-	-
As at 31 December 2021 and 1 January 2022	35,496	6,523,049	121,273	545,074	28,825	439,956	(81,686)	3,046	(143,503)	5,921,101	13,392,631	50,231	13,442,862
Profit for the year	-	-	-	-	-	-	-	-	-	2,079,419	2,079,419	18,832	2,098,251
Other comprehensive loss for the year, net of income tax	-	-	-	-	-	-	-	-	-	-	-	-	-
Change in fair value of FATOCI	-	-	-	-	-	-	-	(70,706)	-	-	(70,706)	-	(70,706)
Share of other comprehensive loss of associates	-	-	-	-	-	-	-	(31,311)	-	-	(31,311)	-	(31,311)
Exchange difference on translation of foreign operations	-	-	-	-	-	(795,259)	-	-	-	-	(795,259)	6,820	(788,439)
Total comprehensive (loss)/income for the year	-	-	-	-	-	(795,259)	-	(102,017)	-	2,079,419	1,182,143	25,652	1,207,795
Purchase of treasury shares	-	-	-	-	-	-	-	-	(43,986)	-	(43,986)	-	(43,986)
Dividend paid	-	-	-	-	-	-	-	-	-	(390,450)	(390,450)	(7,561)	(398,011)
Transfer	-	-	-	66,295	-	-	-	-	-	(66,295)	-	-	-
As at 31 December 2022	35,496	6,523,049	121,273	611,369	28,825	(355,303)	(81,686)	(98,971)	(187,489)	7,543,775	14,140,338	68,322	14,208,660

Consolidated Statement of Changes in Equity

For the year ended 31 December 2022

Notes:

- a. Each of the Company's subsidiary's Articles of Association in the People's Republic of China (the "PRC") requires the appropriation of 10% of its profit after tax determined under the relevant accounting principles and financial regulations applicable to companies established in the PRC each year to the statutory reserve until the balance reaches 50% of the share capital. The statutory reserve shall only be used for making up losses, capitalisation into share capital and expansion of the production and operation.
- b. According to document (Cai Zi 2022 No. 136), entities involved in mining, construction, production of dangerous goods and land transport are required to transfer an amount at fixed rates on production volume or operating revenue as safety fund reserve. The safety fund is for future enhancement of safety production environment and improvement of facilities and is not available for distribution to shareholders.
- c. Other reserve represents the difference between the consideration paid to or received from non-controlling interests for acquisition of additional equity interest or additional capital injection in a subsidiary without the overall change in the control in that subsidiary and the carrying amount of share of net assets being acquired or disposed.
- d. Where any Group's entity purchases the Group's equity share capital (treasury shares), the consideration paid, including any directly attributable incremental costs (net of income taxes), is deducted from equity attributable to the Group's equity owners. Where such shares are subsequently reissued, any consideration received, net of any directly attributable incremental transaction costs and the related income tax effects, is included in equity attributable to the Group's equity owners. As at 31 December 2022, the Company held 30,300,000 (2021: 22,430,500) treasury shares and the aggregate price of the purchased shares was deducted from equity as "Treasury shares reserve" for an amount of HK\$187,489,000 (2021: HK\$143,503,000).

The accompanying notes form an integral part of these consolidated financial statements.

Consolidated Statement of Cash Flows

For the year ended 31 December 2022

	Notes	2022 HK\$'000	2021 HK\$'000
Operating activities			
Profit before tax		2,516,893	2,785,832
Adjustments for:			
Amortisation of intangible assets	23	32,341	17,024
Depreciation of property, plant and equipment	16	328,712	305,504
Depreciation of right-of-use assets	17	33,859	16,991
Finance costs	10	137,493	92,964
Recognition of deferred government grant	37	(52,119)	(41,151)
Loss on disposal of property, plant and equipment	12	2,476	3,920
Write-off of property, plant and equipment	12	11,271	31,087
Write-down of inventories	12	5,265	1,042
(Reversal of)/allowance for expected credit losses recognised in respect of trade and other receivables	12	(22,642)	11,774
Reversal of expected credit loss recognised in respect of loan receivables	12	(795)	(32)
Allowance for/(reversal of) expected credit losses recognised in respect of amounts due from related companies	12	420	(11,389)
Change in fair value on financial assets at fair value through profit or loss	9	67,240	(483,681)
Fair value change on derivative financial instrument		(39,720)	8,350
Interest income		(19,806)	(9,633)
Share of results of associates		43,786	(113,862)
Gain on sales and leaseback transaction, net	8	(2,297)	(2,372)
Net gain in fair value of investment properties	8, 18	(21,351)	(29,575)
Investment income from financial assets at fair value through profit or loss	9	-	(1,167)
Realised loss on disposal of financial assets at fair value through profit or loss, net	9	27,383	-
Impairment loss recognised in respect of goodwill		36,442	-
Operating cash flows before movements in working capital		3,084,851	2,581,626
Increase in inventories		(295,283)	(118,735)
Increase in trade and other receivables		(514,242)	(701,648)
(Decrease)/increase in trade and other payables		(234,575)	605,500
(Increase)/decrease in amounts due from related companies		(22,523)	34,105
Increase/(decrease) in amounts due to related companies		18,748	(53,771)
Increase/(decrease) in contract liabilities		135,089	(74,633)
Increase in deferred income		19,867	10,548
Cash generated from operations		2,191,932	2,282,992
Income tax paid		(349,256)	(277,317)
Net cash generated from operating activities		1,842,676	2,005,675

Consolidated Statement of Cash Flows

For the year ended 31 December 2022

	Notes	2022 HK\$'000	2021 HK\$'000
Investing activities			
Purchase of property, plant and equipment	16	(626,215)	(471,570)
Purchase of intangible asset	23	(431,368)	(64,797)
Purchase of right-of-use assets		(27,489)	–
Acquisition of financial assets at fair value through profit or loss		(1,429,782)	(148,023)
Acquisition of financial assets at fair value through other comprehensive income		(509,086)	(56,083)
Decrease in loan receivables		–	46,477
Addition of investments in associates		(70,431)	(1,201,426)
Dividend received from an associate	20	192,095	198,753
Advances to associates		(70,029)	(13,751)
Repayment of advances to associates		85,605	97,912
Withdrawal of pledged bank deposits, net		5,864	23,898
Increase in non-current prepayments		(586,225)	(91,027)
Proceeds from disposal of property, plant and equipment		1,987	23,789
Proceeds from disposal of financial assets at fair value through profit or loss		1,354,385	–
Proceeds from disposal of financial assets at fair value through other comprehensive income		–	121,482
Interest income received		19,806	9,633
Investment income from financial assets at fair value through profit or loss		–	1,167
Net cash outflow from acquisition of subsidiaries	40	(269,223)	(141,808)
Net cash outflow from acquisition of subsidiaries that do not constitute businesses		–	(103,605)
Net cash used in investing activities		(2,360,106)	(1,768,979)
Financing activities			
Acquisition of partial interest of a subsidiary		–	(63,020)
Capital contribution from non-controlling interests		–	17,894
Purchase of shares for share award scheme		(43,986)	(143,503)
Increase in non-current prepayments		–	(11,497)
Proceed from new bank and other borrowings		3,116,608	1,981,036
Repayments of bank and other borrowings		(2,199,261)	(1,615,733)
Repayments of principal portion of lease liabilities		(10,857)	(5,705)
Interest paid		(137,493)	(92,964)
Dividend paid		(390,450)	(390,450)
Dividends paid to non-controlling interest		(7,561)	(9,229)
Net cash generated from/(used in) financing activities		327,000	(333,171)
Net decrease in cash and cash equivalents		(190,430)	(96,475)
Cash and cash equivalents at the beginning of year		1,752,860	1,836,695
Effect of foreign exchange rate changes		(118,416)	12,640
Cash and cash equivalents at the end of year		1,444,014	1,752,860

The accompanying notes form an integral part of these consolidated financial statements.

Notes to the Consolidated Financial Statements

For the year ended 31 December 2022

1. GENERAL INFORMATION

Grand Pharmaceutical Group Limited (formerly known as China Grand Pharmaceutical and Healthcare Holdings Limited) (the “Company”) is incorporated in Bermuda on 18 October 1995 as an exempted company under the Companies Act 1981 of Bermuda with its shares listed on The Stock Exchange of Hong Kong Limited (the “Stock Exchange”) since 19 December 1995. The addresses of the registered office and principal place of business of the Company are disclosed in “Corporate information” section of the annual report.

The Company and its subsidiaries (hereinafter collectively referred to as the “Group”) are principally engaged in the manufacture and sales of pharmaceutical preparations and medical devices, bio-technology products and health products, specialised pharmaceutical raw materials and other products, in the People’s Republic of China (the “PRC”).

The directors consider that Outwit Investments Limited (“Outwit”) is the parent company of the Company and China Grand Enterprises Incorporation is the ultimate holding company of the Company. The ultimate controlling party is Mr. Hu Kaijun.

The consolidated financial statements are presented in Hong Kong dollars (“HK\$”), which is the same as functional currency of the Company, and the functional currency of the most of the subsidiaries in Renminbi (“RMB”). The board of directors considered that it is more appropriate to present the consolidated financial statements in HK\$ as the shares of the Company are listed on the Stock Exchange. The consolidated financial statements are presented in thousands of units of HK\$ (HK\$’000), unless otherwise stated.

2. APPLICATION OF AMENDMENTS TO HONG KONG FINANCIAL REPORTING STANDARDS (“HKFRS”)

Amendments to HKFRSs that are mandatorily effective for the current year

The Group has applied the following new and amendments to HKFRSs issued by Hong Kong Institute of Certified Public Accountants (the “HKICPA”) for the first time in the current year, which are mandatorily effective for the annual period beginning on or after 1 January 2022 for the preparation of the consolidated financial statements:

Amendments to HKFRS 3	Reference to the Conceptual Framework
Amendments to HKFRS 16	Covid-19-Related Rent Concessions beyond 30 June 2021
Amendments to HKAS 16	Property, Plant and Equipment — Proceeds before Intended Use
Amendments to HKAS 37	Onerous Contracts — Cost of Fulfilling a Contract
Amendments to HKFRSs	Annual Improvements to HKFRSs 2018-2020
Accounting Guideline 5 (Revised)	Merger Accounting for Common Control Combinations

The application of the amendments to HKFRS Standards in the current year has had no material impact on the Group’s financial performance and positions for the current and prior years and/or on the disclosures set out in these consolidated financial statements.

Notes to the Consolidated Financial Statements

For the year ended 31 December 2022

2. APPLICATION OF AMENDMENTS TO HONG KONG FINANCIAL REPORTING STANDARDS (“HKFRSS”) (Continued)

New and amendments to HKFRSs that have been Issued but not yet effective

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

HKFRS 17 (including the October 2020 and February 2022 Amendments to HKFRS 17)	Insurance Contracts ¹
Amendments to HKFRS 10 and HKAS 28	Sale or Contribution of Assets between an Investor and its Associate or Joint Venture ²
Amendments to HKFRS 16	Lease Liability in a Sale and Leaseback ³
Amendments to HKAS 1	Classification of Liabilities as Current or Non-current and related amendments to Hong Kong Interpretation 5 (2020) ³
Amendments to HKAS 1 and HKFRS Practice Statement 2	Disclosure of Accounting Policies ¹
Amendments to HKAS 8	Definition of Accounting Estimates ¹
Amendments to HKAS 12	Deferred Tax related to Assets and Liabilities arising from a Single Transaction ¹

¹ Effective for annual periods beginning on or after 1 January 2023.

² Effective for annual periods beginning on or after a date to be determined.

³ Effective for annual periods beginning on or after 1 January 2024.

The directors anticipate that the application of all other new and amendments to HKFRSs will have no material impact on the consolidated financial statements in the foreseeable future.

3. SUMMARY OF ACCOUNTING POLICIES

Basic of preparation

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

The consolidated financial statements have been prepared in accordance with HKFRSs issued by the HKICPA. For the purpose of preparation of the consolidated financial statements, information is considered material if such information is reasonably expected to influence decisions made by primary users. In addition, the consolidated financial statements include applicable disclosures required by the Rules Governing the Listing of Securities on The Stock Exchange of Hong Kong Limited (“**Listing Rules**”) and by the Hong Kong Companies Ordinance.

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

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

Notes to the Consolidated Financial Statements

For the year ended 31 December 2022

3. SUMMARY OF ACCOUNTING POLICIES *(Continued)*

Basic of preparation *(Continued)*

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

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

- Level 1 inputs are quoted prices (unadjusted) in active markets for identical assets or liabilities that the entity can access at the measurement date;
- Level 2 inputs are inputs, other than quoted prices included within Level 1, that are observable for the asset or liability, either directly or indirectly; and
- Level 3 inputs are unobservable inputs for the asset or liability.

Basis of consolidation

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

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

The Group reassesses whether or not it controls an investee if facts and circumstances indicate that there are changes to one or more of the three elements of control listed above.

Notes to the Consolidated Financial Statements

For the year ended 31 December 2022

3. SUMMARY OF ACCOUNTING POLICIES *(Continued)*

Basis of consolidation *(Continued)*

When the Group has less than a majority of the voting rights of an investee, it has power over the investee when the voting rights are sufficient to give it the practical ability to direct the relevant activities of the investee unilaterally. The Group considers all relevant facts and circumstances in assessing whether or not the Group's voting rights in an investee are sufficient to give it power, including:

- the size of the Group's holding of voting rights relative to the size and dispersion of holdings of the other vote holders;
- potential voting rights held by the Group, other vote holders or other parties;
- rights arising from other contractual arrangements; and
- any additional facts and circumstances that indicate that the Group has, or does not have, the current ability to direct the relevant activities at the time that decisions need to be made, including voting patterns at previous shareholders' meetings.

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

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

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

All intragroup assets and liabilities, equity, income, expenses and cash flows relating to transactions between members of the Group are eliminated in full on consolidation.

Non-controlling interests in subsidiaries are presented separately from the Group's equity therein, which represent present ownership interests entitling their holders to a proportionate share of net assets of the relevant subsidiaries upon liquidation.

Notes to the Consolidated Financial Statements

For the year ended 31 December 2022

3. SUMMARY OF ACCOUNTING POLICIES *(Continued)*

Changes in the Group's interests in existing subsidiaries

Changes in the Group's interests in subsidiaries that do not result in the Group losing control over the subsidiaries are accounted for as equity transactions. The carrying amounts of the Group's relevant components of equity and the non-controlling interests are adjusted to reflect the changes in their relative interests in the subsidiaries, including re-attribution of relevant reserves between the Group and the non-controlling interests according to the Group's and the non-controlling interests' proportionate interests.

Any difference between the amount by which the non-controlling interests are adjusted, and the fair value of the consideration paid or received is recognised directly in equity and attributed to owners of the Company.

When the Group loses control of a subsidiary, the assets and liabilities of that subsidiary and non-controlling interests (if any) are derecognised. A gain or loss is recognised in profit or loss and is calculated as the difference between (i) the aggregate of the fair value of the consideration received and the fair value of any retained interest and (ii) the carrying amount of the assets (including goodwill), and liabilities of the subsidiary attributable to the owners of the Company. All amounts previously recognised in other comprehensive income in relation to that subsidiary are accounted for as if the Group had directly disposed of the related assets or liabilities of the subsidiary (i.e. reclassified to profit or loss or transferred to another category of equity as specified/permitted by applicable HKFRSs). The fair value of any investment retained in the former subsidiary at the date when control is lost is regarded as the fair value on initial recognition for subsequent accounting under HKFRS 9 Financial Instruments or, when applicable, the cost on initial recognition of an investment in an associate or a joint venture.

Optional concentration test

The Group can elect to apply an optional concentration test, on a transaction-by-transaction basis, that permits a simplified assessment of whether an acquired set of activities and assets is not a business. The concentration test is met if substantially all of the fair value of the gross assets acquired is concentrated in a single identifiable asset or group of similar identifiable assets. The gross assets under assessment exclude cash and cash equivalents, deferred tax assets, and goodwill resulting from the effects of deferred tax liabilities. If the concentration test is met, the set of activities and assets is determined not to be a business and no further assessment is needed.

Notes to the Consolidated Financial Statements

For the year ended 31 December 2022

3. SUMMARY OF ACCOUNTING POLICIES *(Continued)*

Business combinations

A business is an integrated set of activities and assets which includes an input and a substantive process that together significantly contribute to the ability to create outputs. The acquired processes are considered substantive if they are critical to the ability to continue producing outputs, including an organised workforce with the necessary skills, knowledge, or experience to perform the related processes or they significantly contribute to the ability to continue producing outputs and are considered unique or scarce or cannot be replaced without significant cost, effort, or delay in the ability to continue producing outputs.

Acquisitions of businesses, other than business combination under common control are accounted for using the acquisition method. The consideration transferred in a business combination is measured at fair value, which is calculated as the sum of the acquisition-date fair values of the assets transferred by the Group, liabilities incurred by the Group to the former owners of the acquiree and the equity interests issued by the Group in exchange for control of the acquiree. Acquisition-related costs are generally recognised in profit or loss as incurred.

For business combinations in which the acquisition date is on or after 1 January 2022, the identifiable assets acquired and liabilities assumed must meet the definitions of an asset and a liability in the *Conceptual Framework for Financial Reporting 2018* issued in June 2018 (the "Conceptual Framework") except for transactions and events within the scope of HKAS 37 or HK(IFRIC)-Int 21, in which the Group applies HKAS 37 or HK(IFRIC)-Int 21 instead of the Conceptual Framework to identify the liabilities it has assumed in a business combination. Contingent assets are not recognised.

At the acquisition date, the identifiable assets acquired and the liabilities assumed are recognised at their fair value, except that:

- deferred tax assets or liabilities, and assets or liabilities related to employee benefit arrangements are recognised and measured in accordance with HKAS 12 Income Taxes and HKAS 19 Employee Benefits respectively;
- liabilities or equity instruments related to share-based payment arrangements of the acquiree or share-based payment arrangements of the Group entered into to replace share-based payment arrangements of the acquiree are measured in accordance with HKFRS 2 at the acquisition date (see the accounting policy below);
- assets (or disposal groups) that are classified as held for sale in accordance with HKFRS 5 Non-current Assets Held for Sale and Discontinued Operations are measured in accordance with that standard; and
- lease liabilities are recognised and measured at the present value of the remaining lease payments (as defined in HKFRS 16) as if the acquired leases were new leases at the acquisition date, except for leases for which (a) the lease term ends within 12 months of the acquisition date; or (b) the underlying asset is of low value. Right-of-use assets are recognised and measured at the same amount as the relevant lease liabilities, adjusted to reflect favourable or unfavourable terms of the lease when compared with market terms.

Goodwill is measured as the excess of the sum of the consideration transferred, the amount of any non-controlling interests in the acquiree, and the fair value of the acquirer's previously held equity interest in the acquiree (if any) over the net amount of the identifiable assets acquired and the liabilities assumed as at acquisition date. If, after re-assessment, the net amount of the identifiable assets acquired and liabilities assumed exceeds the sum of the consideration transferred, the amount of any non-controlling interests in the acquiree and the fair value of the acquirer's previously held interest in the acquiree (if any), the excess is recognised immediately in profit or loss as a bargain purchase gain.

Notes to the Consolidated Financial Statements

For the year ended 31 December 2022

3. SUMMARY OF ACCOUNTING POLICIES *(Continued)*

Business combinations *(Continued)*

Non-controlling interests that are present ownership interests and entitle their holders to a proportionate share of the relevant subsidiary's net assets in the event of liquidation are initially measured at the non-controlling interests' proportionate share of the recognised amounts of the acquiree's identifiable net assets or at fair value. The choice of measurement basis is made on a transaction-by-transaction basis. Other types of non-controlling interests are measured at their fair value.

When the consideration transferred by the Group in a business combination includes a contingent consideration arrangement, the contingent consideration is measured at its acquisition-date fair value and included as part of the consideration transferred in a business combination. Changes in the fair value of the contingent consideration that qualify as measurement period adjustments are adjusted retrospectively. Measurement period adjustments are adjustments that arise from additional information obtained during the "measurement period" (which cannot exceed one year from the acquisition date) about facts and circumstances that existed at the acquisition date.

The subsequent accounting for the contingent consideration that do not qualify as measurement period adjustments depends on how the contingent consideration is classified. Contingent consideration that is classified as equity is not remeasured at subsequent reporting dates and its subsequent settlement is accounted for within equity. Contingent consideration that is classified as an asset or a liability is remeasured to fair value at subsequent reporting dates, with the corresponding gain or loss being recognised in profit or loss.

When a business combination is achieved in stages, the Group's previously held equity interest in the acquiree is remeasured to fair value at the acquisition date (i.e. the date when the Group obtains control), and the resulting gain or loss, if any, is recognised in profit or loss or other comprehensive income, as appropriate. Amounts arising from interests in the acquiree prior to the acquisition date that have previously been recognised in other comprehensive income and measured under HKFRS 9 would be accounted for on the same basis as would be required if the Group had disposed directly of the previously held equity interest.

If the initial accounting for a business combination is incomplete by the end of the reporting period in which the combination occurs, the Group reports provisional amounts for the items for which the accounting is incomplete. Those provisional amounts are adjusted retrospectively during the measurement period (see above), and additional assets or liabilities are recognised, to reflect new information obtained about facts and circumstances that existed at the acquisition date that, if known, would have affected the amounts recognised at that date.

Acquisition of a subsidiary not constituting a business

When the Group acquires a group of assets and liabilities that do not constitute a business, the Group identifies and recognises the individual identifiable assets acquired and liabilities assumed by allocating the purchase price first to right-of-use assets, intangible assets and property, plant and equipment which are subsequently measured under fair value model and financial assets/financial liabilities at the respective fair values, the remaining balance of the purchase price is then allocated to the other identifiable assets and liabilities on the basis of their relative fair values at the date of purchase. Such a transaction does not give rise to goodwill or bargain purchase gain.

Notes to the Consolidated Financial Statements

For the year ended 31 December 2022

3. SUMMARY OF ACCOUNTING POLICIES *(Continued)*

Goodwill

Goodwill arising on an acquisition of a business is carried at cost as established at the date of acquisition of the business (see the accounting policy above) less accumulated impairment losses, if any.

For the purposes of impairment testing, goodwill is allocated to each of the Group's cash-generating units (or group of cash-generating units) that is expected to benefit from the synergies of the combination, which represent the lowest level at which the goodwill is monitored for internal management purposes and not larger than an operating segment.

A cash-generating unit (or group of cash-generating units) to which goodwill has been allocated is tested for impairment annually or more frequently when there is indication that the unit may be impaired. For goodwill arising on an acquisition in a reporting period, the cash-generating unit (or group of cash-generating units) to which goodwill has been allocated is tested for impairment before the end of that reporting period. If the recoverable amount is less than its carrying amount, the impairment loss is allocated first to reduce the carrying amount of any goodwill and then to the other assets on a pro-rata basis based on the carrying amount of each asset in the unit (or group of cash-generating units).

On disposal of the relevant cash-generating unit or any of the cash-generating unit within the group of cash-generating units, the attributable amount of goodwill is included in the determination of the amount of profit or loss on disposal. When the Group disposes of an operation within the cash-generating unit (or a cash-generating unit within a group of cash-generating units), the amount of goodwill disposed of is measured on the basis of the relative values of the operation (or the cash-generating unit) disposed of and the portion of the cash-generating unit (or the group of cash-generating units) retained.

The Group's policy for goodwill arising on the acquisition of an associate and a joint venture is described below.

Investments in associates

An associate is an entity over which the Group has significant influence. Significant influence is the power to participate in the financial and operating policy decisions of the investee but is not control or joint control over those policies.

The results and assets and liabilities of associates are incorporated in these consolidated financial statements using the equity method of accounting. The financial statements of associates used for equity accounting purposes are prepared using uniform accounting policies as those of the Group for like transactions and events in similar circumstances. The associate uses accounting policies that differ from those of the Group for like transactions and events in similar circumstances. Appropriate adjustments have been made to conform the associate's accounting policies to those of the Group. Under the equity method, an investment in an associate is initially recognised in the consolidated statement of financial position at cost and adjusted thereafter to recognise the Group's share of the profit or loss and other comprehensive income of the associate. When the Group's share of losses of an associate exceeds the Group's interest in that associate (which includes any long-term interests that, in substance, form part of the Group's net investment in the associate), the Group discontinues recognising its share of further losses. Additional losses are recognised only to the extent that the Group has incurred legal or constructive obligations or made payments on behalf of the associate.

An investment in an associate is accounted for using the equity method from the date on which the investee becomes an associate. On acquisition of the investment in an associate, any excess of the cost of the investment over the Group's share of the net fair value of the identifiable assets and liabilities of the investee is recognised as goodwill, which is included within the carrying amount of the investment. Any excess of the Group's share of the net fair value of the identifiable assets and liabilities over the cost of the investment, after reassessment, is recognised immediately in profit or loss in the period in which the investment is acquired.

Notes to the Consolidated Financial Statements

For the year ended 31 December 2022

3. SUMMARY OF ACCOUNTING POLICIES *(Continued)*

Investments in associates *(Continued)*

The Group assesses whether there is an objective evidence that the interest in an associate may be impaired. When any objective evidence exists, the entire carrying amount of the investment (including goodwill) is tested for impairment in accordance with HKAS 36 as a single asset by comparing its recoverable amount (higher of value in use and fair value less costs of disposal) with its carrying amount. Any impairment loss recognised is not allocated to any asset, including goodwill, that forms part of the carrying amount of the investment. Any reversal of that impairment loss is recognised in accordance with HKAS 36 to the extent that the recoverable amount of the investment subsequently increases.

When the Group ceases to have significant influence over an associate, it is accounted for as a disposal of the entire interest in the investee with a resulting gain or loss being recognised in profit or loss. When the Group retains an interest in the former associate and the retained interest is a financial asset within the scope of HKFRS 9, the Group measures the retained interest at fair value at that date and the fair value is regarded as its fair value on initial recognition. The difference between the carrying amount of the associate and the fair value of any retained interest and any proceeds from disposing of the relevant interest in the associate is included in the determination of the gain or loss on disposal of the associate. In addition, the Group accounts for all amounts previously recognised in other comprehensive income in relation to that associate on the same basis as would be required if that associate had directly disposed of the related assets or liabilities. Therefore, if a gain or loss previously recognised in other comprehensive income by that associate would be reclassified to profit or loss on the disposal of the related assets or liabilities, the Group reclassifies the gain or loss from equity to profit or loss (as a reclassification adjustment) upon disposal/partial disposal of the relevant associate.

When a group entity transacts with an associate of the Group, profits and losses resulting from the transactions with the associate are recognised in the consolidated financial statements only to the extent of interests in the associate that are not related to the Group.

Changes in the Group's interests in associates

The Group continues to use the equity method when an investment in an associate becomes an investment in a joint venture or an investment in a joint venture becomes an investment in an associate. There is no remeasurement to fair value upon such changes in ownership interests.

When the Group reduces its ownership interest in an associate but the Group continues to use the equity method, the Group reclassifies to profit or loss the proportion of the gain or loss that had previously been recognised in other comprehensive income relating to that reduction in ownership interest if that gain or loss would be reclassified to profit or loss on the disposal of the related assets or liabilities.

Notes to the Consolidated Financial Statements

For the year ended 31 December 2022

3. SUMMARY OF ACCOUNTING POLICIES *(Continued)*

Revenue from contracts with customers

The Group recognises revenue when (or as) a performance obligation is satisfied, i.e. when “control” of the goods or services underlying the particular performance obligation is transferred to the customer.

A performance obligation represents a good or service (or a bundle of goods or services) that is distinct or a series of distinct goods or services that are substantially the same.

Control is transferred over time and revenue is recognised over time by reference to the progress towards complete satisfaction of the relevant performance obligation if one of the following criteria is met:

- the customer simultaneously receives and consumes the benefits provided by the Group’s performance as the Group performs;
- the Group’s performance creates and enhances an asset that the customer controls as the Group performs; or
- the Group’s performance does not create an asset with an alternative use to the Group and the Group has an enforceable right to payment for performance completed to date.

Otherwise, revenue is recognised at a point in time when the customer obtains control of the distinct good or service.

A contract asset represents the Group’s right to consideration in exchange for goods or services that the Group has transferred to a customer that is not yet unconditional. It is assessed for impairment in accordance with HKFRS 9. In contrast, a receivable represents the Group’s unconditional right to consideration, i.e. only the passage of time is required before payment of that consideration is due.

A contract liability represents the Group’s obligation to transfer goods or services to a customer for which the Group has received consideration (or an amount of consideration is due) from the customer.

A contract asset and a contract liability relating to the same contract are accounted for and presented on a net basis.

For contracts that contain more than one performance obligations, the Group allocates the transaction price to each performance obligation on a relative stand-alone selling price basis.

Notes to the Consolidated Financial Statements

For the year ended 31 December 2022

3. SUMMARY OF ACCOUNTING POLICIES *(Continued)*

Sale of goods

Revenue from manufacture and sales of pharmaceutical preparations and medical devices, sales of biotechnology products and nutrition products and sales of specialised pharmaceutical raw materials and other products are recognised at point in time when carrier designated by the customer, or after the customer's acceptance or after control transfer to customer. The credit period granted to customers by the Group is determined based on the characteristics of customers' credit risk, which is consistent with industry practice and there is no significant financing component. The Group's obligations to transfer goods to customers for consideration received or receivable from customers are shown as contract liabilities.

Dividend income

Dividend income from investments is recognised at point in time when the shareholders' right to receive payment has been established (provided that it is probable that the economic benefits will flow to the Group and the amount of revenue can be measured reliably).

Interest income

Interest income is calculated by applying the effective interest rate to the gross carrying amount of a financial asset except for financial assets that subsequently become credit-impaired. For credit impaired financial assets, the effective interest rate is applied to the net carrying amount of the financial asset (after deduction of the loss allowance). Interest income is presented as "interest income" where it is mainly earned from financial assets that are held for cash management purposes.

Rental income

The Group's accounting policy for recognition of revenue from operating leases is described in the accounting policy below.

Leases

Definition of 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.

For contracts entered into or modified on or after the date of initial application of HKFRS 16 or arising from business combinations, the Group assesses whether a contract is or contains a lease based on the definition under HKFRS 16 at inception, modification date or acquisition date, as appropriate. Such contract will not be reassessed unless the terms and conditions of the contract are subsequently changed.

Notes to the Consolidated Financial Statements

For the year ended 31 December 2022

3. SUMMARY OF ACCOUNTING POLICIES *(Continued)*

Leases *(Continued)*

The Group as a lessee

Allocation of consideration to components of a contract

For a contract that contains a lease component and one or more additional lease or non-lease components, the Group allocates the consideration in the contract to each lease component on the basis of the relative stand-alone price of the lease component and the aggregate stand-alone price of the non-lease components.

The Group applies practical expedient not to separate non-lease components from lease component, and instead account for the lease component and any associated non-lease components as a single lease component.

Short-term leases and leases of low-value assets

The Group applies the short-term lease recognition exemption to leases that have a lease term of 12 months or less from the commencement date and do not contain a purchase option. It also applies the recognition exemption for lease of low-value assets. Lease payments on short-term leases and leases of low-value assets are recognised as expense on a straight-line basis or another systematic basis over the lease term.

Right-of-use assets

The cost of right-of-use asset includes:

- the amount of the initial measurement of the lease liability;
- any lease payments made at or before the commencement date, less any lease incentives received;
- any initial direct costs incurred by the Group; and
- an estimate of costs to be incurred by the Group in dismantling and removing the underlying assets, restoring the site on which it is located or restoring the underlying asset to the condition required by the terms and conditions of the lease, unless those costs are incurred to produce inventories.

Except for those that are classified as investment properties and measured under fair value model, right-of-use assets are measured at cost, less any accumulated depreciation and impairment losses, and adjusted for any remeasurement of lease liabilities.

Right-of-use assets in which the Group is reasonably certain to obtain ownership of the underlying leased assets at the end of the lease term are depreciated from commencement date to the end of the useful life. Otherwise, right-of-use assets are depreciated on a straight-line basis over the shorter of its estimated useful life and the lease term.

The Group presents right-of-use assets as a separate line item on the consolidated statement of financial position.

Notes to the Consolidated Financial Statements

For the year ended 31 December 2022

3. SUMMARY OF ACCOUNTING POLICIES *(Continued)*

Leases *(Continued)*

The Group as a lessee *(Continued)*

Refundable rental deposits

Refundable rental deposits paid are accounted under HKFRS 9 and initially measured at fair value. Adjustments to fair value at initial recognition are considered as additional lease payments and included in the cost of right-of-use assets.

Lease liabilities

At the commencement date of a lease, the Group recognises and measures the lease liability at the present value of lease payments that are unpaid at that date. In calculating the present value of lease payments, the Group uses the incremental borrowing rate at the lease commencement date if the interest rate implicit in the lease is not readily determinable.

Lease payments included in the measurement of the lease liability comprise:

- fixed lease payments (including in-substance fixed payments), less any lease incentives receivable;
- variable lease payments that depend on an index or rate, initially measured using the index or rate at the commencement date;
- the amount expected to be payable by the lessee under residual value guarantees;
- the exercise price of purchase options, if the lessee is reasonably certain to exercise the options; and
- payments of penalties for terminating the lease, if the lease term reflects the exercise of an option to terminate the lease.

After the commencement date, lease liabilities are adjusted by interest accretion and lease payments.

The Group remeasures lease liabilities (and makes a corresponding adjustment to the related right-of-use assets) whenever:

- the lease term has changed or there is a change in the assessment of exercise of a purchase option, in which case the related lease liability is remeasured by discounting the revised lease payments using a revised discount rate at the date of reassessment.
- the lease payments change due to changes in market rental rates following a market rent review/expected payment under a guaranteed residual value, in which cases the related lease liability is remeasured by discounting the revised lease payments using the initial discount rate.

The Group presents lease liabilities as a separate line item on the consolidated statement of financial position.

Notes to the Consolidated Financial Statements

For the year ended 31 December 2022

3. SUMMARY OF ACCOUNTING POLICIES *(Continued)*

Leases *(Continued)*

The Group as a lessee *(Continued)*

Lease modifications

The Group accounts for a lease modification as a separate lease if:

- the modification increases the scope of the lease by adding the right to use one or more underlying assets; and
- the consideration for the leases increases by an amount commensurate with the standalone price for the increase in scope and any appropriate adjustments to that standalone price to reflect the circumstances of the particular contract.

For a lease modification that is not accounted for as a separate lease, the Group remeasures the lease liability, less any lease incentives receivable, based on the lease term of the modified lease by discounting the revised lease payments using a revised discount rate at the effective date of the modification.

The Group accounts for the remeasurement of lease liabilities by making corresponding adjustments to the relevant right-of-use asset.

When the modified contract contains a lease component and one or more additional lease or non-lease components, the Group allocates the consideration in the modified contract to each lease component on the basis of the relative stand-alone price of the lease component and the aggregate stand-alone price of the non-lease components.

Changes in the basis for determining the future lease payments as a result of interest rate benchmark reform

For changes in the basis for determining the future lease payments as a result of interest rate benchmark reform, the Group applies the practical expedient to remeasure the lease liabilities by discounting the revised lease payments using the unchanged discount rate, unless the change in lease payments results from a change in floating interest rates. In that case, the Group uses the revised discount rate that reflects change in the interest rate and makes a corresponding adjustment to the related right-of-use assets. A lease modification is required by interest rate benchmark reform if, and only if, both of these conditions are met:

- the modification is necessary as a direct consequence of interest rate benchmark reform; and
- the new basis for determining the lease payments is economically equivalent to the previous basis (i.e. the basis immediately preceding the modification).

If lease modifications are made in addition to those lease modifications required by interest rate benchmark reform, the Group applies the applicable requirements in HKFRS 16 (see the accounting policy above) to account for all lease modifications made at the same time, including those required by interest rate benchmark reform.

Notes to the Consolidated Financial Statements

For the year ended 31 December 2022

3. SUMMARY OF ACCOUNTING POLICIES *(Continued)*

Leases *(Continued)*

The Group as a lessee *(Continued)*

Covid-19-related rent concessions

In relation to rent concessions that occurred as a direct consequence of the Covid-19 pandemic, the Group has elected to apply the practical expedient not to assess whether the change is a lease modification if all of the following conditions are met:

- the change in lease payments results in revised consideration for the lease that is substantially the same as, or less than, the consideration for the lease immediately preceding the change;
- any reduction in lease payments affects only payments originally due on or before 30 June 2022; and
- there is no substantive change to other terms and conditions of the lease.

A lessee applying the practical expedient accounts for changes in lease payments resulting from rent concessions the same way it would account for the changes applying HKFRS 16 if the changes are not a lease modification. Forgiveness or waiver of lease payments are accounted for as variable lease payments. The related lease liabilities are adjusted to reflect the amounts forgiven or waived with a corresponding adjustment recognised in the profit or loss in the period in which the event occurs.

The Group as a lessor

Classification and measurement of leases

Leases for which the Group is a lessor are classified as finance or operating leases. Whenever the terms of the lease transfer substantially all the risks and rewards incidental to ownership of an underlying asset to the lessee, the contract is classified as a finance lease. All other leases are classified as operating leases.

Amounts due from lessees under finance leases are recognised as receivables at commencement date at amounts equal to net investments in the leases, measured using the interest rate implicit in the respective leases. Initial direct costs (other than those incurred by manufacturer or dealer lessors) are included in the initial measurement of the net investments in the leases. Initial direct costs for leases in which the Group is the manufacturer or dealer lessor are recognised in costs of sales at the commencement date of the finance leases. Interest income is allocated to accounting periods so as to reflect a constant periodic rate of return on the Group's net investment outstanding in respect of the leases.

Rental income from operating leases is recognised in profit or loss on a straight-line basis over the term of the relevant lease. Initial direct costs incurred in negotiating and arranging an operating lease are added to the carrying amount of the leased asset, and such costs are recognised as an expense on a straight-line basis over the lease term except for investment properties measured under fair value model. Variable lease payments for operating leases that depend on an index or a rate are estimated and included in the total lease payments to be recognised on a straight-line basis over the lease term. Variable lease payments that do not depend on an index or a rate are recognised as income when they arise. When a lease contract contains a specific clause that provides for rent reduction or suspension of rent in the event that the underlying assets (or any part thereof) are affected by adverse events beyond the control of the Group and the lessee so as to render the underlying assets unfit or not available for use, the relevant rent reduction or suspension of rent resulting from the specific clause is accounted for as part of the original lease and not as a lease modification. Such rent reduction or suspension of rent is recognised in profit or loss in the period in which the event or condition that triggers those payments to occur.

Notes to the Consolidated Financial Statements

For the year ended 31 December 2022

3. SUMMARY OF ACCOUNTING POLICIES *(Continued)*

Leases *(Continued)*

The Group as a lessor *(Continued)*

Allocation of consideration to components of a contract

When a contract includes both leases and non-lease components, the Group applies HKFRS 15 Revenue from Contracts with Customers to allocate consideration in a contract to lease and non-lease components. Non-lease components are separated from lease component on the basis of their relative stand-alone selling prices.

Refundable rental deposits

Refundable rental deposits received are accounted for under HKFRS 9 and initially measured at fair value. Adjustments to fair value at initial recognition are considered as additional lease payments from lessees.

Sublease

When the Group is an intermediate lessor, it accounts for the head lease and the sublease as two separate contracts. The sublease is classified as a finance or operating lease by reference to the right-of-use asset arising from the head lease, not with reference to the underlying asset.

Lease modification

Changes in considerations of lease contracts that were not part of the original terms and conditions are accounted for as lease modifications, including lease incentives provided through forgiveness or reduction of rentals.

The Group accounts for a modification to an operating lease as a new lease from the effective date of the modification, considering any prepaid or accrued lease payments relating to the original lease as part of the lease payments for the new lease.

Foreign currencies

In preparing the financial statements of each individual group entity, transactions in currencies other than the functional currency of that entity (foreign currencies) are recognised at the rates of exchanges prevailing on the dates of the transactions. At the end of the reporting period, monetary items denominated in foreign currencies are retranslated at the rates prevailing at that date. Non-monetary items carried at fair value that are denominated in foreign currencies are retranslated at the rates prevailing on the date when the fair value was determined. When a fair value gain or loss on a non-monetary item is recognised in profit or loss, any exchange component of that gain or loss is also recognised in profit or loss. When a fair value gain or loss on a non-monetary item is recognised in other comprehensive income, any exchange component of that gain or loss is also recognised in other comprehensive income. Non-monetary items that are measured in terms of historical cost in a foreign currency are not retranslated.

Exchange differences arising on the settlement of monetary items, and on the retranslation of monetary items, are recognised in profit or loss in the period in which they arise, except for exchange differences on monetary items receivable from or payable to a foreign operation for which settlement is neither planned nor likely to occur (therefore forming part of the net investment in the foreign operation), which are recognised initially in other comprehensive income and reclassified from equity to profit or loss on disposal or partial disposal of the Group's interests in associates.

Notes to the Consolidated Financial Statements

For the year ended 31 December 2022

3. SUMMARY OF ACCOUNTING POLICIES *(Continued)*

Foreign currencies *(Continued)*

For the purposes of presenting the consolidated financial statements, the assets and liabilities of the Group's operations are translated into the presentation currency of the Group (i.e. HK\$) using exchange rates prevailing at the end of each reporting period. Income and expenses items are translated at the average exchange rates for the period, unless exchange rates fluctuate significantly during that period, in which case the exchange rates at the date of transactions are used. Exchange differences arising, if any, are recognised in other comprehensive income and accumulated in equity under the heading of translation reserve (attributed to non-controlling interests as appropriate).

On the disposal of a foreign operation (that is, a disposal of the Group's entire interest in a foreign operation, or a disposal involving loss of control over a subsidiary that includes a foreign operation, or a partial disposal of an interest in a joint arrangement or an associate that includes a foreign operation of which the retained interest becomes a financial asset), all of the exchange differences accumulated in equity in respect of that operation attributable to the owners of the Company are reclassified to profit or loss.

In addition, in relation to a partial disposal of a subsidiary that does not result in the Group losing control over the subsidiary, the proportionate share of accumulated exchange differences are re-attributed to non-controlling interests and are not recognised in profit or loss. For all other partial disposals (i.e. partial disposals of associates or joint arrangements that do not result in the Group losing significant influence or joint control), the proportionate share of the accumulated exchange differences is reclassified to profit or loss.

Goodwill and fair value adjustments on identifiable assets acquired arising on an acquisition of a foreign operation are treated as assets and liabilities of that foreign operation and translated at the rate of exchange prevailing at the end of each reporting period. Exchange differences arising are recognised in other comprehensive income.

Borrowing costs

All other borrowing costs are recognised in profit or loss in the period in which they are incurred.

Government grants

Government grants are not recognised until there is reasonable assurance that the Group will comply with the conditions attaching to them and that the grants will be received.

Government grants are recognised in profit or loss on a systematic basis over the periods in which the Group recognises as expenses the related costs for which the grants are intended to compensate. Specifically, government grants whose primary condition is that the Group should purchase, construct or otherwise acquire non-current assets are recognised as deferred income/a deduction from the carrying amount of the relevant asset in the consolidated statement of financial position and transferred to profit or loss on a systematic and rational basis over the useful lives of the related assets.

Government grants related to income that are receivable as compensation for expenses or losses already incurred or for the purpose of giving immediate financial support to the Group with no future related costs are recognised in profit or loss in the period in which they become receivable. Such grants are presented under "other revenue and income".

The benefit of a government loan at a below-market rate of interest is treated as a government grant, measured as the difference between proceeds received and the fair value of the loan based on prevailing market interest rates.

Notes to the Consolidated Financial Statements

For the year ended 31 December 2022

3. SUMMARY OF ACCOUNTING POLICIES *(Continued)*

Taxation

Income tax expense represents the sum of the tax currently payable and deferred tax.

The tax currently payable is based on taxable profit for the year. Taxable profit differs from profit/(loss) before tax because of income or expense that are taxable or deductible in other years and items that are never taxable or deductible. The Group's liability for current tax is calculated using tax rates that have been enacted or substantively enacted by the end of the reporting period.

Deferred tax is recognised on temporary differences between the carrying amounts of assets and liabilities in the consolidated financial statements and the corresponding tax bases used in the computation of taxable profit. Deferred tax liabilities are generally recognised for all taxable temporary differences. Deferred tax assets are generally recognised for all deductible temporary differences to the extent that it is probable that taxable profits will be available against which those deductible temporary differences can be utilised. Such deferred tax assets and liabilities are not recognised if the temporary difference arises from the initial recognition (other than in a business combination) of assets and liabilities in a transaction that affects neither the taxable profit nor the accounting profit. In addition, deferred tax liabilities are not recognised if the temporary difference arises from the initial recognition of goodwill.

Deferred tax liabilities are recognised for taxable temporary differences associated with investments in subsidiaries and associates, and interests in joint ventures, except where the Group is able to control the reversal of the temporary difference and it is probable that the temporary difference will not reverse in the foreseeable future. Deferred tax assets arising from deductible temporary differences associated with such investments and interests are only recognised to the extent that it is probable that there will be sufficient taxable profits against which to utilise the benefits of the temporary differences and they are expected to reverse in the foreseeable future.

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

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

The measurement of deferred tax liabilities and assets reflects the tax consequences that would follow from the manner in which the Group expects, at the end of the reporting period, to recover or settle the carrying amount of its assets and liabilities.

For the purposes of measuring deferred tax for investment properties that are measured using the fair value model, the carrying amounts of such properties are presumed to be recovered entirely through sale, unless the presumption is rebutted. The presumption is rebutted when the investment property is depreciable and is held within a business model whose objective is to consume substantially all of the economic benefits embodied in the investment property over time, rather than through sale, except for freehold land, which is always presumed to be recovered entirely through sale.

Notes to the Consolidated Financial Statements

For the year ended 31 December 2022

3. SUMMARY OF ACCOUNTING POLICIES *(Continued)*

Taxation *(Continued)*

For leasing transactions in which the tax deductions are attributable to the lease liabilities, the Group applies HKAS 12 requirements to right-of-use assets and lease liabilities separately. Temporary differences on initial recognition of the relevant right-of-use assets and lease liabilities are not recognised due to application of the initial recognition exemption. Temporary differences arising from subsequent revision to the carrying amounts of right-of-use assets and lease liabilities, resulting from remeasurement of lease liabilities and lease modifications, that are not subject to initial recognition exemption are recognised on the date of remeasurement or modification.

Deferred tax assets and liabilities are offset when there is a legally enforceable right to set off current tax assets against current tax liabilities and when they relate to income taxes levied to the same taxable entity by the same taxation authority.

Current and deferred tax are recognised in profit or loss, except when they relate to items that are recognised in other comprehensive income or directly in equity, in which case, the current and deferred tax are also recognised in other comprehensive income or directly in equity respectively. Where current tax or deferred tax arises from the initial accounting for a business combination, the tax effect is included in the accounting for the business combination.

In assessing any uncertainty over income tax treatments, the Group considers whether it is probable that the relevant tax authority will accept the uncertain tax treatment used, or proposed to be used by individual group entities in their income tax filings. If it is probable, the current and deferred taxes are determined consistently with the tax treatment in the income tax filings. If it is not probable that the relevant taxation authority will accept an uncertain tax treatment, the effect of each uncertainty is reflected by using either the most likely amount or the expected value.

Property, plant and equipment

Property, plant and equipment are tangible assets that are held for use in the production or supply of goods or services, or for administrative purposes. Property, plant and equipment are stated in the consolidated statement of financial position at cost less subsequent accumulated depreciation and subsequent accumulated impairment losses, if any.

Freehold lands are not depreciated and are measured at cost less subsequent accumulated impairment losses.

Properties in the course of construction for production, supply or administrative purposes are carried at cost, less any recognised impairment loss. Costs include any costs directly attributable to bringing the asset to the location and condition necessary for it to be capable of operating in the manner intended by management, including costs of testing whether the related assets is functioning properly and, for qualifying assets, borrowing costs capitalised in accordance with the Group's accounting policy. Sale proceeds of items that are produced while bringing an item of property, plant and equipment to the location and condition necessary for it to be capable of operating in the manner intended by management (such as samples produced when testing whether the asset is functioning properly), and the related costs of producing those items are recognised in the profit or loss. The cost of those items are measured in accordance with the measurement requirements of HKAS 2. Depreciation of these assets, on the same basis as other property assets, commences when the assets are ready for their intended use.

Notes to the Consolidated Financial Statements

For the year ended 31 December 2022

3. SUMMARY OF ACCOUNTING POLICIES *(Continued)*

Ownership interests in leasehold land and building

When the Group makes payments for ownership interests of properties which includes both leasehold land and building elements, the entire consideration is allocated between the leasehold land and the building elements in proportion to the relative fair values at initial recognition. To the extent the allocation of the relevant payments can be made reliably, interest in leasehold land is presented as "right-of-use assets" in the consolidated statement of financial position except for those that are classified and accounted for as investment properties under the fair value model. When the consideration cannot be allocated reliably between non-lease building element and undivided interest in the underlying leasehold land, the entire properties are classified as property, plant and equipment.

Depreciation is recognised so as to write off the cost of assets other than freehold land and properties under construction less their residual values over their estimated useful lives, using the straight-line method. The estimated useful lives, residual values and depreciation method are reviewed at the end of each reporting period, with the effect of any changes in estimate accounted for on a prospective basis.

An item of property, plant and equipment is derecognised upon disposal or when no future economic benefits are expected to arise from the continued use of the asset. Any gain or loss arising on the disposal or retirement of an item of property, plant and equipment is determined as the difference between the sales proceeds and the carrying amount of the asset and is recognised in profit or loss.

Investment properties

Investment properties are properties held to earn rentals and/or for capital appreciation.

Investment properties also include leased properties which are being recognised as right-of-use assets and subleased by the Group under operating leases.

Investment properties are initially measured at cost, including any directly attributable expenditure. Subsequent to initial recognition, investment properties are measured at fair value, adjusted to exclude any prepaid or accrued operating lease income.

Gains or losses arising from changes in the fair value of investment properties are included in profit or loss for the period in which they arise.

Construction costs incurred for investment properties under construction are capitalised as part of the carrying amount of the investment properties under construction.

An investment property is derecognised upon disposal or when the investment property is permanently withdrawn from use and no future economic benefits are expected from its disposal. A leased property which is recognised as a right-of-use asset is derecognised if the Group as intermediate lessor classifies the sublease as a finance lease. Any gain or loss arising on derecognition of the property (calculated as the difference between the net disposal proceeds and the carrying amount of the asset) is included in profit or loss in the period in which the property is derecognised.

Notes to the Consolidated Financial Statements

For the year ended 31 December 2022

3. SUMMARY OF ACCOUNTING POLICIES *(Continued)*

Intangible assets

Intangible assets acquired separately

Intangible assets with finite useful lives that are acquired separately are carried at costs less accumulated amortisation and any accumulated impairment losses/revalued amounts, being their fair value at the date of the revaluation less subsequent accumulated amortisation and any accumulated impairment losses. Amortisation for intangible assets with finite useful lives is recognised on a straight-line basis over their estimated useful lives. The estimated useful life and amortisation method are reviewed at the end of each reporting period, with the effect of any changes in estimate being accounted for on a prospective basis. Intangible assets with indefinite useful lives that are acquired separately are carried at cost less any subsequent accumulated impairment losses.

Internally-generated intangible assets — research and development expenditure

Expenditure on research activities is recognised as an expense in the period in which it is incurred.

An internally-generated intangible asset arising from development activities (or from the development phase of an internal project) is recognised if, and only if, all of the following have been demonstrated:

- the technical feasibility of completing the intangible asset so that it will be available for use or sale;
- the intention to complete the intangible asset and use or sell it;
- the ability to use or sell the intangible asset;
- how the intangible asset will generate probable future economic benefits;
- the availability of adequate technical, financial and other resources to complete the development and to use or sell the intangible asset; and
- the ability to measure reliably the expenditure attributable to the intangible asset during its development.

The amount initially recognised for internally-generated intangible asset is the sum of the expenditure incurred from the date when the intangible asset first meets the recognition criteria listed above. Where no internally-generated intangible asset can be recognised, development expenditure is recognised in profit or loss in the period in which it is incurred.

Subsequent to initial recognition, internally-generated intangible assets are reported at cost less accumulated amortisation and accumulated impairment losses (if any), on the same basis as intangible assets that are acquired separately.

Notes to the Consolidated Financial Statements

For the year ended 31 December 2022

3. SUMMARY OF ACCOUNTING POLICIES *(Continued)*

Intangible assets acquired in a business combination

Intangible assets acquired in a business combination are recognised separately from goodwill and are initially recognised at their fair value at the acquisition date (which is regarded as their cost).

Subsequent to initial recognition, intangible assets acquired in a business combination with finite useful lives are reported at costs less accumulated amortisation and any accumulated impairment losses/revalued amounts, being their fair value at the date of the revaluation less subsequent accumulated amortisation and any accumulated impairment losses, on the same basis as intangible assets that are acquired separately. Intangible assets acquired in a business combination with indefinite useful lives are carried at cost less any subsequent accumulated impairment losses.

An intangible asset is derecognised on disposal, or when no future economic benefits are expected from use or disposal. Gains and losses arising from derecognition of an intangible asset, measured as the difference between the net disposal proceeds and the carrying amount of the asset, are recognised in profit or loss when the asset is derecognised.

Impairment on property, plant and equipment, right-of-use assets and intangible assets other than goodwill

At the end of the reporting period, the Group reviews the carrying amounts of its property, plant and equipment, right-of-use assets, intangible assets with finite useful lives to determine whether there is any indication that these assets have suffered an impairment loss. If any such indication exists, the recoverable amount of the relevant asset is estimated in order to determine the extent of the impairment loss (if any). Intangible assets with indefinite useful lives and intangible assets not yet available for use are tested for impairment at least annually, and whenever there is an indication that they may be impaired.

The recoverable amount of property, plant and equipment, right-of-use assets, and intangible assets are estimated individually. When it is not possible to estimate the recoverable amount individually, the Group estimates the recoverable amount of the cash-generating unit to which the asset belongs.

In testing a cash-generating unit for impairment, corporate assets are allocated to the relevant cash-generating unit when a reasonable and consistent basis of allocation can be established, or otherwise they are allocated to the smallest group of cash generating units for which a reasonable and consistent allocation basis can be established. The recoverable amount is determined for the cash-generating unit or group of cash-generating units to which the corporate asset belongs, and is compared with the carrying amount of the relevant cash-generating unit or group of cash-generating units.

Recoverable amount is the higher of fair value less costs of disposal and value in use. In assessing value in use, the estimated future cash flows are discounted to their present value using a pre-tax discount rate that reflects current market assessments of the time value of money and the risks specific to the asset (or a cash-generating unit) for which the estimates of future cash flows have not been adjusted.

Notes to the Consolidated Financial Statements

For the year ended 31 December 2022

3. SUMMARY OF ACCOUNTING POLICIES *(Continued)*

Impairment on property, plant and equipment, right-of-use assets and intangible assets other than goodwill *(Continued)*

If the recoverable amount of an asset (or a cash-generating unit) is estimated to be less than its carrying amount, the carrying amount of the asset (or a cash-generating unit) is reduced to its recoverable amount. For corporate assets or portion of corporate assets which cannot be allocated on a reasonable and consistent basis to a cash-generating unit, the Group compares the carrying amount of a group of cash-generating units, including the carrying amounts of the corporate assets or portion of corporate assets allocated to that group of cash-generating units, with the recoverable amount of the group of cash-generating units. In allocating the impairment loss, the impairment loss is allocated first to reduce the carrying amount of any goodwill (if applicable) and then to the other assets on a pro-rata basis based on the carrying amount of each asset in the unit or the group of cash-generating units. The carrying amount of an asset is not reduced below the highest of its fair value less costs of disposal (if measurable), its value in use (if determinable) and zero. The amount of the impairment loss that would otherwise have been allocated to the asset is allocated pro rata to the other assets of the unit or the group of cash-generating units. An impairment loss is recognised immediately in profit or loss, unless the relevant asset is carried at a revalued amount under another standard, in which case the impairment loss is treated as a revaluation decrease under that standard.

Where an impairment loss subsequently reverses, the carrying amount of the asset (or cash-generating unit or a group of cash-generating units) is increased to the revised estimate of its recoverable amount, but so that the increased carrying amount does not exceed the carrying amount that would have been determined had no impairment loss been recognised for the asset (or a cash-generating unit or a group of cash-generating units) in prior years. A reversal of an impairment loss is recognised immediately in profit or loss, unless the relevant asset is carried at a revalued amount under another standard, in which case the reversal of the impairment loss is treated as a revaluation increase under that standard.

Inventories

Inventories are stated at the lower of cost and net realisable value. Costs of inventories are determined on a weighted average method. Net realisable value represents the estimated selling price for inventories less all estimated costs of completion and costs necessary to make the sale. Costs necessary to make the sale include incremental costs directly attributable to the sale and non-incremental costs which the Group must incur to make the sale.

Cash and cash equivalents

Cash and cash equivalents presented on the consolidated statement of financial position include:

- (a) cash, which comprises of cash on hand and demand deposits, excluding bank balances that are subject to regulatory restrictions that result in such balances no longer meeting the definition of cash; and
- (b) cash equivalents, which comprises of short-term (generally with original maturity of three months or less), highly liquid investments that are readily convertible to a known amount of cash and which are subject to an insignificant risk of changes in value and restricted deposits arising from pre-sale of properties that are held for meeting short-term cash commitments. Cash equivalents are held for the purpose of meeting short-term cash commitments rather than for investment or other purposes.

Notes to the Consolidated Financial Statements

For the year ended 31 December 2022

3. SUMMARY OF ACCOUNTING POLICIES *(Continued)*

Cash and cash equivalents *(Continued)*

For the purposes of the consolidated statement of cash flows, cash and cash equivalents consist of cash and cash equivalents as defined above, net of outstanding bank overdrafts which are repayable on demand and form an integral part of the Group's cash management. Such overdrafts are presented as short-term borrowings in the consolidated statement of financial position.

Provisions

Provisions are recognised when the Group has a present obligation (legal or constructive) as a result of a past event, it is probable that the Group will be required to settle that obligation, and a reliable estimate can be made of the amount of the obligation.

The amount recognised as a provision is the best estimate of the consideration required to settle the present obligation at the end of the reporting period, taking into account the risks and uncertainties surrounding the obligation. When a provision is measured using the cash flows estimated to settle the present obligation, its carrying amount is the present value of those cash flows (where the effect of the time value of money is material).

When some or all of the economic benefits required to settle a provision are expected to be recovered from a third party, a receivable is recognised as an asset if it is virtually certain that reimbursement will be received and the amount of the receivable can be measured reliably.

Employee benefits

Retirement benefit costs

Payments to defined contribution retirement benefit plans are recognised as an expense when employees have rendered service entitling them to the contributions.

For defined benefit retirement benefit plans, the cost of providing benefits is determined using the projected unit credit method, with actuarial valuations being carried out at the end of each annual reporting period. In determining the present value of the Group's defined benefit obligations and the related current service cost and, where applicable, past service cost, the Group attributes benefit to periods of service under the plan's benefit formula. However, if an employee's service in later years will lead to a materially higher level of benefit than earlier years, the Group attributes the benefit on a straight-line basis from:

- (a) the date when service by the employee first leads to benefits under the plan (whether or not the benefits are conditional on further service) until
- (b) the date when further service by the employee will lead to no material amount of further benefits under the plan, other than from further salary increases.

Notes to the Consolidated Financial Statements

For the year ended 31 December 2022

3. SUMMARY OF ACCOUNTING POLICIES *(Continued)*

Employee benefits *(Continued)*

Retirement benefit costs *(Continued)*

Remeasurement, comprising actuarial gains and losses, the effect of the changes to the asset ceiling (if applicable) and the return on plan assets (excluding interest), is reflected immediately in the consolidated statement of financial position with a charge or credit recognised in other comprehensive income in the period in which they occur. Remeasurement recognised in other comprehensive income is reflected immediately in retained earnings and will not be reclassified to profit or loss.

Past service cost is recognised in profit or loss in the period of a plan amendment or curtailment and a gain or loss on settlement is recognised when settlement occurs. When determining past service cost, or a gain or loss on settlement, an entity shall remeasure the net defined benefit liability or asset using the current fair value of plan assets and current actuarial assumptions, reflecting the benefits offered under the plan and the plan assets before and after the plan amendment, curtailment or settlement, without considering the effect of asset ceiling (i.e. the present value of any economic benefits available in the form of refunds from the plan or reductions in future contributions to the plan).

Net interest is calculated by applying the discount rate at the beginning of the period to the net defined benefit liability or asset. However, if the Group remeasures the net defined benefit liability or asset before plan amendment, curtailment or settlement, the Group determines net interest for the remainder of the annual reporting period after the plan amendment, curtailment or settlement using the benefits offered under the plan and the plan assets after the plan amendment, curtailment or settlement and the discount rate used to remeasure such net defined benefit liability or asset, taking into account any changes in the net defined benefit liability or asset during the period resulting from contributions or benefit payments.

Defined benefit costs are categorised as follows:

- service cost (including current service cost, past service cost, as well as gains and losses on curtailments and settlements);
- net interest expense or income; and
- remeasurement.

Notes to the Consolidated Financial Statements

For the year ended 31 December 2022

3. SUMMARY OF ACCOUNTING POLICIES *(Continued)*

Employee benefits *(Continued)*

Retirement benefit costs *(Continued)*

The retirement benefit obligation recognised in the consolidated statement of financial position represents the actual deficit or surplus in the Group's defined benefit plans. Any surplus resulting from this calculation is limited to the present value of any economic benefits available in the form of refunds from the plans or reductions in future contributions to the plans.

Discretionary contributions made by employees or third parties reduce service cost upon payment of these contributions to the plan.

When the formal terms of the plans specify that there will be contributions from employees or third parties, the accounting depends on whether the contributions are linked to service, as follows:

- If the contributions are not linked to services (for example contributions are required to reduce a deficit arising from losses on plan assets or from actuarial losses), they are reflected in the remeasurement of the net defined benefit liability or asset.
- If contributions are linked to services, they reduce service costs. For the amount of contribution that is dependent on the number of years of service, the Group reduces service cost by attributing the contributions to periods of service using the attribution method required by HKAS 19 paragraph 70 for the gross benefits. For the amount of contribution that is independent of the number of years of service, the Group reduces service cost in the period in which the related service is rendered/reduces service cost by attributing contributions to the employees' periods of service in accordance with HKAS 19 paragraph 70.

Short-term and other long-term employee benefits

Short-term employee benefits are recognised at the undiscounted amount of the benefits expected to be paid as and when employees rendered the services. All short-term employee benefits are recognised as an expense unless another HKFRS requires or permits the inclusion of the benefit in the cost of an asset.

A liability is recognised for benefits accruing to employees (such as wages and salaries, annual leave and sick leave) after deducting any amount already paid.

Liabilities recognised in respect of other long-term employee benefits are measured at the present value of the estimated future cash outflows expected to be made by the Group in respect of services provided by employees up to the reporting date. Any changes in the liabilities' carrying amounts resulting from service cost, interest and remeasurements are recognised in profit or loss except to the extent that another HKFRS requires or permits their inclusion in the cost of an asset.

Notes to the Consolidated Financial Statements

For the year ended 31 December 2022

3. SUMMARY OF ACCOUNTING POLICIES *(Continued)*

Employee benefits *(Continued)*

Termination benefits

A liability for a termination benefit is recognised at the earlier of when the Group entity can no longer withdraw the offer of the termination benefit and when it recognises any related restructuring costs.

Financial instruments

Financial assets and financial liabilities are recognised when a group entity becomes a party to the contractual provisions of the instrument. All regular way purchases or sales of financial assets are recognised and derecognised on a trade date basis. Regular way purchases or sales are purchases or sales of financial assets that require delivery of assets within the time frame established by regulation or convention in the market place.

Financial assets and financial liabilities are initially measured at fair value except for trade receivables arising from contracts with customers which are initially measured in accordance with HKFRS 15. Transaction costs that are directly attributable to the acquisition or issue of financial assets and financial liabilities (other than financial assets or financial liabilities at fair value through profit or loss ("FVTPL")) are added to or deducted from the fair value of the financial assets or financial liabilities, as appropriate, on initial recognition. Transaction costs directly attributable to the acquisition of financial assets or financial liabilities at FVTPL are recognised immediately in profit or loss.

The effective interest method is a method of calculating the amortised cost of a financial asset or financial liability and of allocating interest income and interest expense over the relevant period. The effective interest rate is the rate that exactly discounts estimated future cash receipts and payments (including all fees and points paid or received that form an integral part of the effective interest rate, transaction costs and other premiums or discounts) through the expected life of the financial asset or financial liability, or, where appropriate, a shorter period, to the net carrying amount on initial recognition.

Interest/dividend income (others to specify) which are derived from the Group's ordinary course of business are presented as revenue.

Financial assets

Classification and subsequent measurement of financial assets

Financial assets that meet the following conditions are subsequently measured at amortised cost:

- the financial asset is held within a business model whose objective is to collect contractual cash flows; and
- the contractual terms give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding.

Notes to the Consolidated Financial Statements

For the year ended 31 December 2022

3. SUMMARY OF ACCOUNTING POLICIES *(Continued)*

Financial instruments *(Continued)*

Financial assets *(Continued)*

Classification and subsequent measurement of financial assets *(Continued)*

Financial assets that meet the following conditions are subsequently measured at fair value through other comprehensive income ("FVTOCI"):

- the financial asset is held within a business model whose objective is achieved by both selling and collecting contractual cash flows; and
- the contractual terms give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding.

All other financial assets are subsequently measured at FVTPL, except that at initial recognition of a financial asset the Group may irrevocably elect to present subsequent changes in fair value of an equity investment in other comprehensive income if that equity investment is neither held for trading nor contingent consideration recognised by an acquirer in a business combination to which HKFRS 3 Business Combinations applies.

A financial asset is classified as held for trading if:

- it has been acquired principally for the purpose of selling in the near term; or
- on initial recognition it is a part of a portfolio of identified financial instruments that the Group manages together and has a recent actual pattern of short-term profit taking; or
- it is a derivative that is not designated and effective as a hedging instrument.

In addition, the Group may irrevocably designate a financial asset that are required to be measured at the amortised cost or FVTOCI as measured at FVTPL if doing so eliminates or significantly reduces an accounting mismatch.

Amortised cost and interest income

Interest income is recognised using the effective interest method for financial assets measured subsequently at amortised cost and debt instruments/receivables subsequently measured at FVTOCI. Interest income is calculated by applying the effective interest rate to the gross carrying amount of a financial asset, except for financial assets that have subsequently become credit-impaired (see below). For financial assets that have subsequently become credit-impaired, interest income is recognised by applying the effective interest rate to the amortised cost of the financial asset from the next reporting period. If the credit risk on the credit-impaired financial instrument improves so that the financial asset is no longer credit-impaired, interest income is recognised by applying the effective interest rate to the gross carrying amount of the financial asset from the beginning of the reporting period following the determination that the asset is no longer credit-impaired.

Notes to the Consolidated Financial Statements

For the year ended 31 December 2022

3. SUMMARY OF ACCOUNTING POLICIES *(Continued)*

Financial instruments *(Continued)*

Financial assets *(Continued)*

Classification and subsequent measurement of financial assets *(Continued)*

Equity instruments designated as at FVTOCI

Investments in equity instruments at FVTOCI are subsequently measured at fair value with gains and losses arising from changes in fair value recognised in other comprehensive income and accumulated in the FVTOCI reserve; and are not subject to impairment assessment. The cumulative gain or loss will not be reclassified to profit or loss on disposal of the equity investments, and will be transferred to retained profits.

Dividends from these investments in equity instruments are recognised in profit or loss when the Group's right to receive the dividends is established, unless the dividends clearly represent a recovery of part of the cost of the investment. Dividends are included in the "other revenue and income" line item in profit or loss.

Financial assets at FVTPL

Financial assets that do not meet the criteria for being measured at amortised cost or FVTOCI or designated as FVTOCI are measured at FVTPL.

Financial assets at FVTPL are measured at fair value at the end of each reporting period, with any fair value gains or losses recognised in profit or loss. The net gain or loss recognised in profit or loss includes any dividend or interest earned on the financial asset and is included in the "fair value change on financial assets at fair value through profit or loss" line item.

Impairment of financial assets

The Group performs impairment assessment under expected credit loss ("ECL") model on financial assets (including trade and other receivables, loan receivables, pledge bank deposits, amount due from related companies and cash and cash equivalents), which are subject to impairment assessment under HKFRS 9. The amount of ECL is updated at each reporting date to reflect changes in credit risk since initial recognition.

Lifetime ECL represents the ECL that will result from all possible default events over the expected life of the relevant instrument. In contrast, 12-month ECL ("12m ECL") represents the portion of lifetime ECL that is expected to result from default events that are possible within 12 months after the reporting date. Assessments are done based on the Group's historical credit loss experience, adjusted for factors that are specific to the debtors, general economic conditions and an assessment of both the current conditions at the reporting date as well as the forecast of future conditions.

For all other instruments, the Group measures the loss allowance equal to 12m ECL, unless there has been a significant increase in credit risk since initial recognition, in which case the Group recognises lifetime ECL. The assessment of whether lifetime ECL should be recognised is based on significant increases in the likelihood or risk of a default occurring since initial recognition.

Notes to the Consolidated Financial Statements

For the year ended 31 December 2022

3. SUMMARY OF ACCOUNTING POLICIES *(Continued)*

Financial instruments *(Continued)*

Financial assets *(Continued)*

Impairment of financial assets *(Continued)*

Significant increase in credit risk

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

In particular, the following information is taken into account when assessing whether credit risk has increased significantly:

- an actual or expected significant deterioration in the financial instrument's external (if available) or internal credit rating;
- significant deterioration in external market indicators of credit risk, e.g. a significant increase in the credit spread, the credit default swap prices for the debtor;
- existing or forecast adverse changes in business, financial or economic conditions that are expected to cause a significant decrease in the debtor's ability to meet its debt obligations;
- an actual or expected significant deterioration in the operating results of the debtor;
- an actual or expected significant adverse change in the regulatory, economic, or technological environment of the debtor that results in a significant decrease in the debtor's ability to meet its debt obligations.

Irrespective of the outcome of the above assessment, the Group presumes that the credit risk has increased significantly since initial recognition when contractual payments are more than 30 days past due, unless the Group has reasonable and supportable information that demonstrates otherwise.

The Group regularly monitors the effectiveness of the criteria used to identify whether there has been a significant increase in credit risk and revises them as appropriate to ensure that the criteria are capable of identifying significant increase in credit risk before the amount becomes past due.

Definition of default

For internal credit risk management, the Group considers an event of default occurs when information developed internally or obtained from external sources indicates that the debtor is unlikely to pay its creditors, including the Group, in full (without taking into account any collaterals held by the Group).

Irrespective of the above, the Group considers that default has occurred when a financial asset is more than 90 days past due unless the Group has reasonable and supportable information to demonstrate that a more lagging default criterion is more appropriate.

Notes to the Consolidated Financial Statements

For the year ended 31 December 2022

3. SUMMARY OF ACCOUNTING POLICIES *(Continued)*

Financial instruments *(Continued)*

Financial assets *(Continued)*

Impairment of financial assets *(Continued)*

Credit-impaired financial assets

A financial asset is credit-impaired when one or more events that have a detrimental impact on the estimated future cash flows of that financial asset have occurred. Evidence that a financial asset is credit-impaired includes observable data about the following events:

- (a) significant financial difficulty of the issuer or the borrower;
- (b) a breach of contract, such as a default or past due event;
- (c) the lender(s) of the borrower, for economic or contractual reasons relating to the borrower's financial difficulty, having granted to the borrower a concession(s) that the lender(s) would not otherwise consider;
- (d) it is becoming probable that the borrower will enter bankruptcy or other financial reorganisation;
- (e) the disappearance of an active market for that financial asset because of financial difficulties; or
- (f) the purchase or origination of a financial asset at a deep discount that reflects the incurred credit losses.

Write-off policy

The Group writes off a financial asset when there is information indicating that the counterparty is in severe financial difficulty and there is no realistic prospect of recovery, for example, when the counterparty has been placed under liquidation or has entered into bankruptcy proceedings, or in the case of trade receivables, when the amounts are over 1 years past due, whichever occurs sooner. Financial assets written off may still be subject to enforcement activities under the Group's recovery procedures, taking into account legal advice where appropriate. A write-off constitutes a derecognition event. Any subsequent recoveries are recognised in profit or loss.

Measurement and recognition of ECL

The measurement of ECL is a function of the probability of default, loss given default (i.e. the magnitude of the loss if there is a default) and the exposure at default. The assessment of the probability of default and loss given default is based on historical data and forward-looking information. Estimation of ECL reflects an unbiased and probability-weighted amount that is determined with the respective risks of default occurring as the weights.

Generally, the ECL is the difference between all contractual cash flows that are due to the Group in accordance with the contract and the cash flows that the Group expects to receive, discounted at the effective interest rate determined at initial recognition.

Notes to the Consolidated Financial Statements

For the year ended 31 December 2022

3. SUMMARY OF ACCOUNTING POLICIES *(Continued)*

Financial instruments *(Continued)*

Financial assets *(Continued)*

Impairment of financial assets *(Continued)*

Measurement and recognition of ECL *(Continued)*

For collective assessment, the Group takes into consideration the following characteristics when formulating the grouping:

- Past-due status;
- Nature, size and industry of debtors; and
- External credit ratings where available.

The grouping is regularly reviewed by management to ensure the constituents of each group continue to share similar credit risk characteristics.

Interest income is calculated based on the gross carrying amount of the financial asset unless the financial asset is credit-impaired, in which case interest income is calculated based on amortised cost of the financial asset.

The Group recognises an impairment gain or loss in profit or loss for all financial instruments by adjusting their carrying amount, with the exception of trade and other receivables, loan receivables and amount due from related companies where the corresponding adjustment is recognised through a loss allowance account.

Financial liabilities and equity

Classification as debt or equity

Debt and equity instruments are classified as either financial liabilities or as equity in accordance with the substance of the contractual arrangements and the definitions of a financial liability and an equity instrument.

Equity instruments

An equity instrument is any contract that evidences a residual interest in the assets of an entity after deducting all of its liabilities. Equity instruments issued by the Company are recognised at the proceeds received, net of direct issue costs.

Perpetual instruments, which include no contractual obligation for the Group to deliver cash or other financial assets or the Group has the sole discretion to defer payment of distribution and redemption of principal amount indefinitely are classified as equity instruments.

Repurchase of the Company's own equity instruments is recognised and deducted directly in equity. No gain or loss is recognised in profit or loss on the purchase, sale, issue or cancellation of the Company's own equity instruments.

Notes to the Consolidated Financial Statements

For the year ended 31 December 2022

3. SUMMARY OF ACCOUNTING POLICIES *(Continued)*

Financial instruments *(Continued)*

Financial liabilities and equity *(Continued)*

Financial liabilities

All financial liabilities are subsequently measured at amortised cost using the effective interest method or at FVTPL.

Financial liabilities at amortised cost

Financial liabilities (including bank and other borrowings, lease liabilities, trade payables, accruals and other payables, amounts due to related companies and amount due to the immediate holding company) are subsequently measured at amortised cost, using the effective interest method.

Derecognition of financial assets and liabilities

The Group derecognises a financial asset only when the contractual rights to the cash flows from the asset expire, or when it transfers the financial asset and substantially all the risks and rewards of ownership of the asset to another entity. If the Group neither transfers nor retains substantially all the risks and rewards of ownership and continues to control the transferred asset, the Group recognises its retained interest in the asset and an associated liability for amounts it may have to pay. If the Group retains substantially all the risks and rewards of ownership of a transferred financial asset, the Group continues to recognise the financial asset and also recognises a collateralised borrowing for the proceeds received.

On derecognition of a financial asset measured at amortised cost, the difference between the asset's carrying amount and the sum of the consideration received and receivable is recognised in profit or loss.

On derecognition of an investment in equity instrument which the Group has elected on initial recognition to measure at FVTOCI, the cumulative gain or loss previously accumulated in the FVTOCI reserve is not reclassified to profit or loss, but is transferred to retained earnings.

The Group derecognises financial liabilities when, and only when, the Group's obligations are discharged, cancelled or have expired. The difference between the carrying amount of the financial liability derecognised and the consideration paid and payable is recognised in the profit or loss.

Derivative financial instruments

Derivatives are initially recognised at fair value at the date when derivative contracts are entered into and are subsequently remeasured to their fair value at the end of the reporting period. The resulting gain or loss is recognised in profit or loss.

Notes to the Consolidated Financial Statements

For the year ended 31 December 2022

3. SUMMARY OF ACCOUNTING POLICIES *(Continued)*

Related parties

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

- (i) A person, or a close member of that person's family, is related to the Group if that person:
 - (a) has control or joint control over the Group;
 - (b) has significant influence over the Group; or
 - (c) is a member of the key management personnel of the Group or of a parent of the Group.
- (ii) An entity is related to the Group if any of the following conditions applies:
 - (a) the entity and the Group are members of the same group (which means that each parent, subsidiary and fellow subsidiary is related to the others);
 - (b) one entity is an associate or joint venture of the other entity (or an associate or joint venture of a member of the group of which the other entity is a member);
 - (c) both entities are joint ventures of the same third party;
 - (d) one entity is a joint venture of a third entity and the other entity is an associate of the third entity;
 - (e) the entity is a post-employment benefit plan for the benefit of employees of either the Group or an entity related to the Group;
 - (f) the entity is controlled or jointly controlled by a person identified in (i);
 - (g) A person identified in (i) (a) 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
 - (h) 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 Group's parent.

Close family members of an individual are those family members who may be expected to influence, or be influenced by, that person in their dealing with the and include:

- (a) that person's children and spouse or domestic partner;
- (b) children of that person's spouse or domestic partner; and
- (c) dependants of the person or that person's spouse or domestic partner.

A transaction is considered to be a related party transaction when there is a transfer of resources or obligations between related parties.

Notes to the Consolidated Financial Statements

For the year ended 31 December 2022

3. SUMMARY OF ACCOUNTING POLICIES *(Continued)*

Segment reporting

Operating segments and the amounts of each segment item reported in the consolidated financial statements are identified from the financial information provided regularly to the Group's top management for the purposes of allocating resources to and assessing the performance of the Group's various lines of business.

Individually material operating segments are not aggregated for financial reporting purposes unless the segments have similar economic characteristics and are similar in respect of the nature of business activities.

Segment revenue, expenses, results and assets include items directly attributable to a segment as well as those that can be allocated on a reasonable basis to that segment, but exclude exceptional items. Segment capital expenditure is the total cost incurred during the year to acquire segment assets (both tangible and intangible) that are expected to be used for more than one year. Corporate portions of expenses and assets mainly comprise corporate administrative and financing expenses and corporate financial assets respectively.

Share-based payments

Equity-settled share-based payment transactions

Shares/Share options granted to employees

Equity-settled share-based payments to employees and others providing similar services are measured at the fair value of the equity instruments at the grant date.

The fair value of the equity-settled share-based payments determined at the grant date without taking into consideration all non-market vesting conditions is expensed on a straight-line basis over the vesting period, based on the Group's estimate of equity instruments that will eventually vest, with a corresponding increase in equity (share-based payments reserve). At the end of each reporting period, the Group revises its estimate of the number of equity instruments expected to vest based on assessment of all relevant non-market vesting conditions. The impact of the revision of the original estimates, if any, is recognised in profit or loss such that the cumulative expense reflects the revised estimate, with a corresponding adjustment to the share-based payments reserve.

Cash-settled share-based payment transactions

For cash-settled share-based payments, a liability is recognised for the goods or services acquired, measured initially at the fair value of the liability. The fair value of the cash-settled share-based payments is determined without taking into consideration all non-market vesting conditions.

At the end of each reporting period until the liability is settled, and at the date of settlement, the liability is remeasured to fair value. For cash-settled share-based payments that are already vested, any changes in fair value are recognised in profit or loss for the year. For cash-settled share-based payments which are still subject to non-market vesting conditions, the effects of vesting and non-vesting conditions are accounted on the same basis as equity-settled share-based payments.

Notes to the Consolidated Financial Statements

For the year ended 31 December 2022

4. CRITICAL ACCOUNTING JUDGEMENT AND KEY SOURCES OF ESTIMATION UNCERTAINTY

In the application of the Group's accounting policies, which are described in note 3, the directors of the Company are required to make judgements, estimates and assumptions about the carrying amounts of assets and liabilities that are not readily apparent from other sources. The estimates and underlying assumptions are based on historical experience and other factors that are considered to be relevant. Actual results may differ from these estimates.

The estimates and underlying assumptions are reviewed on an ongoing basis. Revisions to accounting estimates are recognised in the period in which the estimate is revised if the revision affects only that period, or in the period of the revision and future periods if the revision affects both current and future periods.

Critical judgements in applying accounting policies

The following are the critical judgements, apart from those involving estimations (see below), that management has made in the process of applying the Group's accounting policies and that have the most significant effect on the amounts recognised in the consolidated financial statement.

Valuation of inventories

Valuation of inventories is stated at the lower of cost and net realisable value at the end of the reporting period. Net realisable value is determined on the basis of the estimated selling price less the estimated costs necessary to make the sale. The directors estimate the net realisable value for raw materials and finished goods based primarily on the latest invoice prices and current market conditions. In addition, the directors perform an inventory review on a product by product basis at the end of each reporting period and assess the need for write down of inventories.

Significant influence over individual company

Note 20 describes that Grand Pharma Sphere Pte Ltd. is an associate of the Group although the Group has 57.98% ownership interest in Grand Pharma Sphere Pte Ltd as at 31 December 2022. At the beginning of the year, the Group had 56.84% interest in Grand Pharma Sphere Pte Ltd and the remaining 43.16% of shareholdings were owned by CDH Genetech that is a related party of the Group. During the year ended 31 December 2022, additional effective interest of 1.14% was gained by the Group. Details of Grand Pharma Sphere Pte Ltd. are set out in note 20.

Note 20 describes that Shanghai Xudong Haipu Pharmaceutical Company Limited is an associate of the Group although the Group has 55% ownership interest in Shanghai Xudong Haipu Pharmaceutical Company Limited. The Group has a 55% ownership in Shanghai Xudong Haipu Pharmaceutical Company Limited since September 2018; another 45% of shareholdings are owned by another shareholder that are unrelated to the Group. Details of Shanghai Xudong Haipu Pharmaceutical Company Limited are set out in note 20.

The directors of the Company assessed whether the Group has control over Grand Pharma Sphere Pte Ltd. and Shanghai Xudong Haipu Pharmaceutical Company Limited (the "Associates") based on whether the Group controls these Associates when it is exposed, or has rights, to variable returns from its involvement with the Associates and has the ability to affect those returns through its power over the Associates. As such, the classification of the entity as a subsidiary, a joint venture, a joint operation, an associate or a cost investment might require the application of judgement through the analysis of various indicators, such as the percentage of ownership interest held in the entity, the representation on the entity's board of directors and various other factors including, if relevant, the Group's representation on the chief decision-making authorities of an entity, such as board of directors' meetings and shareholders' meetings, as well as other facts and circumstances. After assessment, the directors of the Company concluded that the Group does not have sufficiently dominant voting interest to direct the relevant activities of Associates and therefore the Group does not have control over Associates.

Notes to the Consolidated Financial Statements

For the year ended 31 December 2022

4. CRITICAL ACCOUNTING JUDGEMENT AND KEY SOURCES OF ESTIMATION UNCERTAINTY

(Continued)

Key sources of estimation uncertainty

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

Impairment of goodwill

Determining whether goodwill is impaired requires an estimation of the value in use of the cash-generating units to which goodwill has been allocated. The value in use calculation requires the Group to estimate the future cash flows expected to be arisen from the cash-generating unit and a suitable discount rate in order to calculate the present value.

The carrying amount of goodwill as at 31 December 2022 was approximately HK\$644,047,000 (2021: HK\$596,746,000). An impairment loss of approximately HK\$36,442,000 (2021: Nil) was recognised for the year. Details of the impairment assessment are disclosed in note 21.

Impairment of intangible assets

The Group performs annual tests on whether there is impairment of intangible assets in accordance with the accounting policy. The recoverable amounts are determined based on value in use calculations. These calculations require the use of estimates and assumptions made by management on the future operation of the business, post-tax discount rates, and other assumptions underlying the calculation.

The carrying amount of intangible assets as at 31 December 2022 was approximately HK\$1,397,992,000 (2021: HK\$1,009,764,000). Detailed information is disclosed in note 23.

Provision of ECL for trade and other receivables, loan receivables and amounts due from related companies

The Group uses three-stage model to calculate ECL for the trade and other receivables, loan receivables and amounts due from related companies. The provision rates are based on internal credit ratings as groupings of various debtors that have similar loss patterns. The three-stage model is based on the Group's historical default rates taking into consideration forward-looking information that is reasonable, supportable and available without undue costs or effort. At every reporting date, the historical observed default rates are reassessed and changes in the forward-looking information are considered. In addition, trade and other receivables, loan receivables and amounts due from related companies with significant balances and credit impaired are assessed for ECL individually.

The provision of ECL is sensitive to changes in estimates. The information about the ECL and the Group's trade and other receivables, loan receivables and amounts due from related companies are disclosed in notes 5(b)(iv), 19, 28 and 34.

Notes to the Consolidated Financial Statements

For the year ended 31 December 2022

4. CRITICAL ACCOUNTING JUDGEMENT AND KEY SOURCES OF ESTIMATION UNCERTAINTY

(Continued)

Key sources of estimation uncertainty *(Continued)*

Income tax and deferred tax

The Group is subject to income taxes in several jurisdictions. There are certain transactions and calculations for which the ultimate tax determination may be uncertain. The Group recognises liabilities for anticipated tax issues based on estimates of whether additional taxes will be due. Where the final tax outcome of these matters is different from the amounts that were initially recorded, such differences will impact the current and deferred tax provisions in the period in which such determination is made.

Estimated useful lives of property, plant and equipment, right-of-use assets and intangible assets

The Group's management determines the estimated useful lives and related depreciation/amortisation charges for its property, plant and equipment, right-of-use assets and intangible assets. This estimate is based on the historical experience of the actual useful lives of property, plant and equipment, right-of-use assets and intangible assets of similar nature and functions. It could change significantly as a result of technical innovations and competitor actions in response to market conditions. Management will increase the depreciation/amortisation charge where useful lives are less than previously estimated lives, or it will write-off or write-down technically obsolete or non-strategic assets that have been abandoned or sold.

The patents, trademarks and capitalised development costs are considered by the management of the Group as having an indefinite useful life because it is expected to contribute to net cash inflows indefinitely.

The intangible asset will not be amortised until its useful life is determined to be finite. Instead it will be tested for impairment annually and whenever there is an indication that it may be impaired.

During the year ended 31 December 2022, the Group did not change the estimated useful lives of property, plant and equipment, right-of-use assets and intangible assets.

Impairment test for interests in associates

The Group completed its annual impairment test for interests in associates by comparing the recoverable amount of interests in associates to its carrying amount as at 31 December 2022. The Group has engaged the independent external valuer to carry out a valuation of the interests in associates as at 31 December 2022 based on the value in use calculations. The valuations use cash flow projections based on the financial estimates covering a five-year period, and post-tax discount rates ranged from 15.1% to 33.3%. The cash flows beyond the five-year period and ten years period are extrapolated using a steady 2.0% to 3.0% growth rate for the pharmaceutical industries in which are operated by associates.

Fair value measurement of equity instruments at FVTOCI

As at 31 December 2022, the Group held equity instruments of FVTOCI with carrying amounts of approximately HK\$567,320,000 (2021: HK\$145,685,000). A certain of these equity instruments carrying amounting to HK\$542,477,000 (2021: HK\$145,685,000) do not have a quoted market price in an active market are measured at fair value with fair value being determined based on significant unobservable inputs using valuation techniques. Judgement and estimation are required in establishing the relevant valuation techniques and the relevant inputs thereof. Changes in assumptions relating to these factors could result in material adjustments to the fair value of these instruments. See note 5(b)(vi) for further disclosures.

Notes to the Consolidated Financial Statements

For the year ended 31 December 2022

5. FINANCIAL INSTRUMENTS

(a) Categories of financial instruments

	2022 HK\$'000	2021 HK\$'000
Financial assets		
Equity Instruments at FVTOCI	567,320	145,685
Financial assets at FVTPL	1,038,582	1,112,968
Financial asset at amortised cost (including cash and cash equivalents)		
— Trade and other receivables	2,104,469	1,959,398
— Loan receivables	–	113,190
— Amounts due from related companies	33,747	13,320
— Pledged bank deposits	1,357	7,645
— Cash and cash equivalents	1,444,014	1,752,860
	5,189,489	5,105,066
Derivative financial instrument at fair value	31,370	–
	5,220,859	5,105,066
Financial liabilities		
At amortised costs		
— Trade and other payables	2,389,926	2,678,013
— Bank and other borrowings	4,405,414	3,626,541
— Lease liabilities	69,868	19,034
— Amounts due to related companies	22,670	4,831
— Amount due to the immediate holding company	2,331	2,331
	6,890,209	6,330,750
Derivative financial instrument at fair value	–	8,350
	6,890,209	6,339,100

(b) Financial risk management objectives and policies

The Group's major financial instruments include equity instruments at FVTOCI, financial asset at FVTPL, trade and other receivables, loan receivables, amounts due from related companies, pledged bank deposits, cash and cash equivalents, trade and other payables, bank and other borrowings, lease liabilities, amounts due to related companies, amount due to the immediate holding company and derivative financial instrument at fair value. Details of these financial instruments are disclosed in respective notes. The risks associated with these financial instruments and the policies on how to mitigate these risks are set out below. The management manages and monitors these exposures to ensure appropriate measures are implemented on a timely and effective manner.

Notes to the Consolidated Financial Statements

For the year ended 31 December 2022

5. FINANCIAL INSTRUMENTS *(Continued)*

(b) Financial risk management objectives and policies *(Continued)*

i. Currency risk

The Group's presentation currency is HK\$, however, the Group major subsidiaries' functional currency are RMB in which most of the transactions are denominated. The functional currency is also used to settle expenses for the PRC operations. Certain trade and other receivables, cash and cash equivalents, trade and other payables, bank and other borrowings are denominated in foreign currencies of United State dollars ("USD"). Such USD denominated financial assets and liabilities are exposed to fluctuations in the value of RMB against USD.

The Group currently does not have any USD hedging policy but the management monitors USD exchange exposure and will consider hedging significant USD exposure should the need arise.

Sensitivity analysis

The following table details the Group's sensitivity to a reasonably possible change of 10% (2021: 10%) in exchange rate of USD against RMB while all other variables are held constant. 10% (2021: 10%) is the sensitivity rate used when reporting foreign currency risk internally to key management personnel and represents management's assessment of the reasonably possible change in foreign exchange rates. The sensitivity analysis includes only outstanding foreign currency denominated monetary items and adjusts their translation at the end of each reporting period for a 10% (2021: 10%) change in foreign currency rates.

	2022 HK\$'000	2021 HK\$'000
Increase/(decrease) in profit for the year		
— if USD weakens against of RMB	(17,511)	(15,960)
— if USD strengthens against of RMB	17,511	15,960

A change of 10% (2021: 10%) in exchange rate of USD against RMB does not affect other components of equity except the translation reserve.

The carrying amounts of the foreign currency denominated monetary assets and monetary liabilities at the reporting date are as follows:

	2022 HK\$'000	2021 HK\$'000
USD		
— Trade and other receivables	141,843	153,581
— Loan receivables	—	113,190
— Cash and cash equivalents	121,402	111,744
— Trade and other payables	(8,729)	(9,452)

Notes to the Consolidated Financial Statements

For the year ended 31 December 2022

5. FINANCIAL INSTRUMENTS *(Continued)*

(b) Financial risk management objectives and policies *(Continued)*

ii. Interest rate risk

The Group has variable-rate interest-bearing assets and liabilities including pledged bank deposits, bank balances and bank and other borrowings and is therefore exposed to cash flow interest rate risk. In addition, the Group is exposed to fair value interest rate risk in relation to fixed rate borrowing and lease liabilities. Details of these financial instruments are disclosed in respective notes. The Group currently does not have interest rate hedging policy. However, the management of the Group monitors interest rate exposure and will consider hedging significant interest rate exposure should the need arise. The Group's interest rate risk is mainly concentrated on the fluctuation of variable-rates borrowings and People's Bank of China Loan Prime Rate borrowings as detailed in note 32.

Sensitivity analysis

The sensitivity analysis below is prepared assuming the financial instruments outstanding at the end of the reporting period were outstanding for the whole year. A 100 basis point (2021: 100 basis points) increase or decrease is used when reporting interest rate risk internally to key management personnel and represents management's assessment of the reasonably possible change in interest rates.

If the interest rates had been increased/decreased by 100 basis points (2021: 100 basic points) at the beginning of the year and all other variables were held constant, the Group's profit after tax and retained profits would increase/decrease by approximately HK\$13,756,000 (2021: increase/decrease by approximately HK\$461,000). The assumed changes have no impact on the Group's other components of equity. This is mainly attributable to the Group's exposure with respect to interest rate on its variable-interest rate bank deposits and bank and other borrowings.

Derivatives

As of 31 December 2022, the Group has not moved any existing contracts to alternative benchmark rates. The Group's USD LIBOR-linked financial instruments that need to be but have yet to be transitioned to alternative benchmark rates as at 31 December 2022 and 2021 are as below:

- a carrying amount of HK\$664,031,000 (2021: HK\$777,256,000) of variable rate interest-bearing liabilities referenced to 6-month USD LIBOR;

Notes to the Consolidated Financial Statements

For the year ended 31 December 2022

5. FINANCIAL INSTRUMENTS *(Continued)*

(b) Financial risk management objectives and policies *(Continued)*

ii. Interest rate risk *(Continued)*

Managing interest rate benchmark reform and associated risks

A fundamental reform of major interest rate benchmarks has been undertaken globally, including the replacement of some interbank offered rates (IBORs) with alternative nearly risk-free rates (referred to as "IBOR reform"). The Group has financial instruments referenced to USD London Interbank Offered Rate (USD-LIBOR BBA) and Hong Kong Interbank Offered Rate (HIBOR).

In March 2021, the UK Financial Conduct Authority formally announced the future cessation or non-representativeness of the following LIBOR benchmark settings:

- all sterling, euro, Swiss Franc, Japanese yen LIBOR after 31 December 2021;
- 1-week and 2-month USD LIBOR after 31 December 2021; and
- overnight, 1-month, 3-month, 6-month and 12-month USD LIBOR after 30 June 2023.

In Hong Kong, the Hong Kong Monetary Authority still recognises HIBOR as a credible and reliable benchmark and confirms that there is no plan to discontinue HIBOR although an alternative, the Hong Kong Dollar Overnight Index Average (HONIA) has already been identified.

The Group does not hold any financial instruments referenced to 1-week and 2-month USD LIBOR and as such there are no contracts required to be replaced by 31 December 2022. The Group's financial instruments referenced to 6 months USD LIBOR are not expected to be ceased immediately after 30 June 2023 by the IBOR reform.

The management of the Group's monitors transition to alternative benchmark rates. The Group's treasury function is closely monitoring the market development on IBOR reform and have commenced discussion with counterparties on contracts that need to be amended as a result of the reform, but specific changes have yet to be agreed.

iii. Liquidity risk

In the management of the liquidity risk, the Group monitors and maintains a level of cash and cash equivalents deemed adequate by the management to finance the Group's operations and mitigate the effects of fluctuations in cash flows. The management monitors the utilisation of bank and other borrowings and ensures compliance with loan covenants.

The following table details the Group's remaining contractual maturity for its non-derivative financial liabilities based on the agreed repayment terms. The table has been drawn up based on the undiscounted cash flows of financial liabilities based on the earliest date on which the Group can be required to pay.

The maturity analysis for financial liabilities is prepared based on the scheduled repayment dates. The table includes both interest and principal cash flows. To the extent that interest flows are floating rate, the undiscounted amount is derived from interest rate curve at the end of the reporting period.

Notes to the Consolidated Financial Statements

For the year ended 31 December 2022

5. FINANCIAL INSTRUMENTS (Continued)

(b) Financial risk management objectives and policies (Continued)

iii. Liquidity risk (Continued)

As at 31 December 2022

	Weighted average interest rate %	Total contractual undiscounted cash flow HK\$'000	Within one year or on demand HK\$'000	More than one year but less than two years HK\$'000	More than two years but less than five years HK\$'000	More than five years HK\$'000	Carrying amount HK\$'000
Non-derivative instruments							
Trade and other payables	-	2,389,926	2,389,926	-	-	-	2,389,926
Bank and other borrowings	4.37	4,531,978	3,345,285	931,470	255,223	-	4,405,414
Lease liabilities	6.01	86,388	13,559	12,838	30,638	29,353	69,868
Amounts due to related companies	-	22,670	22,670	-	-	-	22,670
Amount due to the immediate holding company	-	2,331	2,331	-	-	-	2,331
		7,033,293	5,773,771	944,308	285,861	29,353	6,890,209

As at 31 December 2021

	Weighted average interest rate %	Total contractual undiscounted cash flow HK\$'000	Within one year or on demand HK\$'000	More than one year but less than two years HK\$'000	More than two years but less than five years HK\$'000	More than five years HK\$'000	Carrying amount HK\$'000
Non-derivative instruments							
Trade and other payables	-	2,678,013	2,678,013	-	-	-	2,678,013
Bank and other borrowings	2.65	3,693,788	2,163,212	1,510,911	19,665	-	3,626,541
Lease liabilities	7.87	23,671	6,976	5,285	8,324	3,086	19,034
Amounts due to related companies	-	4,831	4,831	-	-	-	4,831
Amount due to the immediate holding company	-	2,331	2,331	-	-	-	2,331
		6,402,634	4,855,363	1,516,196	27,989	3,086	6,330,750

The amounts included above for variable interest rate instruments for non-derivative financial liabilities are subject to change if changes in variable interest rates differ to those estimates of interest rates determined at the end of the reporting period.

Notes to the Consolidated Financial Statements

For the year ended 31 December 2022

5. FINANCIAL INSTRUMENTS *(Continued)*

(b) Financial risk management objectives and policies *(Continued)*

iii. Liquidity risk *(Continued)*

Bank loans with a repayment on demand clause are included in the "On demand or within one year" time band in the below maturity analysis. As at 31 December 2022, the aggregate carrying amounts of these bank loans amounted to approximately HK\$344,000,000 (2021: approximately HK\$611,194,000). Taking into account the Group's financial position, the management does not believe that it is probable that the banks will exercise their discretionary rights to demand immediate repayment. The management believes that such bank loans will be repaid within 1 year (2021: 3 years) after the end of the reporting period in accordance with the scheduled repayment dates set out in the loan agreements, details of which are set out in the table below:

	Maturity Analysis — Bank loans with a repayment on demand clause based on scheduled repayments			Carrying amount
	Less than 1 year	1–2 years	Total undiscounted cash outflows	
	HK\$'000	HK\$'000	HK\$'000	HK\$'000
31 December 2022	360,258	–	360,285	344,000
31 December 2021	98,478	534,794	633,272	611,194

The amounts included above for variable interest rate instruments are subject to change if changes in variable interest rates differ to those estimates of interest rates determined at the end of the reporting period.

Notes to the Consolidated Financial Statements

For the year ended 31 December 2022

5. FINANCIAL INSTRUMENTS *(Continued)*

(b) Financial risk management objectives and policies *(Continued)*

iv. Credit risk

The credit risk of the Group mainly arises from bank balances and deposits, trade and other receivable, loan receivables, amount due from associates and amounts due from related companies. The carrying amounts of these balances represent the Group's maximum exposure to credit risk in relation to financial assets.

In respect of cash deposited at banks, the credit risk is considered to be low as the counterparties are reputable banks. The existing counterparties do not have defaults in the past. Therefore, ECL rate of cash at bank is assessed to be close to zero and no provision was made as of 31 December 2022 and 2021.

The credit risk for amount due from associates are considered to be low, therefore no ECL provision was made during the year ended 31 December 2022 and 2021.

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

At the end of each reporting period, 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.

As at 31 December 2022 and 2021, trade receivables that are individually significant have been separately assessed for impairment. The Group makes periodic assessments on the recoverability of the receivables based on the background and reputation of the customers, historical settlement records and past experience.

Majority of the Group's revenue is received from individual customers in relation to sales of pharmaceutical products and are transacted on credit. The Group's trade receivables arise from sales of pharmaceutical products to the customers. As at the end of the year, the top three debtors and the largest debtor accounted for approximately 6.39% and 2.36% (2021: 5.72% and 2.01%), of the Group's trade receivables balance. In view of the history of business dealings with the debtors and the sound collection history of the receivables due from them, management believes that there is no material credit risk inherent in the Group's outstanding receivable balance due from these debtors saved for the debtor related to the impaired trade receivable disclosed in the below. Management makes periodic assessment on the recoverability of the trade and other receivables based on historical payment records, the length of overdue period, the financial strength of the debtors and whether there are any disputes with the debtors.

Individual credit evaluations are performed on all customers requiring credit over a certain amount. These evaluations focus on the customer's past history of making payments when due and current ability to pay, and take into account information specific to the customer as well as pertaining to the economic environment in which the customer operates. Trade receivables are due within 30 to 180 days (2021: 30 to 180 days) from the date of billing. Normally, the Group does not obtain collateral from customers.

Notes to the Consolidated Financial Statements

For the year ended 31 December 2022

5. FINANCIAL INSTRUMENTS *(Continued)*

(b) Financial risk management objectives and policies *(Continued)*

iv. Credit risk *(Continued)*

The Group measures loss allowances for trade and other receivables, loan receivables and amount due from related companies at an amount equal to 12-month ECLs and lifetime ECLs, which are calculated using three-stage model. As the Group's historical credit loss experience does not indicate significantly different loss patterns for different customer segments, the loss allowance based on past due status is not further distinguished between the Group's different customer bases.

(1) Provision of ECL on trade and other receivables

The tables below show loss allowance for ECL based on the Group's credit policy, which are mainly based on past due information available without undue cost or effort, and year-end staging classification as at 31 December 2022 and 31 December 2021.

As at 31 December 2022	12-months ECLs Stage 1 HK\$'000	Lifetime ECLs Stage 2 HK\$'000	Lifetime ECLs Stage 3 HK\$'000	Total HK\$'000
Trade receivables and other receivables				
— Industry average	17,106	–	–	17,106
— CCC- to CC	–	17,742	–	17,742
— D	–	–	56,926	56,926
	17,106	17,742	56,926	91,774
As at 31 December 2021	12-months ECLs Stage 1 HK\$'000	Lifetime ECLs Stage 2 HK\$'000	Lifetime ECLs Stage 3 HK\$'000	Total HK\$'000
Trade receivables and other receivables				
— Industry average	11,235	–	–	11,235
— CCC- to CC	–	27,499	–	27,499
— D	–	–	110,339	110,339
	11,235	27,499	110,339	149,073

The credit rating of industry average represented the debtors that have not incurred due payments. If the invoice dates of the outstanding debt were from 3 months to 1 year, the credit rating will be represented from CCC- to CC. In case the debts have been outstanding over 1 year, the credit rating will be marked as D.

Notes to the Consolidated Financial Statements

For the year ended 31 December 2022

5. FINANCIAL INSTRUMENTS *(Continued)*

(b) Financial risk management objectives and policies *(Continued)*

iv. Credit risk *(Continued)*

(1) Provision of ECL on trade and other receivables *(Continued)*

The (reversal of)/provision of trade receivables as at 31 December 2022 and 2021 were as follows:

	HK\$'000
As at 1 January 2021	107,627
Reversal for the year	(8,128)
Exchange realignment	3,432
As at 31 December 2021 and 1 January 2022	102,931
Reversal for the year	(10,263)
Written off	(24,459)
Exchange realignment	(6,868)
As at 31 December 2022	61,341

The (reversal of)/provision of ECL on other receivables as at 31 December 2022 and 2021 were as follows:

	HK\$'000
As at 1 January 2021	43,253
Provision for the year	19,902
Written off	(18,916)
Exchange realignment	1,903
As at 31 December 2021 and 1 January 2022	46,142
Reversal for the year	(12,379)
Exchange realignment	(3,330)
As at 31 December 2022	30,433

Notes to the Consolidated Financial Statements

For the year ended 31 December 2022

5. FINANCIAL INSTRUMENTS *(Continued)*

(b) Financial risk management objectives and policies *(Continued)*

iv. Credit risk *(Continued)*

(2) Provision of ECL on due from related companies

The table below show loss allowance for ECL on amounts due from related companies based on the Group's credit policy, which are mainly based on past due information available without undue cost or effort, and year-end staging classification as at 31 December 2022 and 2021.

As at 31 December 2022	12-months ECLs Stage 1 HK\$'000	Lifetime ECLs Stage 2 HK\$'000	Lifetime ECLs Stage 3 HK\$'000	Total HK\$'000
Amounts due from related companies				
— Industry average	359	–	–	359
— CCC- to CC	–	–	–	–
— D	–	–	182	182
	359	–	182	541

As at 31 December 2021	12-months ECLs Stage 1 HK\$'000	Lifetime ECLs Stage 2 HK\$'000	Lifetime ECLs Stage 3 HK\$'000	Total HK\$'000
Amounts due from related companies				
— Industry average	–	–	–	–
— CCC- to CC	–	121	–	121
— D	–	–	–	–
	–	121	–	121

The (reversal of)/provision of ECL on due from related companies as at 31 December 2022 and 2021 was as follows:

	HK\$'000
As at 1 January 2021	11,322
Reversal for the year	(11,389)
Exchange realignment	188
As at 31 December 2021 and 1 January 2022	121
Provision for the year	420
Exchange realignment	–
As at 31 December 2022	541

Notes to the Consolidated Financial Statements

For the year ended 31 December 2022

5. FINANCIAL INSTRUMENTS *(Continued)*

(b) Financial risk management objectives and policies *(Continued)*

iv. Credit risk *(Continued)*

(3) Provision of ECL on loan receivables

The table below show loss allowance for ECL on loan receivables based on the Group's credit policy, which are mainly based on past due information available without undue cost or effort, and year-end staging classification as at 31 December 2021.

	12-months ECLs Stage 1 HK\$'000	Lifetime ECLs Stage 2 HK\$'000	Lifetime ECLs Stage 3 HK\$'000	Total HK\$'000
As at 31 December 2021				
Loan receivables				
— Industry average	—	—	—	—
— CCC- to CC	—	795	—	795
— D	—	—	—	—
	—	795	—	795

The (reversal of) ECL on loan receivables as at 31 December 2022 and 2021 was as follows:

	HK\$'000
As at 1 January 2021	827
Reversal for the year	(32)
As at 31 December 2021 and 1 January 2022	795
Reversal for the year	(795)
As at 31 December 2022	—

Notes to the Consolidated Financial Statements

For the year ended 31 December 2022

5. FINANCIAL INSTRUMENTS *(Continued)*

(b) Financial risk management objectives and policies *(Continued)*

v. Equity price risk

The Group is exposed to equity price risk through its investment in equity instruments measured at FVTPL and FVTOCI. For equity instruments measured at FVTPL quoted in relative active markets, the management of the Group manages this exposure by maintaining a portfolio of investments with different risks. In addition, the Group also invested in certain unquoted equity securities for investees operating in pharmaceutical industry sector for long term strategic purposes which had been designated as FVTOCI.

The sensitivity analysis have been determined based on the exposure to equity price risk at the reporting date. Sensitivity analysis for unquote equity securities with fair value measurement categorized within Level 3 were disclosed in note 5(b)(vi).

If the prices of the respective equity instruments listed in Hong Kong had been 5% (2021: 5%) higher/lower, the post-tax profit for the year ended 31 December 2022 would increase/decrease in financial assets at FVTPL by approximately HK\$725,000 (2021: increase/decrease in financial assets at FVTPL by approximately HK\$1,667,000), as a result of the changes in fair value of listed equity security in Hong Kong.

If the prices of the respective equity instruments listed outside Hong Kong had been 5% (2021: 5%) higher/lower, the post-tax profit for the year ended 31 December 2022 would increase/decrease in financial assets at FVTPL by approximately HK\$21,180,000 (2021: increase/decrease in financial assets at FVTPL by approximately HK\$45,258,000) and the other comprehensive income would increase/decrease in equity instruments at FVTOCI by approximately HK\$1,242,000 (2021: Nil) respectively, as a result of the changes in fair value of listed equity security outside Hong Kong.

vi. Fair value

The fair value of financial assets and financial liabilities are determined as follows:

- the fair value of financial assets and financial liabilities with standard terms and conditions and traded in active liquid markets are determined with reference to quoted market bid prices and ask prices respectively; and
- the fair value of other financial assets and financial liabilities (excluding derivative instruments) is determined in accordance with generally accepted pricing models based on discounted cash flow analysis.

The directors consider the fair values of trade and other receivables, loan receivables, pledged bank deposits, cash and cash equivalents, trade and other payables, bank and other borrowings reported in the consolidated statement of financial position approximate their carrying amounts due to their immediate or short-term maturities.

The directors consider the fair value of amount due to the immediate holding company approximate to its carrying amount as the impact of discounting is not significant.

Notes to the Consolidated Financial Statements

For the year ended 31 December 2022

5. FINANCIAL INSTRUMENTS *(Continued)*

(b) Financial risk management objectives and policies *(Continued)*

vi. Fair value *(Continued)*

The following table provides an analysis of financial instruments that are measured subsequent to initial recognition at fair value, grouped into Level 1 to 3 based on the degree to which the fair value is observable.

- Level 1 fair value measurements are those derived from quoted prices (unadjusted) in active market for identical assets or liabilities.
- Level 2 fair value measurements are those derived from inputs other than quoted prices included within Level 1 that are observable for the asset or liability, either directly (i.e. as prices) or indirectly (i.e. derived from prices).
- Level 3 fair value measurements are those derived from valuation techniques that include inputs for the asset or liability that are not based on observable market data (unobservable inputs).

Fair value hierarchy

	2022			
	Level 1 HK\$'000	Level 2 HK\$'000	Level 3 HK\$'000	Total HK\$'000
Financial assets at FVTPL (note 26)	1,038,582	–	–	1,038,582
Equity instruments at FVTOCI (note 25) (note (a))	24,843	–	542,477	567,320
Derivative financial instrument (note 39)	–	31,370	–	31,370
	2021			
	Level 1 HK\$'000	Level 2 HK\$'000	Level 3 HK\$'000	Total HK\$'000
Financial assets at FVTPL (note 26)	1,112,968	–	–	1,112,968
Equity instruments at FVTOCI (note 25) (note (a))	–	–	145,685	145,685
Derivative financial instrument (note 39)	–	(8,350)	–	(8,350)

There were no transfer between level 2 and level 3 in the current year.

Notes to the Consolidated Financial Statements

For the year ended 31 December 2022

5. FINANCIAL INSTRUMENTS *(Continued)*

(b) Financial risk management objectives and policies *(Continued)*

vi. Fair value *(Continued)*

Fair value hierarchy (Continued)

Note:

- (a) As at 31 December 2022, the fair value of equity instruments at FVTOCI of approximately HK\$542,477,000 (2021: HK\$145,685,000) were valued by an independent valuer. The calculation was based on investment costs and including some unobservable inputs.

Below is a summary of the valuation technique used and the key inputs to the valuation of equity instruments and derivative financial instruments:

	Valuation technique	Significant unobservable inputs	2022	2021
Financial assets				
Equity instruments				
9.86% (2021:11.92%) of eTheRNA Immunotherapies NV of Preferred Series B Shares (note i)	Discounted cash flow method	Terminal growth rate Discount rate (note i)	1.7% 21.21%	1.8% 16.01%
6.83% of Cloudbreak Pharmaceutical Inc. of Series B Preferred Shares (note i)	Discounted cash flow method	Discount rate (note i)	18.04%	17.80%
Derivative financial instrument — Cross currency swap	Discounted cash flow method	Discount rate	0.96%	N/A
Financial liability				
Derivative financial instrument — Cross currency swap	Discounted cash flow method	Discount rate	N/A	0.94%

Notes:

- (i) A slight increase in the discount rate used in isolation would result in a slight decrease in the fair value measurement of the eTheRNA Immunotherapies NV of Preferred Series B Shares and Cloudbreak Pharmaceutical Inc. of Series B Preferred Shares respectively, and vice versa. A 5% (2021: 5%) increase/decrease in the discount rate holding all other variables constant would decrease/increase the carrying amount of the eTheRNA Immunotherapies NV of Preferred Series B Shares and Cloudbreak Pharmaceutical Inc. of Series B Preferred Shares by HK\$3,104,000 and HK\$3,029,000 (2021: HK\$5,672,000 and HK\$3,380,000) respectively.

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For the year ended 31 December 2022

5. FINANCIAL INSTRUMENTS *(Continued)*

(b) Financial risk management objectives and policies *(Continued)*

vi. Fair value *(Continued)*

Reconciliation of Level 3 fair value measurements of equity instruments at FVTOCI

	2022	2021
	HK\$'000	HK\$'000
As at 1 January	145,685	171,164
Addition during the year	431,192	56,083
Acquisition of subsidiary (note 40)	–	15,616
Disposal during the year	–	(121,482)
Fair value (loss)/gain in other comprehensive income	(17,654)	28,641
Exchange alignment	(16,746)	(4,337)
As at 31 December	542,477	145,685

Included in other comprehensive income is a fair value loss in an amount of approximately HK\$70,706,000 (2021: fair value gain approximately HK\$28,641,000) relating to listed and unlisted equity securities classified as equity instruments at FVTOCI held at the end of the current reporting period and is reported as changes of “FVTOCI reserve”.

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6. CAPITAL RISK MANAGEMENT

The Group reviews its capital structure to ensure that entities in the Group will be able to continue as a going concern while maximising the return to shareholders through the optimisation of the debt and equity balance. The Group's overall strategy remains unchanged from prior year.

The capital structure of the Group consists of debt, which includes bank and other borrowings, lease liabilities, amount due to associate, amounts due to related companies and amount due to the immediate holding company and derivative financial instruments, cash and cash equivalents and equity attributable to owners of the Company, comprising issued share capital, share premium, reserves and retained profits.

The Group is not subject to any externally imposed capital requirements.

Gearing ratio

The directors of the Company review the capital structure regularly. As part of this review, the directors of the Company consider the cost of capital and the risks associated with each class of capital. Based on recommendations of the directors, the Group will balance its overall capital structure through payment of dividends, new share issues and share buy-backs as well as the issue of new debt or the redemption of existing debt.

The gearing ratio at the end of the reporting period was as follows:

	2022 HK\$'000	2021 HK\$'000
Debts (note (a))	4,500,283	3,652,737
Cash and cash equivalents	(1,444,014)	(1,752,860)
Net debt	3,056,269	1,899,877
Equity (note (b))	14,140,338	13,392,631
Net debt to equity ratio	22%	14%

Notes:

- (a) Debts comprises bank and other borrowings, lease liabilities, amounts due to related companies and amount due to the immediate holding company respectively.
- (b) Equity includes all capital and reserves attributable to owners of the Company.

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For the year ended 31 December 2022

7. REVENUE AND SEGMENT INFORMATION

For the years ended 31 December 2022 and 2021, the Group is principally engaged in manufacture and sales of pharmaceutical preparations and medical devices, bio-technology products, health products, specialised pharmaceutical raw materials and other products. The board of directors, being the chief operating decision maker of the Group, reviews the operating results of the Group as a whole to make decisions about resource allocation. The operation of the Group constitutes one single reportable segment under HKFRS 8 and accordingly, no separate segment information is prepared.

The Group's revenue represents the invoiced value of goods sold, net of discounts and sales related taxes.

Geographical information

The Group's operations are mainly located in the PRC (country of domicile) and it also derives revenue from America, Europe and Asia.

Information about the Group's revenue from external customers is presented based on geographical location of the customers and information about the Group's non-current assets is presented based on geographical location of the assets are detailed below:

	Revenue from external customers		Non-current assets	
	2022 HK\$'000	2021 HK\$'000	2022 HK\$'000	2021 HK\$'000
The PRC	7,453,795	7,422,136	9,675,884	8,528,777
America	956,036	430,098	–	–
Europe	566,532	297,962	–	–
Asia other than the PRC	480,809	330,889	66,228	42,805
Others	105,113	116,890	–	–
Total	9,562,285	8,597,975	9,742,112	8,571,582

Note: Non-current assets excluded equity instruments at fair value through comprehensive income, deferred tax assets and a part of interests in associates.

Information about major customers

For the years ended 31 December 2022 and 2021, none of the Group's sales to a single customer amounted to 10% or more of the Group's total revenue.

Notes to the Consolidated Financial Statements

For the year ended 31 December 2022

7. REVENUE AND SEGMENT INFORMATION *(Continued)*

Revenue

Disaggregation of revenue from contracts with customers

	2022 HK\$'000	2021 HK\$'000
Type of goods and services		
Manufacture and sales of pharmaceutical preparations and medical devices	5,677,109	5,377,145
Sales of bio-technology products and health products	2,885,369	2,231,461
Sales of specialised pharmaceutical raw materials and other products	999,807	989,369
Total revenue recognised at point in time	9,562,285	8,597,975

	2022 HK\$'000	2021 HK\$'000
Revenue disclosed in segment information		
External customers	9,562,285	8,597,975
Timing of revenue recognition		
At point in time	9,562,285	8,597,975

All of the Group's revenue are recognised at point in time when carrier designated by the customers, or after the customer's acceptance or upon transfer of control of the goods to customer. All of the Group's revenue is generated in the PRC based on where goods are sold. All revenue contracts are for period of one year or less, as permitted by practical expedient under HKFRS 15, the transaction price allocated to these unsatisfied contacts is not disclosed.

Notes to the Consolidated Financial Statements

For the year ended 31 December 2022

8. OTHER REVENUE AND INCOME

	2022 HK\$'000	2021 HK\$'000
Government grants (note (i))	97,352	69,354
Interest income	19,806	74,953
Sales of raw materials, scrap and other materials, net	7,891	5,776
Gain on sales and leaseback transaction, net	2,297	2,372
Rental income	557	1,421
Net gain in fair value of investment properties	21,351	29,575
Compensation income	–	3,767
Consultancy income (note (ii))	24,925	123,199
Sundry income	37,393	38,599
	211,572	349,016

Notes:

- (i) The amount in 2022 consists of government grants with conditions to be fulfilled amounted to approximately HK\$52,119,000 and HK\$45,233,000 (2021: HK\$41,151,000 and HK\$28,213,000) respectively. There are no unfulfilled conditions related to the remaining amount.
- (ii) The amount consists of income from the provision of various consultancy services such as product registration, technology consultancy, market development and consultation, etc.

9. NET (LOSS)/INCOME FROM FINANCIAL ASSETS AT FAIR VALUE THROUGH PROFIT OR LOSS

	2022 HK\$'000	2021 HK\$'000
Loss in fair value change of listed equity securities in Hong Kong	(18,833)	(1,667)
(Loss)/Gain in fair value change of equity instruments outside Hong Kong	(48,407)	485,348
Investment income at fair value, net	–	1,167
Realised loss on disposal of financial assets at fair value through profit or loss	(27,383)	–
	(94,623)	484,848

10. FINANCE COSTS

	2022 HK\$'000	2021 HK\$'000
Interest on bank and other borrowings:		
— wholly repayable within five years	132,977	90,191
Interest on lease liabilities	4,516	2,773
	137,493	92,964

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For the year ended 31 December 2022

11. INCOME TAX EXPENSE

	2022 HK\$'000	2021 HK\$'000
Current tax:		
The PRC Enterprise Income Tax	383,904	370,443
Deferred tax (notes 24 and 35)	34,738	10,357
	418,642	380,800

No provision for Hong Kong profits tax has been made in the consolidated financial statements as the Company did not have any assessable profits subject to Hong Kong profits tax for both years. Provision on profits assessable elsewhere has been calculated at the rate of tax prevailing to the countries to which the Group operates, based on existing legislation, interpretations, and practices in respect thereof.

Under the Law of the PRC on Enterprise Income Tax (the "EIT Law") and Implementation Regulation of the EIT Law, the tax rate of the PRC subsidiaries is 25% from 1 January 2008 onwards.

According to the relevant the PRC tax regulations, High-New Technology Enterprise (the "HNTE") operating within a High and New Technology Development Zone are entitled to a reduced Enterprise Income Tax (the "EIT") rate of 15%. Certain subsidiaries are recognised as HNTE and accordingly, are subject to EIT at 15%. The recognition as a HNTE is subject to review on every three years by the relevant government bodies.

The charge for the year is reconciled to the profit before tax per the consolidated statement of profit or loss and other comprehensive income as follows:

	2022 HK\$'000	2021 HK\$'000
Profit before tax	2,516,893	2,785,832
Tax at the average income tax rate	629,223	505,996
Tax effect of share of results of associates	27,530	(44,270)
Tax effect of expenses not deductible for tax purpose	78,942	89,535
Tax effect of income not taxable for tax purpose	(102,174)	(77,520)
Tax effect of deductible temporary differences not recognised	(7,580)	(4,412)
Effect of tax exemptions granted to the PRC subsidiaries	(44,023)	(23,870)
Income tax on concessionary rate	(252,182)	(137,683)
Tax effect of tax losses not recognised	88,906	73,024
Tax charge for the year	418,642	380,800

Notes to the Consolidated Financial Statements

For the year ended 31 December 2022

12. PROFIT FOR THE YEAR

	2022 HK\$'000	2021 HK\$'000
Profit for the year is arrived after charging/(crediting):		
Staff costs (excluding Directors' emoluments (note 15)) comprises:		
— Wages and salaries	1,371,081	1,265,065
— Retirement benefits schemes contributions	92,550	82,188
	1,463,631	1,347,253
Depreciation of property, plant and equipment (note 16)	328,712	305,504
Depreciation of right-of-use assets (note 17)	33,859	16,991
Amortisation of intangible assets (note 23)	32,341	17,024
Total depreciation and amortisation	394,912	339,519
(Reversal)/provision of allowance for ECL on financial assets		
— trade and other receivables	(22,642)	11,774
— amounts due from related companies	420	(11,389)
— loan receivables	(795)	(32)
(Reversal)/provision of allowance for ECL of financial assets at amortised cost, net	(23,017)	353
Auditors' remuneration		
— audit services	3,880	3,400
— non-audit services	—	—
Cost of inventories recognised as an expense	3,610,806	3,350,737
Write-off of property, plant and equipment	11,271	31,087
Research and development expenditure	531,924	331,421
Marketing and promotion expenses	498,692	634,985
Write-down of inventories	5,265	1,042
Loss on disposal of property, plant and equipment	2,476	3,920
Net foreign exchange (gain)/loss	(34,348)	35,802
Short-term lease rental expenses	12,015	1,026
Fair value change on derivative financial instruments	(39,720)	8,350

Notes to the Consolidated Financial Statements

For the year ended 31 December 2022

13. DIVIDEND

(i) Dividends payable to equity shareholders of the company attributable to the year

	2022 HK\$'000	2021 HK\$'000
Final dividend proposed after the end of the reporting period of HK\$0.14 per share (2021: HK\$0.11 per share)	496,940	390,450

(ii) Dividends payable to equity shareholders of the company attributable to the previous financial year, approved and paid during the year

	2022 HK\$'000	2021 HK\$'000
Final dividend in respect of the previous financial year, approved and paid during the year, of HK\$0.11 per share (2021: HK\$0.11 per share)	390,450	390,450

14. EARNINGS PER SHARE

Basic earnings per share is calculated by dividing the profit attributable to equity owners of the Company by the weighted average number of ordinary shares outstanding during the year, excluding ordinary shares purchased by the Group and held as treasury shares.

	2022 HK\$'000	2021 HK\$'000
Earnings		
Earnings for the purpose of basic earnings per share calculation	2,079,419	2,402,563
	2022 '000	2021 '000
Number of shares		
Weighted average number of ordinary shares for the purpose of basic earnings per share calculation (Note)	3,542,258	3,548,050

Note:

As at 31 December 2022 and 2021, treasury shares are deducted from total shares in issue for the purpose of calculating earnings per share.

Diluted earnings per share is the same as the basic earnings per share for the year ended 31 December 2022 and 2021 as there were no potential dilutive ordinary shares in issue.

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For the year ended 31 December 2022

15. DIRECTORS' AND EMPLOYEES' EMOLUMENTS

(a) Directors' emoluments

Details of directors' emoluments are as follows:

	2022 HK\$'000	2021 HK\$'000
Fees:		
Executive directors	58	92
Independent non-executive directors	395	340
	453	432
Other emoluments:		
Salaries and allowances	5,784	4,079
Retirement benefits scheme contributions	120	43
	6,357	4,554

No emoluments were paid by the Group to the directors as an inducement to join, or upon joining the Group, or as compensation for loss of office for both years ended 31 December 2022 and 2021.

The emoluments paid or payable to each of the seven (2021: nine) directors for the year ended 31 December 2022 are as follows:

	Fees HK\$'000	Salaries and allowances HK\$'000	Retirement benefits schemes contributions HK\$'000	Total HK\$'000
Executive directors:				
Dr. Tang Weikun (<i>Chairman</i>)	–	2,812	102	2,914
Dr. Shao Yan	–	1,958	18	1,976
Dr. Niu Zhanqi	58	–	–	58
Dr. Shi Lin	–	1,014	–	1,014
Independent non-executive directors:				
Ms. So Tosi Wan, Winnie	209	–	–	209
Mr. Hu Yebi	116	–	–	116
Dr. Pei Geng	70	–	–	70
Total	453	5,784	120	6,357

Notes to the Consolidated Financial Statements

For the year ended 31 December 2022

15. DIRECTORS' AND EMPLOYEES' EMOLUMENTS (Continued)

(a) Directors' emoluments (Continued)

Details of directors' emoluments for the year ended 31 December 2021 are as follows:

	Fees HK\$'000	Salaries and allowances HK\$'000	Retirement benefits schemes contributions HK\$'000	Total HK\$'000
Executive directors:				
Mr. Liu Chengwei (retired on 1 June 2021)	21	–	–	21
Mr. Hu Bo (retired on 1 June 2021)	21	–	–	21
Dr. Shao Yan	–	2,345	18	2,363
Dr. Niu Zhanqi	50	–	–	50
Dr. Tang Weikun (<i>Chairman</i>) (appointed on 1 June 2021)	–	1,073	25	1,098
Dr. Shi Lin (appointed on 1 June 2021)	–	661	–	661
Independent non-executive directors:				
Ms. So Tosi Wan, Winnie	180	–	–	180
Mr. Hu Yebi	100	–	–	100
Dr. Pei Geng	60	–	–	60
Total	432	4,079	43	4,554

During year ended 31 December 2022 and 2021, no director of the Company agreed to waive or waived any emoluments.

(b) Five Highest Paid Individuals

The five individuals with the highest emoluments in the Group, none (2021: one) was the director of the Company whose emoluments were included above. The emoluments of the remaining five (2021: four) individuals are as follows:

	2022 HK\$'000	2021 HK\$'000
Employees		
Salaries and allowances	22,347	11,442
Retirement benefits schemes contributions	980	443
	23,327	11,885

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15. DIRECTORS' AND EMPLOYEES' EMOLUMENTS *(Continued)*

(b) Five Highest Paid Individuals *(Continued)*

These emoluments were within the following bands:

	2022	2021
	No. of	No. of
	employees	employees
Nil to HK\$3,000,000	–	3
HK\$3,000,001 to HK\$3,500,000	2	–
HK\$3,500,001 to HK\$4,000,000	1	1
Over HK\$4,000,000	2	–
	5	4

During both years ended 31 December 2022 and 2021, no emoluments were paid by the Group to the five highest paid individuals as an inducement to join or upon joining the Group or as compensation for loss of office.

(c) Senior Management of the Group

The emoluments of the senior management who are non-director of the Group are within the following band:

	2022	2021
	No. of	No. of
	employees	employees
Nil to HK\$1,000,000	–	1
HK\$1,000,001 to HK\$1,500,000	2	2
HK\$1,500,001 to HK\$2,000,000	–	–
Over HK\$2,000,000	1	2
	3	5

During years ended 31 December 2022 and 2021, no emoluments were paid by the Group to the senior management as an inducement to join or upon joining the Group or as compensation for loss of office.

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16. PROPERTY, PLANT AND EQUIPMENT

	Owned buildings	Allocated land	Plant and machinery	Motor vehicles	Equipment	Others	Construction in progress	Total
	HK\$'000	HK\$'000	HK\$'000	HK\$'000	HK\$'000	HK\$'000	HK\$'000	HK\$'000
Cost								
As at 1 January 2021	1,992,416	1,778	1,982,552	30,181	133,823	412	482,092	4,623,254
Additions	64,926	–	103,031	4,613	27,405	–	271,595	471,570
Disposals	–	–	(48,514)	(3,334)	(305)	–	–	(52,153)
Acquired through acquisition of assets/ business combination (note 40)	72,915	–	88,026	125	37	–	–	161,103
Write-off	(919)	–	(92,224)	(4,235)	(7,515)	–	–	(104,893)
Transfer	156,838	–	154,361	–	–	–	(311,199)	–
Exchange realignment	70,821	59	66,668	954	4,735	–	15,322	158,559
As at 31 December 2021 and 1 January 2022	2,356,997	1,837	2,253,900	28,304	158,180	412	457,810	5,257,440
Additions	3,775	–	807	2,120	93,419	–	526,094	626,215
Disposals	(21)	–	(28,676)	–	(3,120)	–	–	(31,817)
Acquired through business combination (note 40)	60,522	–	22,147	371	427	–	1,730	85,197
Write-off	(290)	–	(33,304)	(1,398)	(10,740)	–	–	(45,732)
Transfer	100,984	–	292,784	–	1,733	–	(395,501)	–
Exchange realignment	(184,812)	(141)	(179,538)	(2,194)	(14,441)	(31)	(38,795)	(419,952)
As at 31 December 2022	2,337,155	1,696	2,328,120	27,203	225,458	381	551,338	5,471,351
Accumulated depreciation and impairment								
As at 1 January 2021	505,523	–	979,936	13,692	90,475	412	–	1,590,038
Depreciation provided for the year	98,477	–	175,314	5,386	26,327	–	–	305,504
Eliminated on disposals	–	–	(21,900)	(2,289)	(255)	–	–	(24,444)
Eliminated on write-off	(328)	–	(64,811)	(3,238)	(5,429)	–	–	(73,806)
Exchange realignment	17,788	–	29,411	454	3,312	–	–	50,965
As at 31 December 2021 and 1 January 2022	621,460	–	1,097,950	14,005	114,430	412	–	1,848,257
Depreciation provided for the year	103,384	–	187,745	3,398	34,185	–	–	328,712
Eliminated on disposals	(5)	–	(26,091)	–	(1,258)	–	–	(27,354)
Eliminated on write-off	(288)	–	(22,877)	(1,243)	(10,053)	–	–	(34,461)
Exchange realignment	(50,463)	–	(87,910)	(1,133)	(9,404)	(31)	–	(148,941)
As at 31 December 2022	674,088	–	1,148,817	15,027	127,900	381	–	1,966,213
Net carrying amounts								
As at 31 December 2022	1,663,067	1,696	1,179,303	12,176	97,558	–	551,338	3,505,138
As at 31 December 2021	1,735,537	1,837	1,155,950	14,299	43,750	–	457,810	3,409,183

Notes to the Consolidated Financial Statements

For the year ended 31 December 2022

16. PROPERTY, PLANT AND EQUIPMENT *(Continued)*

The above items of property, plant and equipment, except for construction in progress and allocated land are depreciated on a straight-line basis, at the following rates per annum:

Buildings	2.5%–10%
Plant and machinery	5%–25%
Equipment	12%–33.3%
Motor vehicles	10%–25%
Others	12.5%–20%

Allocated land is located in the PRC and is not specified by the PRC government authorities with the period of usage. The allocated land is restricted for disposal or transfer, but can be leased or pledged to other parties upon obtaining the approval from the relevant PRC's authorities.

Buildings are held in the PRC under medium-term leases.

As at 31 December 2022, certain buildings in the Group aggregated amount of approximately HK\$107,846,000 (2021: HK\$121,315,000) have been pledged to banks to secure general bank loans granted to the Group as further detailed in note 43.

Notes to the Consolidated Financial Statements

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17. RIGHT-OF-USE ASSETS

	Motor vehicle leased for own used	Buildings leased for own use	Land right use	Total
	HK\$'000	HK\$'000	HK\$'000	HK\$'000
Cost				
As at 1 January 2021	252	30,355	397,485	428,092
Acquisition of asset/business combination (note 40)	–	–	14,999	14,999
Additions	734	3,226	–	3,960
Termination of lease	(264)	(6,288)	–	(6,552)
Exchange realignment	12	581	13,162	13,755
As at 31 December 2021 and 1 January 2022	734	27,874	425,646	454,254
Acquisition through business combination (note 40)	–	–	17,263	17,263
Additions	–	64,579	27,489	92,068
Termination of lease	–	(2,950)	–	(2,950)
Exchange realignment	(38)	(2,946)	(29,937)	(32,921)
As at 31 December 2022	696	86,557	440,461	527,714
Accumulated depreciation				
As at 1 January 2021	252	10,626	40,101	50,979
Depreciation provided for the year	122	7,061	9,808	16,991
Termination of leases	(264)	(6,288)	–	(6,552)
Exchange realignment	2	88	218	308
As at 31 December 2021 and 1 January 2022	112	11,487	50,127	61,726
Depreciation provided for the year	118	22,740	11,001	33,859
Termination of leases	–	(2,950)	–	(2,950)
Exchange realignment	(3)	(1,365)	(317)	(1,685)
As at 31 December 2022	227	29,912	60,811	90,950
Net carrying amounts				
As at 31 December 2022	469	56,645	379,650	436,764
As at 31 December 2021	622	16,387	375,519	392,528

Notes:

- The Group leases several assets including office premises and land right use. The average lease term is 6 years (2021: 7 years).
- The total cash outflow for leases amount approximately to HK\$15,373,000 (2021: HK\$8,478,000) for the year ended 31 December 2022.

Notes to the Consolidated Financial Statements

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18. INVESTMENT PROPERTIES

	2022 HK\$'000	2021 HK\$'000
Residential properties	175,112	167,151
	2022 HK\$'000	2021 HK\$'000
As at 1 January	167,151	132,696
Fair value gain recognised in profit or loss (note 8)	21,351	29,575
Exchange realignment	(13,390)	4,880
As at 31 December	175,112	167,151

Asset measured at fair value

	2022			Total HK\$'000
	Level 1 HK\$'000	Level 2 HK\$'000	Level 3 HK\$'000	
Investment properties located in PRC	–	–	175,112	175,112
	2021			
	Level 1 HK\$'000	Level 2 HK\$'000	Level 3 HK\$'000	Total HK\$'000
Investment properties located in PRC	–	–	167,151	167,151

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18. INVESTMENT PROPERTIES *(Continued)*

(a) Valuation of investment properties

The investment properties amounted of approximately HK\$175,112,000 (2021: HK\$167,151,000) of the Group were stated at fair value as at 31 December 2022. The fair value of investment properties as at 31 December 2022 and 2021 were arrived at based on the valuations carried out by Wuhan Huasheng Zhenghao Assets Appraisal Co., Ltd.*; an independent external valuer. *(This is the English translation of Chinese name or words which included for identification purposes only)

The valuer has valued the properties on the basis of comparable market transactions as available. Discussions of valuation processes and results are held between the Group and valuers at least once every six months, in line with the Group's interim and annual reporting dates. As at 31 December 2022 and 2021, the fair values of the properties were determined by the valuer. At each financial year end, the Group (i) verifies all major inputs to the independent valuation report and (ii) holds discussions with the independent valuer.

Market approach method is adopted based on the principle of substitution, where comparison is made based on prices realised on actual sales and/or asking prices of comparable properties. Comparable properties of similar size, scale, nature, character and location are analysed and carefully weighed against all the respective advantages and disadvantages of each property in order to arrive at a fair comparison of market value and capital values.

The valuation assumptions, unless otherwise stated, the valuer assumed that:

- (a) The assets within the scope of the assessment are owned by the appraised unit and there is no ownership dispute;
- (b) The assessment information provided by the entrusting party and the appraised unit is true, lawful and complete; and
- (c) The assessment data collected by the assessors in the capacity range is authentic and credible.

There was no change from the valuation technique used during the year. In estimating the fair value of the properties, the highest and best use of the properties is their current use.

The valuation of investment properties is determined by various major inputs:

As at 31 December 2022, one of the major inputs applied in valuing the investment properties was market selling price per each square meter. The range of unit market price was from RMB3,798 to RMB4,026 (2021: RMB3,268 to RMB3,464).

Another unobservable major input was volume rate of the land use right. The range of plot ratio of investment properties was from 1.2 to 2.5 (2021: 1.8 to 3.3). An increase in volume rate would result in increase in the fair value of investment properties, and vice versa.

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19. LOAN RECEIVABLES

	2022 HK\$'000	2021 HK\$'000
Loan receivables:		
Within one year	–	113,985
Two to five years	–	–
	–	113,985
Less: allowance for ECL	–	(795)
Total loan receivables	–	113,190

The loan receivable was secured by shares of an unlisted company with a fixed interest rate of 8% per annum.

20. INTERESTS IN ASSOCIATES

	2022 HK\$'000	2021 HK\$'000
Cost of unlisted investments	7,564,016	7,647,643
Share of post-acquisition (loss)/profit and other comprehensive (loss)/income	(184,586)	82,606
Group interests in associates	7,379,430	7,730,249
Amounts due from associates	324,731	336,420
	7,704,161	8,066,669

Amounts due from associates are unsecured, interest-free and not recoverable within next twelve months.

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20. INTERESTS IN ASSOCIATES *(Continued)*

The summarised financial information in respect of the Group's material associates is set out below:

Shanghai Xudong Haipu Pharmaceutical Company Limited (the "Xudong Haipu")

	2022	2021
	HK\$'000	HK\$'000
Total assets	2,624,141	2,653,980
Total liabilities	(369,192)	(385,160)
Net assets of the associate	2,254,949	2,268,820
Less: Non-controlling interests	(62,934)	(68,007)
Net assets attributable to owners of associate	2,192,015	2,200,813
Group's share of net assets of the associate	1,205,608	1,210,447
Goodwill	930,000	1,006,962
	2,135,608	2,217,409
Revenue	1,062,627	1,443,419
Profit for the year	200,535	507,914
Share of result in an associate for the year	110,294	279,353
Dividend received during the year	(192,095)	(198,753)

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20. INTERESTS IN ASSOCIATES (Continued)

Grand Pharma Sphere Pte Ltd. (the “Grand Pharma Sphere”)

	2022 HK\$'000	2021 HK\$'000
Total assets	12,239,513	12,370,610
Total liabilities	(3,797,409)	(4,081,954)
Net assets	8,422,104	8,288,656
Group's interest in the associate	5,074,390	4,873,267
Revenue	1,223,111	1,242,167
Loss for the year	(72,103)	(18,028)
Share of result of an associate for the year	(40,991)	(9,835)

Aggregate information of associates that are not individually material

	2022 HK\$'000	2021 HK\$'000
The Group's share of results of associates (note a)	(113,089)	(155,656)
The Group's interest in associates	169,432	639,573

Note:

- (a) The share of results mainly consist of share of loss from OncoSec Medical Incorporated amounted approximately to HK\$97,145,000 (2021: HK\$139,938,000) (based on its management account adjusted under international generally accepted accounting principals).

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20. INTERESTS IN ASSOCIATES *(Continued)*

Details of the principal associates as at 31 December 2022 and 2021 are as follows:

Name	Place of incorporation/ operation	Form of business structure	Percentage of effective equity interest and voting power held by the Company		Particulars of issued/paid-up capital	Principal activities
			2022	2021		
Yangxin Fuxin (note (a) & (m))	PRC/PRC	Limited liability company	40.32% (indirect)	40.32% (indirect)	Contributed capital RMB2,000,000	Production and sales of fine chemicals and chemical medicine
Cardionovum Holding (note (b))	Hong Kong/ Hong Kong	Limited liability company	33.33% (indirect)	33.33% (indirect)	Contributed capital USD93,000,000	Development, production and distribution of advanced cardiovascular interventional medical devices and the provision of related services
Xudong Haipu (note (d) & (l))	PRC/PRC	Limited liability company	55.00% (indirect)	55.00% (indirect)	Contributed capital RMB60,000,000	Production and sales of pharmaceutical preparations for injections
Grand Pharma Sphere (note (e))	Singapore/ Singapore	Limited liability company	57.98% (indirect)	56.84% (indirect)	Contributed capital USD100	Investment holding
Revolmmune (note (f) & (m))	PRC/PRC	Limited liability company	7.83% (indirect)	8.91% (indirect)	Issued capital RMB813,447/ contributed capital RMB272,269	Development of colorectal cancer medicine
Nanjing Fuhan (note (g) & (m))	PRC/PRC	Limited partnership	51.00% (indirect)	51.00% (indirect)	Contributed capital RMB40,000,000	Investment holding
Nanjing Kainite (note (h) & (m))	PRC/PRC	Limited liability company	29.27% (indirect)	29.27% (indirect)	Contributed capital RMB3,100,000	Development of Neurological intervention
OncoSec (note (i))	USA/USA	Limited liability company	25.70% (indirect)	42.71% (indirect)	Contributed capital USD2,769	Development of cancer immunotherapy
CoRISMA (note (j))	USA/USA	Limited liability company	22.20% (indirect)	22.20% (indirect)	Contributed capital USD13,250,000	Development of global innovative medical devices
FastWave (note (k))	USA/USA	Limited liability company	40.00% (indirect)	20.00% (indirect)	Contributed capital USD12,000,000	Development of global cerebro-cardiovascular precision interventional devices

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For the year ended 31 December 2022

20. INTERESTS IN ASSOCIATES *(Continued)*

Notes:

- (a) Yangxin Fuxin Chemical Company Limited ("Yangxin Fuxin") was an associate of Hubei Grand Fuchi Pharmaceutical and Chemical Company Limited ("Hubei Fuchi") and Hubei Fuchi was acquired by the Group as a subsidiary pursuant to an agreement signed on 2 March 2010.

The Group held approximately 40.22% equity interest in Yangxin Fuxin and are accounted for the investment as an associate. The Group had further acquired approximately 0.24% equity interest in Grand Pharm (China). Immediately after completion of this acquisition, the Group's equity interest in Yangxin Fuxin was increased from 40.22% to 40.32%.

- (b) Cardionovum Holding Co. Limited ("Cardionovum Holding") was an associate of Grand Wise International Trading Limited, a wholly-owned subsidiary of the Company, and Cardionovum Holding was established with individual third party. The Company had subscribed for approximately 33.33% of the enlarged issued share capital of the Cardionovum Holding pursuant to an agreement signed on 21 April 2015, and are accounted for the investment in an associate.

The Group is able to exercise significant influence over Cardionovum Holding because it has the power to appoint one out of the five directors of that company under the shareholders agreement.

- (c) East Ocean Medical (Hong Kong) Limited ("East Ocean Medical") was an associate of the Company and East Ocean was established with a connected person of the Company. During the year ended 31 December 2020, the Company had contributed approximately HK\$27,717,000, which increased the equity interest to 23.69%. The Group is able to exercise significant influence over East Ocean because it has the power to appoint one out of the three directors of that company under the shareholders agreement.

During the year ended 31 December 2021, the Company had further acquired 752 shares of East Ocean. The Group gain full control over East Ocean since the completion of acquisition. Details of the acquisition are stated in note 40.

- (d) Xudong Haipu was an associate of Taiwan Tung Yang International Company Limited ("Tung Yang"). The Company entered into the acquisition agreement, the Company had acquired 100% of the Tung Yang shares at aggregate consideration HK\$2,004,227,000 which are settled by cash and shares. Upon completion of the acquisition, Tung Yang is a directly wholly-owned subsidiary of the Company. Xudong Haipu and its subsidiaries are classified as associates of the Company after Completion. This is because material decisions of Xudong Haipu (including but not limited to the approval of its annual budget, manufacturing plan and profit distribution policy) are subject to the resolutions of the board of directors of Xudong Haipu which must be passed by at least two-third of its directors in attendance under the articles of association of Xudong Haipu. As Tung Yang is entitled to appoint only four out of the seven directors of Xudong Haipu, Tung Yang does not have control over the operations and financial management of Xudong Haipu.

The completion of the acquisition took place on 5 September 2018. Details of the acquisition of Tung Yang are disclosed in the announcement of the Company dated 24 May 2018, 31 July 2018 and 24 August 2018.

Even the Company was holding 55% of shares of Xudong Haipu, since the resolutions requires at least 5 out of 7 directors' approval to pass, where the Company only entitled to appoint 4 directors on the board meeting, the Company does not have control over the associate.

- (e) Grand Pharma Sphere was an associate of Grand Decade Developments Limited ("Grand Decade") and it was the immediate holder of Grand Pharma Sphere (Australia BidCo) Pte Ltd. ("BidCo").

The Company entered into the binding scheme implementation deed pursuant to which CDH Genetech Limited ("CDH Genetech") and the Company had acquired 100% of the Sirtex Medical Pty Ltd. ("Sirtex") shares. The Company and CDH Genetech had established BidCo to acquire the Sirtex shares and paid aggregate consideration HK\$2,907,725,000. Upon completion of the acquisition, the Company and CDH Genetech owned 49% and 51% of the issued shares capital of the BidCo respectively. The completion of the acquisition took place on 20 September 2018. Details of the acquisition of BidCo are disclosed in the announcement of the Company dated 14 June 2018, 26 July 2018, 20 September 2018 and 12 March 2019.

The Group entered into a subscription agreement with CDH Genetech pursuant to which the Group and CDH Genetech (or its nominee) will further subscribe shares of Grand Pharma Sphere in proportion to their respective equity interests. The total consideration for the further subscription is approximately HK\$1,163,571,000 and the Group and CDH Genetech will invest for approximately HK\$570,150,000 and HK\$593,421,000 respectively. Details of the further subscription of the Grand Pharma Sphere were disclosed in the announcement of the Company dated 4 May 2020.

Notes to the Consolidated Financial Statements

For the year ended 31 December 2022

20. INTERESTS IN ASSOCIATES *(Continued)*

Notes: *(Continued)*

(e) *(Continued)*

During the year ended 31 December 2021, there was an increase in shareholding in Grand Pharma Sphere through several transactions as described below. Details of the transactions were stated in the Company published announcement dated 2 July 2021, 11 August 2021 and 1 September 2021 and circular dated 13 September 2021.

On 1 July 2021, the Group entered into a subscription agreement with Grand Pharma Sphere, pursuant to which, the Group agreed to subscribe for and Grand Pharma Sphere agreed to issue and allot 84,704,650 Grand Pharma Sphere Shares for a consideration of US\$100 million. The subscription was completed in July 2021. As at 31 December 2021, the shareholdings in Grand Pharma Sphere held by the Group increased by approximately 0.15% after a series of transactions.

The Group also entered into two agreements of total return swap transaction ("TRS Agreements") with a financial institution (the "Natixis"), pursuant to which, among other things, the Natixis shall pass through to the Company the full economic exposure to the shares of Grand Pharma Sphere ("Sirtex HoldCo Shares") acquired by the Natixis pursuant to the Natixis's Subscriptions.

In view of the TRS Agreements, the total of Sirtex HoldCo Shares held by the Natixis which was acquired by the Natixis under the Natixis's Subscription (the "Natixis Shares") are treated as part of the existing ownership interests of the Group in Grand Pharma Sphere for the purpose of applying the equity method of accounting as the terms of the TRS Agreement are such that it is the Company that has access to the returns associated with an ownership interest in the Natixis's shares currently held by the Natixis. In such circumstances, the proportion of ownership interest in Grand Pharma Sphere allocated to the Group is determined by taking into account the Shares held by the Natixis that currently give the Group access to the returns. The Group's effective interests in Grand Pharma Sphere, has been increased by 7.69%.

Hence, the Group had, in substance, an existing ownership interest in respect of the 84,704,650 Sirtex HoldCo Shares as a result of the TRS transaction. A corresponding liability of USD100,000,000, which is equivalent to HK\$777,256,000, representing the potential future payments was recognised at initial recognition of these ownership interests, which is disclosed under "Bank and other borrowings" of consolidated statement of financial position.

During the year ended 31 December 2022, the Group subscribed 29,646,627 new shares of Grand Pharma Sphere Pte Ltd. (which wholly owned the equity interests of Sirtex) at the consideration of USD35,000,000. After the completion of the transaction, the equity interests held in it increased to approximately 51.61%. The Group's effective interest in Grand Pharma Sphere Pte. Ltd. increased to 57.98%, with consideration of shares held by Natixis. Details of the subscription for new shares in Grand Pharma Sphere were disclosed in the announcement of the Company dated 15 December 2022.

(f) Revolmmune Therapeutics Co., Ltd. ("Revolmmune") was an associate of Grand Pharm (China). The Company subscribed for approximately 9.68% of issued share capital of the Revolmmune pursuant to an agreement signed on 13 July 2020, and are accounted for the investment in an associate.

During the year ended 31 December 2021, the Group's equity interest in Revolmmune decreased from 9.68% to 8.91%. The equity interest was further decreased by 1.08% to 7.83%, as a result of new shares issued to third party during the year ended 31 December 2022.

The Group is able to exercise significant influence over Revolmmune because it has the power to appoint one out of the five directors of that company under the shareholders agreement.

(g) Nanjing Fuhan Enterprise Management Partnership (Limited Partnership) ("Nanjing Fuhan") was an associate of Grand Pharm (China). The Company held 51% of issued share capital of the Nanjing Fuhan as at 31 December 2022 and 2021.

Even the Company was holding 51% of shares of Nanjing Fuhan, since the resolutions requires over 50% of the total number of directors (2 directors in total) to pass, where the Company only entitled to appoint 1 director on the board meeting, the Company does not have control over the associate.

(h) Nanjing Kainite Medical Technology Co., Ltd. ("Nanjing Kainite") was an associate of Grand Pharm (China). The Company subscribed for approximately 29.17% of issued share capital of the Nanjing Kainite on 27 July 2020. Pursuant to an agreement, the Company will inject and acquire to 100% equity interest of capital into Nanjing Kainite in phases if the conditions are met, and are accounted for the investment in an associate.

During the year ended 31 December 2021, the Group's equity interest in Nanjing Kainite increased from 29.17% to 29.27%.

The Group is able to exercise significant influence over Nanjing Kainite because it has the power to appoint one out of the three directors of that company under the shareholders agreement.

Notes to the Consolidated Financial Statements

For the year ended 31 December 2022

20. INTERESTS IN ASSOCIATES (Continued)

Notes: (Continued)

- (i) OncoSec Medical Incorporated ("OncoSec") was an associate of Grand Decade Developments Limited ("Grand Decade").

The Company had acquired approximately of 43.95% of the issued shares capital of the OncoSec at aggregate consideration for approximately HK\$193,929,000 which are settled by cash. The completion of the acquisition took place on 7 February 2020. Details of the acquisition of the OncoSec are disclosed in the announcement of the Company dated 10 October 2019, 26 November 2019 and 7 February 2020.

Since OncoSec has announced offering of common stock of an aggregate 4,608,589 shares of USD3.25 per share on 16 August 2020, the Company had acquired 1,999,000 of new placing shares at aggregate consideration of approximately HK\$50,396,000. Furthermore, OncoSec has announced offering of common stock of an aggregate 7,711,284 shares of USD5.45 per share on 21 January 2021. The Group had acquired 3,389,198 of new placing shares at aggregate consideration approximately HK\$144,075,000. And according to the anti-dilution terms of stock purchase agreement on 19 October 2019, the Group has the right to acquire further shares when certain share options issued by OncoSec were exercised, and the Group had acquired 1,409,838 shares of USD3.45 per share on 16 April 2021 at aggregate consideration of approximately HK\$37,939,000.

OncoSec has announced the share consolidation on the basis of every 22 issued and outstanding common stock in to 1 share each on 8 November 2022. Furthermore, OncoSec has announced offering of common stock of an aggregate 1,166,667 shares of USD3.00 per share on 30 November 2022. During the year ended 31 December 2022, the Group's equity interest in OncoSec had decreased from 42.71% to 25.70% after series of transaction.

The Group is able to exercise significant influence over OncoSec because it has the power to appoint three out of the nine directors of that company under the shareholders agreement.

- (j) CoRISMA MCS Systems Incorporated ("CoRISMA") was an associate of East Ocean Medical, a wholly-owned subsidiary of the Company. The Company had subscribed for approximately 22.20% of issued share capital of the CoRISMA pursuant to an agreement signed on 10 December 2021. The Group has accounted for the investment as interest in an associate.

The Group is able to exercise significant influence over CoRISMA because it has the power to appoint one out of the three directors of that company under the shareholders voting agreement. During the year ended 31 December 2022, CoRISMA has increased its number of board seats to include five directors and one observer. In the opinion of the Directors, a quorum must be presented in any of the board meeting and the board seat held by the Group will give rise to the significant influence to any significant decision.

The Group is able to exercise significant influence over CoRISMA because it has the power to appoint one out of the five directors of that company under the shareholders agreement.

- (k) FastWave Medical, Inc. ("FastWave") is an associate of East Ocean Medical (Hong Kong) Company Limited ("East Ocean Medical"). East Ocean Medical had subscribed for approximately 20% of issued share capital of FastWave pursuant to an agreement on 28 July 2021 and had accounted for the investment as interest in an associate. The Company will inject and acquire up to 40% equity interest of issued capital of FastWave in phases if the conditions are met. During the year ended 31 December 2022, the Group has further acquired 20% equity interest of FastWave after conditions being met, 40% in aggregate at the end of the year.

The Group is able to exercise significant influence over FastWave because it has the power to appoint two out of the five directors of that company under the shareholders agreement.

- (l) Xudong Haipu is a wholly foreign owned enterprise.

- (m) These companies are wholly-domestic owned enterprises.

The above table lists associates of the Group which, in the opinion of the directors of the Company, principally affected the results of the year or formed a substantial portion of the net assets of the group. To give details of other associates would, in the opinion of the directors of the Company, result in particulars of excessive length.

21. GOODWILL

	HK\$'000
As at 1 January 2021	505,574
Arising on acquisition of subsidiaries (note 40)	75,912
Exchange realignment	15,260
As at 31 December 2021 and 1 January 2022	596,746
Arising on acquisition of a subsidiary (note 40)	128,071
Impairment loss recognised for the year	(36,442)
Exchange realignment	(44,328)
As at 31 December 2022	644,047

Notes to the Consolidated Financial Statements

For the year ended 31 December 2022

21. GOODWILL (Continued)

Impairment Tests for Cash-generating Units Containing Goodwill

Goodwill acquired has been allocated for impairment testing purposes to the following cash generating units ("CGU"):

- Zhejiang Jianju Xianle Pharmaceutical Company Limited ("Zhejiang Xianle")
- Wuhan Kernel Bio-tech Co., Ltd. ("Wuhan Kernel")
- Hubei Wellness Pharmaceutical Co., Ltd. ("Hubei Wellness")
- Beijing Rui Yao Technology Limited ("Beijing Rui Yao")
- Beijing Jiu He Pharmaceutical Limited ("Jiu He")
- Tianjin Jingming New Technology Development Co., Ltd. ("Tianjin Jingming")
- Xi'an Beilin Pharmaceutical Co., Ltd. ("Xi'an Beilin")
- Cangzhou Huachen BioTech Co., Ltd ("Huachen BioTech")
- Beijing Puer Weiye Biotechnology Co., Ltd ("Puer Weiye")
- Hubei Bafeng Pharmaceutical & Chemicals Share Co., Ltd. ("Hubei Bafeng")

The Group tests goodwill annually for impairment, or more frequently if there are indications that goodwill might be impaired.

The carrying amount of goodwill (net of accumulated impairment losses) was allocated to CGU as follows:

	2022 HK\$'000	2021 HK\$'000
Zhejiang Xianle	39,136	54,944
Wuhan Kernel	15,836	17,146
Hubei Wellness	22,847	24,738
Beijing Rui Yao	24,400	26,419
Jiu He	181,853	196,902
Tianjin Jingming	41,569	66,708
Xi'an Beilin	123,737	133,977
Huachen BioTech	59,861	64,815
Puer Weiye	10,249	11,097
Hubei Bafeng	124,559	–
	644,047	596,746

Notes to the Consolidated Financial Statements

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21. GOODWILL *(Continued)*

Impairment Tests for Cash-generating Units Containing Goodwill *(Continued)*

Notes:

Zhejiang Xianle

The recoverable amount of the CGU is determined by reference to the income approach, which is based on discounted cash flow sourced from the financial budgets approved by the management covering a 5-year period, and the discount rate of approximately 16% (2021: 16%) that reflects current market assessment of the time value of money and the risks specific to the CGU. Cash flows beyond 5 year period have been extrapolated using 3% growth rate per annum (2021: 2%). The directors believe that any reasonably possible further change in the key assumptions on which the recoverable amount is based would cause further impairment loss on goodwill and other assets of Zhejiang Xianle.

The impairment loss was caused by under-performance of the CGU from impact of the market conditions and direct cost control after the implementation of lockdown and restriction measures by the PRC local government. The Group's financial budget was revised to reflect current assessment of economic and market conditions.

With the assistance from an independent valuer, the directors determine the recoverable amount which based on value in use calculation to be lower than the carrying amount of CGU to which goodwill is allocated, an impairment loss of goodwill of approximately HK\$15,808,000 was recognised for the year (2021: Nil). No impairment loss of other asset allocated to Zhejiang Xianle is considered necessary.

Wuhan Kernel

The recoverable amount of the CGU is determined by reference to the income approach, which is based on discounted cash flow sourced from the financial budgets approved by management covering a 5-year period, and the discount rate of approximately 14% (2021: 14%) that reflects current market assessment of the time value of money and the risks specific to the CGU. Cash flows beyond 5 year period have been extrapolated using 3% growth rate per annum (2021: 2%). The directors believe that any reasonably possible further change in the key assumptions on which the recoverable amount is based would not cause the carrying amount of the unit to exceed its recoverable amount.

As the recoverable amount was calculated to be exceed the carrying amount of CGU to which goodwill is allocated, no impairment loss was recognised.

Hubei Wellness

The recoverable amount of the CGU is determined by reference to the income approach, which is based on discounted cash flow sourced from the financial budgets approved by the management covering a 5-year period, and the discount rate of approximately 16% (2021: 14%) that reflects current market assessment of the time value of money and the risks specific to the CGU. Cash flows beyond 5 year period have been extrapolated using 3% growth rate per annum (2021: 2%). The directors believe that any reasonably possible further change in the key assumptions on which the recoverable amount is based would not cause the carrying amount of the unit to exceed its recoverable amount.

As the recoverable amount was calculated to be exceed the carrying amount of CGU to which goodwill is allocated, no impairment loss was recognised.

Beijing Rui Yao

The recoverable amount of the CGU is determined by reference to the income approach, which is based on discounted cash flow sourced from the financial budgets approved by the management covering a 5-year period, and the discount rate of approximately 16% (2021: 14%) that reflects current market assessment of the time value of money and the risks specific to the CGU. Cash flows beyond 5 year period have been extrapolated using 3% growth rate per annum (2021: 2%). The directors believe that any reasonably possible further change in the key assumptions on which the recoverable amount is based would not cause the carrying amount of the unit to exceed its recoverable amount.

As the recoverable amount was calculated to be exceed the carrying amount of CGU to which goodwill is allocated, no impairment loss was recognised.

Jiu He

The recoverable amount of the CGU is determined by reference to the income approach, which is based on discounted cash flow sourced from the financial budgets approved by the management covering a 5-year period, and the discount rate of approximately 16% (2021: 14%) that reflects current market assessment of the time value of money and the risks specific to the CGU. Cash flows beyond 5 year period have been extrapolated using 3% growth rate per annum (2021: 2%). The directors believe that any reasonably possible further change in the key assumptions on which the recoverable amount is based would not cause the carrying amount of the unit to exceed its recoverable amount.

As the recoverable amount was calculated to be exceed the carrying amount of CGU to which goodwill and intangible assets are allocated, no impairment loss was recognised.

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For the year ended 31 December 2022

21. GOODWILL (Continued)

Impairment Tests for Cash-generating Units Containing Goodwill (Continued)

Notes: (Continued)

Tianjin Jingming

The recoverable amount of the CGU is determined by reference to the income approach, which is based on discounted cash flow sourced from the financial budgets approved by the management covering a 5-year period, and the discount rate of approximately 17% (2021: 15%) that reflects current market assessment of the time value of money and the risks specific to the CGU. Cash flows beyond 5 year period have been extrapolated using 2% growth rate per annum (2021: 2%). The directors believe that any reasonably possible further change in the key assumptions on which the recoverable amount is based would cause further impairment loss on goodwill and other assets of Tianjin Jingming.

The impairment loss was caused by under-performance of the CGU from impact of the market conditions and direct cost control after the implementation of lockdown and restriction measures by the PRC local government. The Group's financial budget was revised to reflect current assessment of economic and market conditions.

With the assistance from an independent valuer, the directors determine the recoverable amount which based on value in use calculation to be lower than the carrying amount of CGU to which goodwill and intangible assets are allocated, an impairment loss of goodwill of approximately HK\$20,634,000 was recognised for the year (2021: Nil). No impairment loss of other asset allocated to Tianjin Jingming is considered necessary.

Xi'an Beilin

The recoverable amount of the CGU is determined by reference to the income approach, which is based on discounted cash flow sourced from the financial budgets approved by the management covering a 5-year period, and the discount rate of approximately 16% (2021: 14%) that reflects current market assessment of the time value of money and the risks specific to the CGU. Cash flows beyond 5 year period have been extrapolated using 3% growth rate per annum (2021: 2%). The directors believe that any reasonably possible further change in the key assumptions on which the recoverable amount is based would not cause the carrying amount of the unit to exceed its recoverable amount.

As the recoverable amount was calculated to be exceed the carrying amount of CGU to which goodwill and intangible assets are allocated, no impairment loss was recognised.

Huachen BioTech

The recoverable amount of the CGU is determined by reference to the income approach, which is based on discounted cash flow sourced from the financial budgets approved by the management covering a 5-year period, and the discount rate of approximately 16% (2021: 11%) that reflects current market assessment of the time value of money and the risks specific to the CGU. Cash flows beyond 5 year period have been extrapolated using 3% growth rate per annum (2021: 2%). The directors believe that any reasonably possible further change in the key assumptions on which the recoverable amount is based would not cause the carrying amount of the unit to exceed its recoverable amount.

As the recoverable amount was calculated to be exceed the carrying amount of CGU to which goodwill is allocated, no impairment loss was recognised.

Puer Weiye

The recoverable amount of the CGU is determined by reference to the income approach, which is based on discounted cash flow sourced from the financial budgets approved by the management covering a 5-year period, and the discount rate of approximately 16% (2021: 14%) that reflects current market assessment of the time value of money and the risks specific to the CGU. Cash flows beyond 5 year period have been extrapolated using 3% growth rate per annum (2021: 2%). The directors believe that any reasonably possible further change in the key assumptions on which the recoverable amount is based would not cause the carrying amount of the unit to exceed its recoverable amount.

As the recoverable amount was calculated to be exceed the carrying amount of CGU to which goodwill is allocated, no impairment loss was recognised.

Hubei Bafeng

The recoverable amount of the CGU is determined by reference to the income approach, which is based on discounted cash flow sourced from the financial budgets approved by the management covering a 5-year period, and the discount rate of approximately 14% that reflects current market assessment of the time value of money and the risks specific to the CGU. Cash flows beyond 5 year period have been extrapolated using 3% growth rate per annum. The directors believe that any reasonably possible further change in the key assumptions on which the recoverable amount is based would not cause the carrying amount of the unit to exceed its recoverable amount.

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For the year ended 31 December 2022

21. GOODWILL (Continued)

Impairment Tests for Cash-generating Units Containing Goodwill (Continued)

Notes: (Continued)

As the recoverable amount was calculated to be exceed the carrying amount of CGU to which goodwill and intangible assets are allocated, no impairment loss was recognised.

The key assumptions used in the value in use calculations for the cash-generating units are as follows:

Budgeted market share	Average market share in the period immediately before the budget period, plus a growth of 3% (2021: 2%) of market share per year. The values assigned to the assumption reflect past experience and are consistent with the directors' plans for focusing operations in these markets. The directors believe that the planned market share growth per year for the next five years is reasonably achievable.
Budgeted gross margin	Average gross margins achieved in the period immediately before the budget period, increased for expected efficiency improvements. This reflects past experience.

22. PARTICULAR OF SUBSIDIARIES

Particulars of the Group's principal subsidiaries as at 31 December 2022 and 2021 are as follows:

Name	Place of incorporation/operation	Form of business structure	Percentage of effective equity interest and voting power held by the Company		Particulars of issued/paid-up capital	Principal activities
			2022	2021		
Grand Pharm (China) Co., Ltd. ("Grand Pharm (China)") (notes (iv), (vi), (vii), (viii) & (xxvii))	PRC/PRC	Limited liability company	99.84% (indirect)	99.84% (indirect)	Contributed capital RMB470,000,000	Manufacture and sales of pharmaceutical products in the PRC
Wuhan Wuyao Pharmaceutical Co. Ltd. ("Wuhan Wuyao") (notes (i) & (viii))	PRC/PRC	Limited liability company	99.18% (indirect)	99.18% (indirect)	Contributed capital RMB61,000,000	Production and sale of pharmaceutical raw material and chemicals and export of self-made products and related technologies
Wuhan Grand Hoyo Co., Ltd. ("Wuhan Grand Hoyo") (notes (ii), (vii), (xvi), (xxv) and (xxix))	PRC/PRC	Limited liability company	97.67% (indirect)	97.67% (indirect)	Paid up capital RMB50,000,000	Manufacture and distribution of amino acid products
Hubei Grand Fuchi Pharmaceutical and Chemical Company Limited ("Hubei Fuchi") (notes (viii) and (xx))	PRC/PRC	Limited liability company	89.60% (indirect)	89.60% (indirect)	Contributed capital RMB38,990,000	Production and sales of agrochemicals, fine chemicals and chemical medicine
Hubei Grand EBE Bright Eyes Company Limited ("Hubei Grand EBE") (note (viii))	PRC/PRC	Limited liability company	99.84% (indirect)	99.84% (indirect)	Contributed capital RMB114,000,000	Production and sales of ophthalmic gel and eye drops
Zhejiang Xianle (note xxvii)	PRC/PRC	Limited liability company	67.00% (indirect)	67.00% (indirect)	Contributed capital RMB10,000,000	Manufacture and sales of steroid hormones active pharmaceutical ingredients ("APIs") and related Intermediates
Wuhan Kernel (notes (iii), (viii), (xvi) and (xvii))	PRC/PRC	Limited liability company	91.56% (indirect)	91.56% (indirect)	Contributed capital RMB79,200,000	Research and development, production and sale of bio-pesticides and additives

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22. PARTICULAR OF SUBSIDIARIES (Continued)

Name	Place of incorporation/operation	Form of business structure	Percentage of effective equity interest and voting power held by the Company		Particulars of issued/paid-up capital	Principal activities
			2022	2021		
Hubei Wellness (notes (v) & (viii))	PRC/PRC	Limited liability company	99.84% (indirect)	99.84% (indirect)	Contributed capital RMB48,000,000	Manufacture and sales of pharmaceutical products in the PRC
Grand Pharmaceutical Huangshi Feiyun Pharmaceutical Co., Ltd. ("Huangshi Feiyun") (notes (viii) & (ix))	PRC/PRC	Limited liability company	59.90% (indirect)	59.90% (indirect)	Contributed capital RMB125,000,000	Manufacture and sales of pharmaceutical products in the PRC
Beijing Rui Yao (notes (x) & (xii))	PRC/PRC	Limited liability company	99.84% (indirect)	99.84% (indirect)	Contributed capital RMB23,901,750	Investment holding
Beijing Huajin Pharmaceutical Co., Ltd. ("Beijing Huajin") (notes (viii), (x) & (xii))	PRC/PRC	Limited liability company	71.88% (indirect)	71.88% (indirect)	Contributed capital RMB7,886,400	Manufacture and sales of pharmaceutical products in the PRC
Huangshi Fuchi Water Affairs Company Limited ("Fuchi Water") (note (xi))	PRC/PRC	Limited liability company	99.84% (indirect)	99.84% (indirect)	Contributed capital RMB1,000,000	Treatment of sewage in the PRC
Jiuhe (note (xiii))	PRC/PRC	Limited liability company	96.84% (indirect)	96.84% (indirect)	Contributed capital RMB20,000,000	Manufacture and sales of capsules, pharmaceutical intermediates, tablets, granules and soft capsules in the PRC
Tianjin Jingming (note (xiv))	PRC/PRC	Limited liability company	73.18% (indirect)	73.18% (indirect)	Contributed capital RMB1,000,000	Research and development, manufacture and sales of ophthalmic medical devices and disposal surgical product
Zhu Hai Cardionovum Medical Device Co. Ltd. ("Zhu Hai Cardionovum") (note (xv))	PRC/PRC	Limited liability company	77.89% (indirect)	77.89% (indirect)	Contributed capital USD1,000,000	Development, manufacture and sales of ophthalmic medical devices
Xi'an Beilin (note (xviii))	PRC/PRC	Limited liability company	99.84% (indirect)	99.84% (indirect)	Contributed capital RMB27,800,000	Manufacture and sales of Chinese medicine and health food product
Grand Decade (note (xxi))	BVI/BVI	Limited liability company	100% (direct)	100% (direct)	Contributed capital HKD78,000	Investment holding
Tung Yang (note (xxii))	Hong Kong/Hong Kong	Limited liability company	100% (direct)	100% (direct)	Contributed capital HKD27,654,100	Investment holding
Beijing Kun Wu International Business Limited ("Beijing Kun Wu") (note (xxiv))	PRC/PRC	Limited liability company	99.84% (indirect)	99.84% (indirect)	Contributed capital RMB3,800,000	Land holding

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For the year ended 31 December 2022

22. PARTICULAR OF SUBSIDIARIES (Continued)

Name	Place of incorporation/ operation	Form of business structure	Percentage of effective equity interest and voting power held by the Company		Particulars of issued/paid-up capital	Principal activities
			2022	2021		
Huachen BioTech (note (xxx))	PRC/PRC	Limited liability Company	77.94% (indirect)	77.94% (indirect)	Contributed capital RMB100,000,000	Research and development, sales and technical services of amino acid products
East Ocean Medical (notes (xxvii) and (xxxii))	Hong Kong/ Hong Kong	Limited liability Company	100% (direct)	100% (direct)	Contributed capital HKD117,000,000	Investment holding
Puer Weiye (note (xxxii))	PRC/PRC	Limited liability company	99.84% (indirect)	99.84% (indirect)	Contributed capital RMB18,000,000	Radioactive Pharmaceutical production and trading of radioactive pharmaceutical
Hubei Bafeng (note (xxxiii))	PRC/PRC	Limited liability company	99.84% (indirect)	–	Contributed capital RMB30,000,000	Research and development, production and operation of amino acid APIs and preparations

Notes:

(a) Detail of subsidiaries

None of the subsidiaries had any debt securities outstanding at the end of the year or at any time during the year.

- (i) Pursuant to a shareholders' resolution dated 4 January 2011, the registered capital of Wuhan Wuyao was increased from RMB31,000,000 to RMB61,000,000. Then, Grand Pharm (China) injected additional capital of RMB30,000,000 into Wuhan Wuyao. As a result, the Group's equity interest in Wuhan Wuyao was increased from 72.72% to 73.18%. The registration of this transaction under the PRC government authority was completed on 20 January 2011.
- (ii) Wuhan Grand Hoyo became a subsidiary of the Group in 2010.

During the year ended 31 December 2010, a further 6.4% equity interest in Wuhan Grand Hoyo was acquired by Grand Pharm (China). As a result, the effective equity interest in Wuhan Grand Hoyo held by the Group was increased from 41.26% to 45.97%.
- (iii) Grand Pharm (China) entered into an agreement with Wuhan Optics to acquire 81.0263% equity interest in Wuhan Kernel on 22 September 2011. The effective equity interest in Wuhan Kernel held by the Group is 59.69% upon the completion of the acquisition on 17 November 2011.
- (iv) Pursuant to an agreement dated 14 February 2012, the Group acquired additional 2.28% equity interest in Grand Pharm (China) from the non-controlling interests of Grand Pharm (China) at a cash consideration of RMB9.66 million (approximately HK\$11.91 million). The Group recognised a decrease in non-controlling interests and other reserve of approximately HK\$18,047,000 and HK\$6,133,000 respectively.
- (v) Grand Pharm (China) entered into an agreement with 湖北絲寶藥業有限公司 to acquire 100% equity interest in Hubei Wellness Pharmaceutical Co., Ltd. on 22 November 2012. The effective equity interest in Hubei Wellness held by the Group is 99.60% upon the completion of the acquisition on 22 November 2012.
- (vi) Pursuant to share transfer agreement dated on 17 December 2012, the Group further entered into an agreement to acquire approximately 20.26% equity interest in Grand Pharm (China) at the consideration of RMB136.40 million (approximately HK\$169.66 million) (representing approximately RMB6.73 million per each percentage of equity interest in Grand Pharm (China)). This acquisition had been completed on 28 December 2012. Immediately after completion of this acquisition on 28 December 2012, the equity interest held by the Group in Grand Pharm (China) was approximately 96.21%.

Notes to the Consolidated Financial Statements

For the year ended 31 December 2022

22. PARTICULAR OF SUBSIDIARIES *(Continued)*

Notes: *(Continued)*

(a) Detail of subsidiaries *(Continued)*

- (vii) Pursuant to share transfer agreement dated on 21 December 2012, the Group further entered into an agreement to acquire approximately 3.39% equity interest in Grand Pharm (China) at the consideration of RMB20.06 million (representing approximately RMB5.92 million per each percentage of equity interest in Grand Pharm (China)). This acquisition had been completed on 28 December 2012. Immediately after completion of this acquisition on 28 December 2012, the equity interest held by the Group in Grand Pharm (China) was approximately 99.6%. As a result of the acquisition detail on note (iv), (vi) & (vii), the Group's equity interest in Wuhan Wuyao was increased from 73.18% to 98.94%; Wuhan Grand Hoyo was increased from 45.97% to 62.15%; Hubei Fuchi was increased from 60.72% to 82.09%; Hubei Grand EBE was increased from 73.67% to 99.60% and Wuhan Kemel was increased from 59.69% to 80.70%.
- (viii) Pursuant to share transfer agreement dated on 10 October 2014, Grand Pharm (China) had increased the paid-up capital to RMB470,000,000. The Group had paid RMB285,000,000 during the year ended 2014. After the payment of additional paid-up capital, the Group further acquired approximately 0.24% equity interest in Grand Pharm (China) at the consideration of RMB1.134 million (representing approximately RMB4.725 million per each percentage of equity interest in Grand Pharm (China)). This acquisition had been completed on 23 October 2014. Immediately after completion of this acquisition on 23 October 2014, the equity interest held by the Group in Grand Pharm (China) was approximately 99.84%. As a result of the acquisition detail on notes (iv), (vi) & (vii), the Group's equity interest in Wuhan Wuyao was increased from 98.94% to 99.18%; Wuhan Grand Hoyo was increased from 62.15% to 62.30%; Hubei Fuchi was increased from 82.09% to 82.29%; Hubei Grand EBE was increased from 99.60% to 99.84%, Wuhan Kemel was increased from 80.70% to 80.90%. Hubei Wellness was increased from 99.60% to 99.84%; Huangshi Feiyun was increased from 59.76% to 59.90% and Beijing Huajin was increased from 50.80% to 50.92%.
- (ix) Pursuant to an agreement dated 22 February 2013, the Group established and owned 60% equity interest in Huangshi Feiyun. The effective equity interest in Huangshi Feiyun held by the Group is 59.76% on 22 February 2013.
- (x) Pursuant to an agreement dated 16 July 2013, Grand Pharm (China) entered into an agreement with Beijing Kun Wu International Business Limited to acquire 70.84% equity interest in Beijing Rui Yao on 31 October 2013. Beijing Rui Yao also owning 72% equity interest in Beijing Huajin without any encumbrances and potential disputes, and upon completion of Rui Yao acquisition, Grand Pharm (China) will own approximately 70.56% equity interest in Rui Yao and approximately 50.80% equity interest in Beijing Huajin indirectly through Rui Yao.
- (xi) The Group established and owned 99.84% equity interest in Fuchi Water. The effective equity interest in Fuchi Water held by the Group is 99.84% on 30 September 2014.
- (xii) Pursuant to an agreement dated 11 December 2014, Grand Pharm (China) entered into an agreement with Beijing Kun Wu International Business Limited to acquire 29.16% equity interest in Beijing Rui Yao on 1 January 2015. Beijing Rui Yao also owning 72% equity interest in Beijing Huajin without any encumbrances and potential disputes, and upon completion of Rui Yao additional acquisition, the Group will own approximately 99.84% equity interest in Rui Yao and approximately 71.88% equity interest in Beijing Huajin indirectly through Rui Yao.
- (xiii) Pursuant to an agreement dated 17 July 2015, Grand Pharm (China) entered into an agreement with Ningbo CDH Jinxiu Investment Management Company Limited (the "Ningbo CDH") to acquire 67.00% equity interest in Jiuhe on 31 July 2015 and upon completion of Jiuhe acquisition, the Group will own approximately 66.89% equity interest in Jiuhe. During the year ended 2015, a further 30.00% equity interest in Jiuhe was acquired by Grand Pharm (China). As a result, the effective equity interest in Jiuhe held by the Group was increased from 66.89% to 96.84%.
- (xiv) Pursuant to an agreement dated 22 December 2014, Grand Pharm (China) entered into an agreement with Wu Liang and Fan Li Jin to acquire 73.30% equity interest in Tianjin Jingming on 1 January 2015. The effective equity interest in Tianjin Jingming held by the Group is 73.18% on 1 January 2015.
- (xv) The Group established and owned 77.89% equity interest in Zhu Hai Cardionovum. The effective equity interest in Zhu Hai Cardionovum held by the Group is 77.89% on 9 October 2015.

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For the year ended 31 December 2022

22. PARTICULAR OF SUBSIDIARIES (Continued)

Notes: (Continued)

(a) Detail of subsidiaries (Continued)

- (xvi) During the year ended 31 December 2016, the Group increase effective equity interest by 13.44% in Huang Gang Fuchi Pharmaceutical Co., Ltd. from the non-controlling interests at consideration of three subsidiaries shares of 2.59% in Wuhan Grand Hoyo; 2.11% in Wuhan Kernel and 3.47% in Hubei Grand Bio-technology Limited.
- (xvii) During the year ended 31 December 2016, the Group acquired additional 1.55% and 16.05% equity interest in Wuhan Kernel from the non-controlling interests of Wuhan Kernel at a cash consideration of RMB3,000,000 and RMB20,180,000 (approximately HK\$3,362,000 and HK\$22,614,000). The Group recognised an decrease in non-controlling interests and decrease in other reserve of approximately HK\$28,165,000 and HK\$2,059,000 respectively.
- (xviii) Pursuant to an agreement dated 29 June 2016, Grand Pharm (China) entered into an agreement with independent third parties to acquire 77.21% equity interest in Xi'an Beilin on 13 July 2016. Xi'an Beilin also owing 100%, 100% and 79% equity interest in Shenxi Xin Beilin Medical Company Limited (the "Shenxi Xin Beilin"), Xi'an Hanyuan Shiye Company Limited (the "Xi'an Hanyuan Shiye") and Xi'an Beilin Biological Technology Company Limited (the "Xi'an Beilin Biological") without any encumbrances and potential disputes, and upon completion of Xi'an Beilin acquisition, the Group will own approximately 77.09% equity interest in Xi'an Beilin and approximately 77.09%, 77.09% and 60.91% equity interest in Shenxi Xin Beilin, Xi'an Hanyuan Shiye and Xi'an Beilin Biological indirectly through Xi'an Beilin. During the year ended 31 December 2016, the Group derecognised Xi'an Beilin Biological Technology.

During the year ended 31 December 2017, Grand Pharm (China) acquire additional 22.79% equity interest in Xi'an Beilin from the non-controlling interests of Xi'an Beilin at a cash consideration of RMB131,512,000 (approximately HK\$151,606,000), and upon completion of the further acquisition, the Group will own approximately 99.84% equity interest in Xi'an Beilin and approximately 99.84% and 99.84% equity interest in Shenxi Xin Beilin and Xi'an Huanyuan Shiye indirectly through Xi'an Beilin. The Group recognised a decrease in non-controlling interests and decrease in other reserve of approximately HK\$113,123,000 and HK\$38,484,000 respectively.

- (xix) During the year ended 31 December 2017, Wuhan Kernel had increased the contributed capital to RMB79,200,000. After the payment of additional of contributed capital, Grand Pharm (China) disposed 4.9% equity interest in Wuhan Kernel to independent third party at a cash consideration of RMB12,740,000 (approximately HK\$14,687,000). Upon the completion of the partial disposal, the Group will own approximately 91.56% equity interest in Wuhan Kernel indirectly. The Group recognised an increase in non-controlling interests and increase in other reserve of approximately HK\$5,832,000 and HK\$8,853,000 respectively.
- (xx) During the year ended 31 December 2017, Grand Pharm (China) acquire additional approximately 7.32% equity interest in Hubei Fuchi from the non-controlling interests of Hubei Fuchi at a cash consideration of approximately RMB11,679,000 (approximately HK\$13,463,000), and upon completion of the further acquisition, the Group will own approximately 89.60% equity interest in Hubei Fuchi. The Group recognised a decrease in non-controlling interests and decrease in other reserve of approximately HK\$7,506,000 and HK\$5,957,000 respectively. As a result of the acquisition, the Group's equity interest in Wuhan Grand Hoyo was increased from 59.71% to 60.80%; and Hubei Fuchi was increased from 82.29% to 89.60%.
- (xxi) During the year ended 31 December 2018, the Company establish Grand Decade for the purpose of acquiring associate, Grand Pharma Sphere.
- (xxii) During the year ended 31 December 2018, the Company acquire 100% equity interest in Tung Yang at aggregate consideration HK\$2,004,227,000. Upon completion, Xudong Haipu becomes an associate of the Company.
- (xxiii) Pursuant to an agreement dated 20 November 2019, the Group acquired additional of 24.6% equity interest in Wuhan Grand Hoyo from the non-controlling interests of Wuhan Grand Hoyo at a cash consideration of RMB73,724,700 (approximately HK\$83,630,000), and upon completion of the further acquisition, the effective equity interest in Wuhan Grand Hoyo held by the Group is approximately 84.76%. The Group recognised a decrease in non-controlling interests and other reserve of approximately HK\$77,803,000 and HK\$5,827,000 respectively.

Notes to the Consolidated Financial Statements

For the year ended 31 December 2022

22. PARTICULAR OF SUBSIDIARIES (Continued)

Notes: (Continued)

(a) Detail of subsidiaries (Continued)

- (xxiv) During the year ended 31 December 2019, Grand Pharm (China) entered into an agreement with 北京瑞雅科國際企業管理有限公司 to acquire 100% equity interest in Beijing Kun Wu. The effective equity interest in Beijing Kun Wu held by the Group is 99.84% upon the completion of the acquisition on 1 May 2019.
- (xxv) Pursuant to an agreement dated 16 July 2020, the Group acquired additional of 3.0% equity interest in Wuhan Grand Hoyo from the non-controlling interests of Wuhan Grand Hoyo at a cash consideration of RMB8,990,800 (approximately HK\$10,102,000), and upon completion of the further acquisition, the effective equity interest in Wuhan Grand Hoyo held by the Group is approximately 87.69%.
- (xxvi) The above table lists the subsidiaries of the Group, which, in the opinion of the Directors, principally affected the results or assets of the Group. To give details of other subsidiaries would, in the opinion of the directors result in particulars of excessive lengths.
- (xxvii) These companies are foreign and domestic owned enterprises.
- (xxviii) Except the companies listed in note (xxvii), all other companies incorporated and operating in PRC are wholly domestic owned enterprises.
- (xxix) Pursuant to an agreement dated 31 July 2021, the Group acquired additional of 9.98% equity interest in Wuhan Grand Hoyo from the non-controlling interests of Wuhan Grand Hoyo at a cash consideration of RMB51,980,000 (approximately HK\$63,020,000), and upon completion of the further acquisition, the effective equity interest in Wuhan Grand Hoyo held by the Group is approximately 97.67%.
- (xxx) In October 2021, Hubei Grand Life Science & Technology Co., Ltd. ("Grand Life Science") of the Group entered into an equity acquisition agreement with Hebei Huayang Biological Technology Co., Ltd.*, pursuant to which Grand Life Science will acquire 80% equity interest in Cangzhou Huachen BioTech Co., Ltd.* (滄州華農生物科技有限公司, "Huachen BioTech") at a consideration of RMB107,200,000 (equivalent to approximately HK\$130,852,000) to establish a presence in the glycine industry chain and lay a foundation for the establishment of the Group's leading position in the amino acid industry.
- (xxxi) East Ocean Medical became a wholly owned subsidiary of the Group in 2021. During the year ended 31 December 2021, a further 752 shares of East Ocean Medical was acquired by the Company.
- (xxxii) In November 2020, the Group and Puer Weiye entered into a share purchase agreement, pursuant to which the Group will acquire 100% equity interests in Puer Weiye for a cash consideration of RMB10,000,000 (equivalents to HKD12,249,000) subject to conditions precedent. Upon completion of this acquisition, the effective equity interest in Puer Weiye held by the Group is approximately 99.84%.
- (xxxiii) In July 2022, the Group entered into an equity acquisition agreement with Hubei Bafeng, pursuant to which the Group will acquire 100% equity interest in Hubei Bafeng at a cash consideration of RMB270,000,000 (equivalents to HK\$313,900,000) after the relevant conditions as agreed in the acquisition agreement are fulfilled. Upon completion of acquisition, the effective equity interest in Hubei Bafeng held by the Group is approximately 99.84%. The date of completion of acquisition is 12 August 2022. Details refer to note 40(b).

(b) Detail of non-wholly owned subsidiaries that have material non-controlling interests

Name of Company	Place of incorporation/ registration and operation	Proportion of ownership interests and voting rights held by non-controlling interests		Profits allocated to non-controlling interests		Accumulated non-controlling interests	
		2022	2021	2022	2021	2022	2021
Wuhan Grand Hoyo	PRC/PRC	2.33%	2.33%	5,920	2,765	17,464	12,680
Jiuhe	PRC/PRC	3.16%	3.16%	9,539	5,828	6,428	18,830
Wuhan Kernel	PRC/PRC	8.44%	8.44%	4,922	3,439	27,475	27,907

Summarised financial information in respect of each of the Group's subsidiaries that has material non-controlling interests is set out below. The summarised financial information below represents amounts before intragroup eliminations.

Notes to the Consolidated Financial Statements

For the year ended 31 December 2022

22. PARTICULAR OF SUBSIDIARIES (Continued)

Notes: (Continued)

(b) Detail of non-wholly owned subsidiaries that have material non-controlling interests (Continued)

Wuhan Grand Hoyo and its subsidiaries

	2022 HK\$'000	2021 HK\$'000
Current assets	998,895	587,842
Non-current assets	193,632	72,881
Current liabilities	(306,288)	(115,335)
Non-current liabilities	(136,720)	(1,034)
Equity attributable to owners of the Company	732,055	531,674
Non-controlling interests	17,464	12,680
Revenue	1,494,335	1,056,972
Other revenue and income	22,302	9,052
Expenses	(1,262,556)	(947,347)
Profit for the year	254,081	118,677
Profit attributable to owners of the Company	248,161	115,912
Profit attributable to non-controlling interests	5,920	2,765
Total comprehensive income for the year	205,165	134,158
Total comprehensive income attributable to owners of the Company	200,381	131,032
Total comprehensive income attributable to non-controlling interests	4,784	3,126
Net cash inflow from operating activities	201,029	46,748
Net cash outflow from investing activities	(111,201)	(90,754)
Net cash outflow from financing activities	(81,840)	(1,044)
Effect of foreign exchange rate charges	(4,396)	6,866
Net cash inflow/(outflow)	3,592	(38,184)

Notes to the Consolidated Financial Statements

For the year ended 31 December 2022

22. PARTICULAR OF SUBSIDIARIES (Continued)

Notes: (Continued)

(b) Detail of non-wholly owned subsidiaries that have material non-controlling interests (Continued)

Wuhan Kernel

	2022 HK\$'000	2021 HK\$'000
Current assets	323,365	193,087
Non-current assets	283,200	370,583
Current liabilities	(199,366)	(187,183)
Non-current liabilities	(81,666)	(41,868)
Equity attributable to owners of the Company	298,058	306,712
Non-controlling interests	27,475	27,907
Revenue	301,870	261,908
Other revenue and income	16,764	18,717
Expenses	(260,322)	(238,942)
Profit for the year	58,312	41,683
Profit attributable to owners of the Company	53,390	38,244
Profit attributable to non-controlling interests	4,922	3,439
Total comprehensive (loss)/income for the year	(4,384)	45,930
Total comprehensive (loss)/income attributable to owners of the Company	(4,014)	42,434
Total comprehensive (loss)/income attributable to non-controlling interests	(370)	3,496
Dividend paid to non-controlling interest	(397)	(227)
Net cash inflow from operating activities	54,958	82,284
Net cash outflow from investing activities	(170,827)	(96,324)
Net cash inflow from financing activities (excluding dividend paid to non-controlling interest)	111,900	3,275
Effect of foreign exchange rate charges	(6,481)	10,112
Net cash outflow	(10,847)	(880)

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22. PARTICULAR OF SUBSIDIARIES (Continued)

Notes: (Continued)

(b) Detail of non-wholly owned subsidiaries that have material non-controlling interests (Continued)

Jiu He

	2022 HK\$'000	2021 HK\$'000
Current assets	515,657	422,139
Non-current assets	63,197	620,814
Current liabilities	(374,814)	(363,453)
Non-current liabilities	(623)	(82,713)
Equity attributable to owners of the Company	196,989	577,957
Non-controlling interests	6,428	18,830
Revenue	1,039,003	905,386
Other revenue and income	964	5,324
Expenses	(738,109)	(725,987)
Profit for the year	301,858	184,723
Profit attributable to owners of the Company	292,319	178,895
Profit attributable to non-controlling interests	9,539	5,828
Total comprehensive (loss)/income for the year	(179,145)	203,286
Total comprehensive (loss)/income attributable to owners of the Company	(173,484)	196,872
Total comprehensive (loss)/income attributable to non-controlling interests	(5,661)	6,414
Dividend paid to non-controlling interest	(6,769)	(4,559)
Net cash inflow from operating activities	259,525	140,633
Net cash inflow/(outflow) from investing activities	10,227	(4,092)
Net cash outflow from financing activities (excluding dividend paid to non-controlling interest)	(219,084)	(173,119)
Effect of foreign exchange rate charges	(7,882)	10,797
Net cash inflow/(outflow)	36,017	(30,340)

Significant restrictions

Cash and short-term deposits of RMB held in the PRC are subject to local exchange control regulations. These local exchange control regulations provide for restrictions on exporting capital from the PRC, other than through normal dividends.

(c) Change in ownership interests in Wuhan Grand Ho Yo and its subsidiaries

During the year ended 31 December 2021, the Group acquired 9.98% effective equity interests of from a non-controlling shareholder, which held 10% interests of Wuhan Grand Ho Yo and its subsidiaries, pursuant to an equity transfer agreement at a cash consideration of RMB51,980,000 (approximately HK\$63,020,000).

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23. INTANGIBLE ASSETS

	Pharmaceutical technology HK\$'000	Patent, trademark and capitalised development cost HK\$'000	Acquired Patent rights HK\$'000	Total HK\$'000
Cost				
As at 1 January 2021	7,489	792,102	171,794	971,385
Acquisition of subsidiaries (note 40)	–	–	50,380	50,380
Addition	–	37,058	27,739	64,797
Exchange realignment	248	26,238	3,930	30,416
As at 31 December 2021 and 1 January 2022	7,737	855,398	253,843	1,116,978
Acquisition of subsidiaries (note 40)	–	70,255	–	70,255
Addition	–	2,297	429,071	431,368
Exchange realignment	(591)	(67,667)	(24,042)	(92,300)
As at 31 December 2022	7,146	860,283	658,872	1,526,301
Accumulated amortisation and impairment loss				
As at 1 January 2021	2,088	–	87,454	89,542
Provided for the year	381	–	16,643	17,024
Exchange realignment	75	–	573	648
As at 31 December 2021 and 1 January 2022	2,544	–	104,670	107,214
Provided for the year	368	–	31,973	32,341
Exchange realignment	(205)	–	(11,041)	(11,246)
As at 31 December 2022	2,707	–	125,602	128,309
Net carrying amounts				
As at 31 December 2022	4,439	860,283	533,270	1,397,992
As at 31 December 2021	5,193	855,398	149,173	1,009,764

The economic useful life of recognised intangible assets are as follows:

Intangible assets	Economic useful life
Pharmaceutical technology	20 years
Acquired patent rights	5 years–7 years
Patents, trademarks and capitalised development cost	indefinite useful lives

The patents and trademarks will expire in the coming two to five years and subject to renewal. The directors of the Company are not aware of any expected impediment with respect to the renewal of the patents and trademarks and consider that the possibility of failing in renewal is remote and the patents and trademarks will generate net cash flows for the Group for an indefinite period. Therefore, the patents and trademarks are treated as having an indefinite useful life.

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For the year ended 31 December 2022

23. INTANGIBLE ASSETS *(Continued)*

The carrying amount of intangible assets were allocated to CGU as follow:

	2022 HK\$'000	2021 HK\$'000
Jiuhe	509,275	551,420
Tianjin Jingming	53,042	57,431
Xi'an Beilin	193,477	209,489
East Ocean	38,816	38,816
Shenming Medical	10,102	11,564
Hubei Bafeng	68,328	–
	873,040	868,720

For the purposes of impairment testing, goodwill, patents and trademarks above have been allocated to the acquired cash generating units, details of impairment assessment were set out in note 21. During the years ended 31 December 2022 and 2021, the management of the Group determined that there was no impairment loss to patents and trademarks.

24. DEFERRED TAX ASSETS

The following are the major deferred tax assets recognised and the movements thereof during the current and prior years:

	ECL provision HK\$'000	Total HK\$'000
As at 1 January 2021	25,162	25,162
Arising on acquisition of subsidiaries (note 40)	69	69
Charged to profit or loss	(1,373)	(1,373)
Exchange realignment	750	750
As at 31 December 2021 and 1 January 2022	24,608	24,608
Credited to profit or loss	1,833	1,833
Exchange realignment	(1,856)	(1,856)
As at 31 December 2022	24,585	24,585

As at 31 December 2022, the Group has unused tax losses of approximately HK\$567,126,000 (2021: HK\$615,936,000) available to offset against future profits. No deferred tax assets have been recognised in respect of the remaining tax losses of approximately HK\$567,126,000 (2021: HK\$615,936,000) due to the unpredictability of future profit streams.

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25. EQUITY INSTRUMENTS AT FAIR VALUE THROUGH OTHER COMPREHENSIVE INCOME

	2022 HK\$'000	2021 HK\$'000
Unlisted equity securities (note a)	542,477	145,685
Listed equity securities (note b)	24,843	–
	567,320	145,685

Note:

- (a) As at 31 December 2022 and 2021, the fair value of the unlisted equity securities was arrived on the basis of valuations carried out by an independent professional valuer, details of movements are set out in note 5(b)(vi).
- (b) As at 31 December 2022, the fair value of the listed equity securities was determined with reference to quoted market bid prices.

26. FINANCIAL ASSETS AT FAIR VALUE THROUGH PROFIT OR LOSS

	2022 HK\$'000	2021 HK\$'000
Listed equity security in HK (note (a))	14,499	33,332
Listed equity security in Australia (note (a))	423,596	905,156
Investment at fair value (note (b))	600,487	174,480
	1,038,582	1,112,968

Notes:

- (a) Fair value was determined with reference to quoted market bid prices.
- (b) As at 31 December 2022 and 2021, the Group's investment in wealth management products were designed at financial assets at fair value through profit or loss of which fair values are determined by reference to the quoted market bid prices available on the relevant PRC market.

The financial assets at fair value through profit or loss were classified as level 1 of fair value hierarchy.

27. INVENTORIES

	2022 HK\$'000	2021 HK\$'000
Raw materials	306,897	285,761
Work-in-progress	543,611	335,679
Finished goods	489,958	495,716
	1,340,466	1,117,156

Notes to the Consolidated Financial Statements

For the year ended 31 December 2022

28. TRADE AND OTHER RECEIVABLES

	2022 HK\$'000	2021 HK\$'000
Trade receivables, net	1,093,854	967,703
Bills receivables	819,880	829,402
Deposits and prepayments (note (a))	1,853,237	1,104,631
Other tax receivables	68,700	63,528
Other receivables, net	190,735	162,293
	4,026,406	3,127,557
Less: non-current portion prepayments	(1,029,022)	(466,107)
Current portion	2,997,384	2,661,450

Notes:

- (a) During the year ended 31 December 2022, prepayment amounted to approximately HK\$947,408,000 (2021: HK\$658,719,000) which mainly comprised of the prepayment for the acquisition of technical know-how, and the deposits amounted to approximately HK\$156,242,000 (2021: HK\$169,885,000) for trade and rental deposits. The prepayments mainly paid to certain third-party pharmaceutical institutes located in the PRC, Australia, Canada and Germany (2021: PRC and Australia) for the acquisition of certain technical knowhow for certain medication pursuant to agreements entered into between the Group and those pharmaceutical institutes.

Specially, as at 31 December 2022, the deposits and prepayment mainly comprise of the followings:

- (i) The Group had prepaid of approximately USD25,000,000 (2021: USD25,000,000) (equivalent to HK\$195,000,000 (2021: HK\$193,762,000)) to Telix Pharmaceuticals Limited related to the milestones payments pursuant to the licensing agreement. Details of which are stated in the Company published announcement dated 1 November 2020.
- (ii) The Group had prepaid of approximately EUR30,000,000 (equivalent to HK\$245,831,000) to ITM Isotope Technologies Munich SE related to the milestones payments of acquisition and license of certain technical know-how. Details of which are stated in the Company published announcement dated 27 December 2021.
- (iii) The Group had prepaid of approximately EUR10,000,000 (equivalent to HK\$83,843,000) to InnovHeart S.r.l. related to the upfront payments of acquisition of certain technical know-how.
- (iv) The Group had prepaid of approximately USD5,489,000 (2021: USD5,489,000) (equivalent to HK\$42,884,000 (2021: HK\$42,884,000)) to Conavi Medical Inc. related to the milestones payments of acquisition of certain technical know-how.
- (v) The Group had paid approximately HK\$156,243,000 (2021: HK\$155,490,000) to Natixis as deposit for the Grand Pharma Sphere Pte Ltd. ("Sirtex HoldCo") project.
- (vi) The Group had recognised a prepayment of approximately USD17,718,000 (equivalent to approximately HK\$138,420,000) related to transfer of equity interest of CNCB Healthcare Investment Fund II L.P. (the "Fund"). Please refer to note 48 for further details.

Notes to the Consolidated Financial Statements

For the year ended 31 December 2022

28. TRADE AND OTHER RECEIVABLES *(Continued)*

The Group generally allows a credit period of 30–180 days (2021: 30–180 days) to its trade customers. The Group does not hold any collaterals over the trade and other receivables. The following is an aging analysis of trade receivables presented based on the invoice date at the reporting date. The bills receivables were all with maturity within 180 days from the reporting date.

	2022	2021
	HK\$'000	HK\$'000
Trade receivables	1,155,195	1,070,634
Less: allowance for ECL	(61,341)	(102,931)
Total trade receivables	1,093,854	967,703

The ageing analysis of the trade receivables is as follows:

	2022	2021
	HK\$'000	HK\$'000
Within 90 days	788,026	738,650
91–180 days	218,252	155,539
181–365 days	87,576	73,514
	1,093,854	967,703

As of 1 January 2021, the carrying amount of trade receivables from contracts with customers amounted to HK\$815,265,000.

Notes to the Consolidated Financial Statements

For the year ended 31 December 2022

28. TRADE AND OTHER RECEIVABLES (Continued)

	2022 HK\$'000	2021 HK\$'000
Other receivables	221,168	208,435
Less: allowance for ECL	(30,433)	(46,142)
Total other receivables	190,735	162,293

Allowance for ECL in respect of trade and other receivables are recorded using an allowance account unless the Group is satisfied that recovery of the amount is remote, in which case the impairment loss is written off against trade and other receivable balances directly.

The Group does not hold any collateral or other credit enhancement over its trade and other receivables balances. Trade and other receivables are non-interest bearing.

The Directors considered that the residual amounts of trade and other receivables are fully recoverable and no provision for impairment.

29. CASH AND CASH EQUIVALENTS AND PLEDGED BANK DEPOSITS

	2022 HK\$'000	2021 HK\$'000
Cash in banks	1,443,957	1,752,823
Cash on hand	57	37
	1,444,014	1,752,860

At the end of the reporting period, cash and cash equivalents comprise of the followings:

	2022 HK\$'000	2021 HK\$'000
HK\$	19,782	8,299
USD	121,402	111,744
Australian dollars (the "AUD")	2,182	3,801
Euro dollars (the "EURO")	621	10
RMB	1,300,027	1,629,006
	1,444,014	1,752,860

As at 31 December 2022, bank deposits of approximately HK\$1,357,000 (2021: HK\$7,645,000) are pledged as collateral for bills payables and bank borrowings respectively.

As at 31 December 2022, the annual effective interest rate on pledged bank deposits is 1.15% (2021: 1.18%).

The remittance of cash and cash equivalents denominated in RMB out of the PRC is subject to the foreign exchange control restrictions imposed by the government of the PRC.

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30. TRADE AND OTHER PAYABLES

	2022 HK\$'000	2021 HK\$'000
Trade payables	687,731	549,963
Bills payables	185,129	184,535
Accruals and other payables	1,517,066	1,943,515
Other tax payables	98,201	193,746
Total	2,488,127	2,871,759

The following is an ageing analysis of trade payables presented based on the invoice date at the end of the reporting period.

	2022 HK\$'000	2021 HK\$'000
Within 90 days	516,952	300,002
Over 90 days	170,779	249,961
	687,731	549,963

The average credit period on purchases of goods is 90 days.

The bills payables are mature within 180 days from the end of the reporting period.

31. CONTRACT LIABILITIES

	2022 HK\$'000	2021 HK\$'000
Amount received in advance in relation to sales of pharmaceutical products (note)	318,824	202,106

Notes:

- (a) As at 1 January 2021, contract liabilities amounted to approximately HK\$269,049,000.
- (b) Contract liabilities in relation to sales of finished goods are expected to be settled within one year. The entire amount of contract liabilities as at 1 January 2022 was all recognised as revenue during current year.

Notes to the Consolidated Financial Statements

For the year ended 31 December 2022

32. BANK AND OTHER BORROWINGS

	2022 HK\$'000	2021 HK\$'000
Bank borrowings (secured)	3,741,383	2,849,285
Other borrowing (unsecured)	664,031	777,256
	4,405,414	3,626,541
Carrying amount repayable:		
On demand or within one year	3,243,126	2,116,471
More than one year but not exceeding two years	910,705	1,490,794
More than two years but not more than five years	251,583	19,276
	4,405,414	3,626,541
Less: non-current portion	1,162,288	1,510,070
Current portion	3,243,126	2,116,471

As at 31 December 2022 and 2021, certain bank loans are guaranteed by China Grand Enterprises Incorporation, a related company with common controlling shareholder of the Company, and secured by the plant and machinery, buildings, right-of-use assets, interests in subsidiaries and pledged bank deposits of the Group in the PRC as detailed in note 43.

On 29 April 2021 and 23 June 2021, the Group has borrowed secured bank borrowings of HK\$430,000,000 and USD75,000,000 (equivalent to HK\$582,098,000) that were charged at fixed interest rate of 1.4% plus HIBOR and 1.6% plus HIBOR respectively.

The Group has entered into the TRS transaction with Natixis during the year ended 31 December 2021. As a result, unsecured other borrowings of USD100,000,000 (equivalent to HK\$777,256,000) was raised. The Group shall pay a floating amount to Natixis, on a semi-annual basis, calculated with reference to the Equity Notional Amount at the USD-LIBOR-BBA for a designated maturity of 6 months (subject to a minimum of zero) plus a spread of 2.5% per annum (for the first two years) or 4.5% per annum (for the period after the first two years).

Except above, remaining borrowings of the Group are denominated in RMB.

As at 31 December 2022 and 2021, the bank loans are granted by banks in the PRC and Hong Kong.

Except for the bank loans of approximately HK\$1,952,531,000 (2021: HK\$226,042,000) that were charged at fixed interest rate 2.70% to 5.50% (2021: 2.18% to 6.89%) per annum, all other bank loans bear variable interest rates from 2.70% to 7.68% (2021: 3.50% to 6.89%) per annum.

Notes to the Consolidated Financial Statements

For the year ended 31 December 2022

33. LEASE LIABILITIES

The following table shows the remaining contractual maturities of the Group's lease liabilities at the current reporting periods and at the date of transition of HKFRS 16:

	As at 31 December 2022		As at 31 December 2021	
	Present value of the minimum lease payments HK\$'000	Total minimum lease payments HK\$'000	Present value of the minimum lease payments HK\$'000	Total minimum lease payments HK\$'000
Within 1 year	9,785	13,559	5,728	6,976
After 1 year but within 2 years	9,663	12,838	4,392	5,285
After 2 years but within 5 years	24,370	30,638	7,163	8,324
After 5 years	26,050	29,353	1,751	3,086
	60,083	72,829	13,306	16,695
	69,868	86,388	19,034	23,671
Less: total future interest expenses		(16,520)		(4,637)
Present value of lease obligations		69,868		19,034

	As at 31 December 2022 HK\$'000	As at 31 December 2021 HK\$'000
Current liabilities	9,785	5,728
Non-current liabilities	60,083	13,306
	69,868	19,034

The carrying amount of the lease liabilities approximate their fair value. As at 31 December 2022, the Group leased property, plant and equipment under lease liabilities with net book value approximately HK\$57,114,000 (2021: HK\$17,009,000).

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34. AMOUNTS DUE FROM/(TO) RELATED COMPANIES

Details of amounts due from related companies are as follows:

Name of related companies (note (a)):	2022	2021
	HK\$'000	HK\$'000
Amounts due from related companies under common control of members/shareholder of the Group		
Hebei Grand Jiufu Biochemical Co., Ltd. (formerly known as Baoding Jiufu Biochemical Company Limited)	10,772	495
Jiangsu Grand Xinyi Pharmaceutical Company Limited	9,044	9,748
Huadong Medicine Co. Ltd	13,408	2,820
Guangdong Leiyunshang Pharmaceutical Company Limited	672	–
Huadong Medicine (Lishui) Company Limited	–	63
Shenyang Yaoda Leiyunshang Pharmaceutical Company Limited	37	–
Huadong Medicine (Xi'An) Bohua Pharmaceutical Company Limited	–	126
Huadong Medicine (Hangzhou) Biological Products Company Limited	–	29
Henan Grand Bio-Pharm.Co.,Ltd.	152	160
Guiyang Yuanda Real Estate Development Co.,Ltd.	14	–
Yuanda Shuyang Pharmaceutical Co.,Ltd.	7	–
China Grand Group Co.,Ltd.	182	–
	34,288	13,441
Less: allowance for ECL	(541)	(121)
	33,747	13,320

Note:

- (a) The name of related companies are English translation of Chinese name or words which included for identification purpose only and should not be regarded as the official English name or official translation of such Chinese name or words.

Details of impairment assessment as at 31 December 2022 are set out in note 5(b)(iv).

The Group had policy regarding impairment losses on amounts due from related parties which was based on the evaluation of collectability and on the management's judgement including the current creditworthiness and the past collection history of each related party.

Members of the shareholder of the Group have controlling interests over the related companies.

The amounts due from/(to) related companies are unsecured, interest-free and recoverable/repayable on demand.

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35. DEFERRED TAX LIABILITIES

The followings are the major deferred tax liabilities recognised and movements thereof during the current and prior years:

	Intangible assets HK\$'000	Property, plant and equipment and right-of-use assets HK\$'000	Investment properties HK\$'000	Total HK\$'000
As at 1 January 2021	138,314	31,415	12,150	181,879
Acquisition of subsidiaries (note 40)	–	1,317	–	1,317
Charged to profit or loss	1,587	3,987	3,410	8,984
Exchange realignment	4,195	1,016	458	5,669
As at 31 December 2021 and 1 January 2022	144,096	37,735	16,018	197,849
Acquisition of subsidiaries (note 40)	10,538	9,621	–	20,159
Charged to profit or loss	25,303	7,467	3,801	36,571
Exchange realignment	(29,858)	(3,240)	(1,333)	(34,431)
As at 31 December 2022	150,079	51,583	18,486	220,148

Under the EIT Law of the PRC, withholding tax is imposed on dividends declared in respect of profits earned by the PRC subsidiaries from 1 January 2008 onwards. Deferred taxation has not been provided for in the consolidated financial statements in respect of temporary differences attributable to accumulated profits of the PRC subsidiaries amounting to approximately HK\$8,349,100,000 (2021: approximately HK\$6,537,720,000) and the estimated tax liabilities of approximately HK\$417,455,000 (2021: approximately HK\$326,886,000) as the Group is able to control the timing of the reversal of the temporary differences and it is probable that the temporary differences will not be reversed in the foreseeable future.

36. AMOUNT DUE TO THE IMMEDIATE HOLDING COMPANY

The amount is unsecured, interest-free and repayable on demand.

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37. DEFERRED INCOME

The movement of deferred income is set out below:

	HK\$'000
As at 1 January 2021	341,606
Acquisition of a subsidiary (note 40)	3,238
Compensation received during the year (note (b) and (d))	9,998
Credit to profit or loss	(41,151)
Exchange realignment	13,127
As at 31 December 2021 and 1 January 2022	326,818
Compensation received during the year (note (b), (d) and (e))	19,867
Credit to profit or loss	(52,119)
Exchange realignment	(29,285)
As at 31 December 2022	265,281

Notes:

- (a) On 5 February 2010, Grand Pharm (China) received a notice from Wuhan Municipal Government requesting it to relocate its existing production facilities to other places. According to the required land resumption procedures, Grand Pharm (China) submitted to the relevant municipal authorities an application for resumption of state-owned land use rights on 10 November 2010. Pursuant to the submission by Grand Pharm (China), the Land Reserve Centre had agreed to resume the land and buildings, structure and attachments (including immovable plant and equipment) located thereon and thereunder at the place where the production facilities of Grand Pharm (China) are situated (the "PRC Property").

On 25 November 2010, Grand Pharm (China) entered into an agreement with the Land Reserve Centre (the "Agreement") which provides for detailed provisions as to Grand Pharm (China)'s agreement to surrender the PRC Property to the Land Reserve Centre and to relocate its production facilities to other locations and the Land Reserve Centre's agreement to compensate for the resumption of the PRC Property and the relocation of the production facilities by Grand Pharm (China) (the "Relocation"). The compensation, as mutually agreed between Grand Pharm (China) and the Land Reserve Centre, amounts to RMB855,000,000 (the "Compensation") and will be settled by instalments in the way as further detailed below.

Pursuant to the Agreement, the Compensation for the Relocation of RMB855,000,000 is comprising (i) a relocation commencement fee of RMB100,000,000; (ii) compensation for loss of profits of RMB85,500,000; and (iii) other compensation of RMB669,500,000, which shall be payable by the Land Reserve Centre to Grand Pharm (China) as follows:

- (i) RMB171,000,000, which includes the relocation commencement fee of RMB100,000,000 (equivalent to approximately HK\$114,943,000), is payable within 30 working days from the effective date of the Agreement (the "First Instalment"). This amount was received by Grand Pharm (China) during the year ended 31 December 2010 upon the fulfillment of certain conditions by the Group, which includes the procurement and provision of documents necessary for the initiation of the Relocation. The remaining amount of RMB71,000,000 (equivalent to approximately HK\$83,529,000) was also received by Grand Pharm (China) during the year ended 31 December 2010.
- (ii) RMB85,500,000 (equivalent to approximately HK\$105,329,000), is payable within 30 working days upon completion of the responsibilities of Grand Pharm (China) as stated in Clauses 11(1)(i) and (ii) of the Agreement, which include, among other things, the surrender of all relevant documents in respect of the PRC Property to the Land Reserve Centre for deregistering the title to land within 15 days after the effective date of the Agreement, and the commencement of the relocation plan and construction of production facilities at the new location(s) (the "Second Payment"). This amount was received by Grand Pharm (China) during the year ended 31 December 2011.

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37. DEFERRED INCOME *(Continued)*

Notes: *(Continued)*

(a) *(Continued)*

- (iii) RMB427,500,000, being 50% of the Compensation, is payable commencing from the completion of the Second Payment, by semi-annual instalments of RMB85,500,000 each, and shall pay within 30 days of the last month of each instalment period until completion of the payment for the last instalment or until completion of relocation and delivery of vacant possession of the PRC Property to the Land Reserve Centre by Grand Pharm (China) (in which case the instalment payments will be consolidated or accelerated), whichever is earlier. During the year ended 31 December 2011 and 2013, RMB85,500,000 and RMB283,500,000 (equivalent to approximately HK\$105,330,000 and HK\$357,580,000) were received by Grand Pharm (China) respectively. During the year ended 31 December 2014, RMB58,500,000 (equivalent to approximately HK\$73,629,000) was received by Grand Pharm (China).
- (iv) the last instalment of RMB171,000,000 is payable within 30 days upon completion of relocation and delivery of vacant possession of the PRC Property to the Land Reserve Centre by Grand Pharm (China) and the receipt of all title documents in respect of the PRC Property by the Land Reserve Centre from Grand Pharm (China). During the year ended 31 December 2014, RMB171,000,000 (equivalent to approximately HK\$215,219,000) was received by Grand Pharm (China).

The Compensation received or which becomes receivable is initially recognised as deferred income and subsequently recognised as income in profit or loss on a systematic basis over the periods in which the Group recognises as expenses the related costs for which the Compensation is intended to compensate. The Compensation which is intended for expenses of losses already incurred or for the purpose of giving immediate financial support to the entity with no future related costs is recognised in profit or loss of the period in which it is received or becomes receivable.

The relocation commencement fee of RMB100,000,000 (equivalent to approximately HK\$114,943,000), being part of the First Instalment, was received by Grand Pharm (China) upon the fulfillment of certain conditions by the Group, which included the procurement and provision of documents necessary for the initiation of the Relocation. The relocation commencement fee was recognised in the profit for the year ended 31 December 2010 upon the fulfillment of the aforesaid conditions by the Group.

The remaining part of the Compensation of RMB755,000,000 is intended to compensate the Group for (i) loss of profit as to the amount of RMB85,500,000 and (ii) the cost of removing the production facilities, the cost of establishing new production facilities in other places and the estimated future appreciation in value of the land as included in the PRC Property and other related expenses. The Compensation related to depreciable assets is recognised in profit or loss over the periods and in the proportion in which depreciation expense on those assets is recognised. The Compensation related to the loss of profits and expenses of removing the production facilities is recognised in profit or loss in the same period as the recognition of the relevant loss or expenses. In the event that the relevant loss or expenses are unable to be identified, the recognition of the related part of the Compensation to profit or loss will be deferred until the completion of the Relocation. During the years ended 31 December 2010 and 2011, the Group has received part of the Compensation of RMB71,000,000 (equivalent to approximately HK\$83,529,000) and RMB171,000,000 (equivalent to approximately HK\$210,659,000) respectively. During the years ended 31 December 2012, the Group did not receive any Compensation. During the years ended 31 December 2013 and 2014, the Group has received part of Compensation of RMB283,500,000 (equivalent to approximately HK\$357,580,000) and RMB229,500,000 (equivalent to approximately HK\$288,848,000) respectively.

During the year ended 31 December 2020, Wuhan Wuyao received one of the construction completion reports to verify partially the completion of the Relocation. Therefore, the Group recognised approximately RMB20,464,000 (equivalent to approximately HK\$22,994,000) related to depreciable assets over their useful life and approximately RMB101,910,000 (equivalent to approximately HK\$114,509,000) in regards to relevant loss or expenses which were unable to identified and deferred until completion of the Relocation.

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37. DEFERRED INCOME *(Continued)*

Notes: *(Continued)*

- (b) Wuhan Kernel entered into an agreement with The People's Government of Xiantao which provides for detailed provisions as to promote economic development of Xiantao and expand its operation scale.

During the year ended 31 December 2021, Wuhan Kernel entered into an agreement with Xiantao Municipal Bureau of Economy and Information Technology which provides subsidies for operational expansion. The compensation, as mutually agreed between Wuhan Kernel and Xiantao Municipal Bureau of Economy and Information Technology, amounts to RMB5,800,000 (equivalent to approximately HK\$6,987,000). The expansion was finished during the year then ended and the Company achieve the consideration and obtain the approval from the PRC Government. The compensation was recognised in the statement of profit or loss started from 31 December 2021 over five years.

During the year ended 31 December 2022, Wuhan Kernel entered into an agreement with The People's Government of Xiantao which provides for research and development expenditure allowance, amounts to RMB900,000 (equivalents to HK\$1,048,000). The Company achieve all consideration and obtain the approval from the PRC Government.

- (c) On 20 September 2019, Wuhan Wuyao entered into an agreement with The People's Government of Xiantao which provides for land bidding. The compensation, as mutually agreed between Wuhan Wuyao and The People's Government of Xiantao, amounts to RMB12,111,000 (equivalent to approximately HK\$13,608,000). The acquisition of land right use was finished at 29 May 2020, the Company achieve the consideration and obtain the approval from the PRC Government. The compensation was recognised in the statement of profit or loss started from 31 December 2020 over useful lives of the land right use.

On 15 July 2021, Hubei Wellness entered into an agreement with The People's Government of Xiantao which provides for research and development expenditure allowance, amounting to RMB2,500,000 (equivalent to approximately HK\$3,011,000). As at 31 December 2021 and 2022, the Company did not achieve all consideration and obtain the approval from the PRC Government.

- (d) During the year ended 31 December 2022, Wuhan Grand Hoyo entered into an agreement with The People's Government of Wuhan which provides for plant and equipment bidding. The compensation, as mutually agreed between Wuhan Grand Hoyo and The People's Government of Wuhan, amounts to RMB15,664,500 (equivalent to approximately HK\$18,237,000). The acquisition of plant and equipment was completed during the year and the Company achieve the consideration and obtain the approval from the PRC Government. The compensation was recognised in the statement of profit or loss started from 31 December 2022 over useful lives of the plant and equipment.
- (e) During the year ended 31 December 2022, Nanjing AuroRNA Biotech Co., Ltd. entered into an agreement with Nanjing Biotech and Pharmaceutical Valley which provides for research and development expenditure allowance, amounting to RMB500,000 (equivalent to approximately HK\$582,000). As at 31 December 2022, the Company did not achieve all consideration and obtain the approval from Nanjing Biotech and Pharmaceutical Valley.

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38. SHARE CAPITAL

	Number of shares at		Share capital at	
	31 December 2022 '000	31 December 2021 '000	31 December 2022 HK\$'000	31 December 2021 HK\$'000
Authorised				
Ordinary shares of HK\$0.01 each	100,000,000	100,000,000	1,000,000	1,000,000
Issued and fully paid				
As at beginning and the end of the year	3,549,571	3,549,571	35,496	35,496

Notes:

As at 31 December 2022, the Company, through a trust, held 30,300,000 (2021: 22,430,500) shares in treasury for the purpose of a share award scheme. The fair value of the purchased shares was deducted from equity as "Treasury shares reserve" for an amount of approximately HK\$187,489,000 (2021: HK\$143,503,000).

39. DERIVATIVE FINANCIAL INSTRUMENT

As at 31 December 2022 and 2021, all of the derivative financial instruments are interest rate swaps. The Groups entered into cross currency swap contracts with banks to manage the exposure to the interest rate risk on the Groups' floating-rate borrowings by swapping a proportion of those borrowings from floating rates to fixed rates. No hedge accounting is adopted and there is no offsetting during the year.

	Notional amount		Fair value HK\$'000	Period	Floating interest rate	Fixed interest rate	Interest period
	RMB\$'000	HK\$'000					
Asset							
RMB\$/HK\$ cross currency swap At 31 December 2022	769,168	904,000	31,370	9 September 2021 to 4 September 2023	HIBOR	1.8%	Monthly
Liability							
RMB\$/HK\$ cross currency swap At 31 December 2021	961,461	1,130,000	8,350	9 September 2021 to 4 September 2023	HIBOR	1.8%	Monthly

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40. ACQUISITION OF SUBSIDIARIES

(a) Acquisition of an asset

- (i) On 8 February 2021, the Group acquired 752 shares of East Ocean Medical (Hong Kong) Company Limited ("East Ocean") at a total consideration of US\$12,000,000 (equivalent to HK\$93,060,000).

Assets acquired at the date of acquisition

	HK\$'000
Financial assets as at fair value through other comprehensive income	15,616
Intangible assets (note 23)	38,816
Prepayment	66,885
	121,317

Total consideration in respect of acquisition of a subsidiary that are not constitute business

	HK\$'000
Cash consideration paid	93,060
Fair value of previously held interest in East Ocean	28,257
	121,317

This company did not operate any business prior to the acquisitions and had distribution agreement, investment in unlisted securities and prepayments for licensing agreement. Therefore, the Group considered this would be an acquisition of assets in substance and as a result the difference between purchase consideration paid and the net assets acquired would be recognised as adjustments to the carrying value of the intangible asset.

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40. ACQUISITION OF SUBSIDIARIES *(Continued)*

(a) Acquisition of an asset *(Continued)*

- (ii) During the year ended 31 December 2021, the Group acquired 100% equity interest of Jiangsu Shenming Medical Technology Co., Ltd. ("**Shenming Medical**"), at a consideration of RMB8,600,000 (equivalent to approximately HK\$10,546,000). Upon completion of the transaction, the Group obtained the commercialization rights of the temperature-sensitive embolic agent developed by Shenming Medical for the treatment of liver cancer and the subsequent development of gel products.

Assets acquired and liabilities recognised at the date of acquisition

	HK\$'000
Property, plant and equipment	542
Intangible assets (note 23)	11,564
Bank balance and cash	1
Other payables	(1,561)
Total identifiable net assets acquired	10,546

Net cash outflow in respect of acquisition of a subsidiary that are not constitute business

	HK\$'000
Consideration paid in cash	10,546
Less: Cash and cash equivalent balances acquired	(1)
	10,545

This company did not operate any business prior to the acquisitions and had the patent in related to the thermosensitive embolic agents for the treatment of liver cancer. Therefore, the Group considered this would be an acquisition of assets in substance and as a result the difference between purchase consideration paid and the net assets acquired would be recognized as adjustments to the carrying value of the intangible asset.

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40. ACQUISITION OF SUBSIDIARIES (Continued)

(b) Business Combination

- (i) In July 2022, Grand Pharma (China) entered into an equity acquisition agreement with Hubei Bafeng, pursuant to which, Grand Pharma (China) will acquire 100% equity interest in Hubei Bafeng at an amount of not more than RMB270,000,000 (equivalents to approximately HK\$313,900,000 after the relevant conditions as agreed in the acquisition agreement are fulfilled). Hubei Bafeng is principally engaged in the research and development, production and operation of amino acid APIs and preparations and was acquired with the objective of further reinforcing the Group's leading position in the high-quality amino acid segment. The acquisition was completed on 12 August 2022. The acquisition has been accounted for as acquisition of business using the acquisition method.

Assets acquired and liabilities recognised at the date of acquisition

	HK\$'000
Property, plant and equipment (note 16)	85,197
Right-of-use assets (note 17)	17,263
Intangible assets (note 23)	70,255
Prepayments	2,516
Inventories	27,805
Deposits, prepayments and other receivables	29,183
Cash and cash equivalents	44,677
Deferred tax liabilities (note 35)	(20,159)
Trade and other payables	(70,908)
Total identifiable net assets acquired	185,829
Goodwill (note 21)	128,071
	313,900

Net cash outflow arising on acquisition

	HK\$'000
Consideration paid in cash	313,900
Less: Cash and cash equivalent balances acquired	(44,677)
	269,223

Acquisition-related costs amounting to approximately HK\$220,000 have been recognised as an expense in the current year, within the "administrative expenses" line item in the consolidated statement of profit or loss and other comprehensive income.

Since the acquisition, Hubei Bafeng contributed approximately HK\$46,487,000 to the Group's revenue and approximately HK\$9,774,000 to the consolidated profit and loss for the year ended 31 December 2022.

Notes to the Consolidated Financial Statements

For the year ended 31 December 2022

40. ACQUISITION OF SUBSIDIARIES (Continued)

(b) Business Combination (Continued)

- (ii) On 15 October 2021, the Group acquired 80% interest in Cangzhou Huachen BioTech Co., Ltd. Cangzhou Huachen BioTech Co., Ltd is principally engaged in the research and development, manufacture, sales and technical services of amino acid products. The acquisition has been accounted for as acquisition of business using the acquisition method.

Assets acquired and liabilities recognised at the date of acquisition

	HK\$'000
Property, plant and equipment	159,344
Right of use assets (note 17)	14,999
Inventories	10,374
Trade and other receivables	19,111
Bank balances and cash	1,292
Trade and other payable	(45,856)
Deferred tax liabilities (note 35)	(1,317)
Bank and other borrowing	(72,013)
Deferred income (note 37)	(3,238)
Non-controlling interest	(16,659)
Total identifiable net assets acquired	66,037
Goodwill (note 21)	64,815
	130,852

Net cash outflow arising on acquisition

	HK\$'000
Consideration paid in cash	130,852
Less: Cash and cash equivalent balances acquired	(1,292)
	129,560

Since the acquisition, Huachen Bio Tech contributed approximately HK\$67,138,000 to the Group's revenue and approximately HK\$12,511,000 to the consolidated profit for the year ended 31 December 2021.

Had the combination taken place at the beginning of the year, the revenue of the Group and the profit of the Group for the year ended 31 December 2021 would have been approximately HK\$8,710,123,000 and approximately HK\$2,364,247,000, respectively.

The non-controlling interest was recognised at the non-controlling interests' proportionate share of the recognised amounts of acquirees identifiable net assets.

Notes to the Consolidated Financial Statements

For the year ended 31 December 2022

40. ACQUISITION OF SUBSIDIARIES *(Continued)*

(b) Business Combination *(Continued)*

- (iii) During the year ended 31 December 2021, the Group acquired 100% equity interest of Puer Weiye at a consideration of RMB10,000,000 (equivalent to approximately HK\$12,249,000). Puer Weiye is principally engaged in the radioactive pharmaceutical production and trading of radioactive pharmaceuticals. The acquisition has been accounted for as acquisition of business using the acquisition method.

Assets acquired and liabilities recognised at the date of acquisition

	HK\$'000
Property, plant and equipment	1,217
Deferred tax assets (note 24)	69
Inventories	35
Trade and other receivables	123
Bank balance and cash	1
Trade and other payables	(293)
Total identifiable net assets acquired	1,152
Goodwill (note 21)	11,097
	<u>12,249</u>

Net cash outflow in respect of acquisition of a subsidiary that are not constitute business

	HK\$'000
Consideration paid in cash	12,249
Less: Bank balance and cash acquired	(1)
	<u>12,248</u>

Since the acquisition, Puer Weiye contributed a loss of approximately HK\$75,000 to the consolidated profit for the year ended 31 December 2021.

Had the combination taken place at the beginning of the year, the revenue of the Group and the profit of the Group for the year ended 31 December 2021 would have been approximately HK\$8,597,975,000 and approximately HK\$2,384,071,000, respectively.

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For the year ended 31 December 2022

41. STATEMENT OF FINANCIAL POSITION AND RESERVE OF THE COMPANY

	2022 HK\$'000	2021 HK\$'000
Non-current assets		
Interests in associates	4,764,474	4,034,844
Interests in subsidiaries	2,734,124	3,180,598
Right-of-use assets	533	2,155
Prepayment	–	11,497
Loan receivables	–	113,190
	7,499,131	7,342,284
Current assets		
Financial assets at fair value through profit or loss	14,499	33,332
Other receivables	163,929	201,385
Cash and cash equivalents	1,507	143,567
	179,935	378,284
Current liabilities		
Lease liabilities	431	1,672
Financial guarantee	1,727	107
Other payable	19,375	11,069
Other borrowings	664,031	777,256
Amount due to the immediate holding company	2,331	–
	687,895	790,104
Net current liabilities	(507,960)	(411,820)
Total assets less current liabilities	6,991,171	6,930,464
Non-current liabilities		
Amount due to the immediate holding company	–	2,331
Financial guarantee	–	501
Lease liabilities	–	431
	–	3,263
Net assets	6,991,171	6,927,201
Capital and reserves attributable to owners of the Company		
Share capital	35,496	35,496
Reserves	6,955,675	6,891,705
Total equity	6,991,171	6,927,201

The financial statement was approved and authorised for issue by the board of directors of the Company on 22 March 2023 and are signed on its behalf by:

Tang Weikun
Director

Shao Yan
Director

Notes to the Consolidated Financial Statements

For the year ended 31 December 2022

41. STATEMENT OF FINANCIAL POSITION AND RESERVE OF THE COMPANY *(Continued)*

Movement of reserve of the Company

	Share premium HK\$'000	Contributed surplus HK\$'000	Treasury shares HK\$'000	Retained earnings HK\$'000	Total HK\$'000
As at 1 January 2021	6,523,049	121,273	–	350,886	6,995,208
Profit and total comprehensive income for the year	–	–	–	430,450	430,450
Total comprehensive income for the year	–	–	–	430,450	430,450
Purchase of treasury shares	–	–	(143,503)	–	(143,503)
Dividend paid (note 13)	–	–	–	(390,450)	(390,450)
As at 31 December 2021 and 1 January 2022	6,523,049	121,273	(143,503)	390,886	6,891,705
Profit and total comprehensive income for the year	–	–	–	498,406	498,406
Total comprehensive income for the year	–	–	–	498,406	498,406
Purchase of treasury shares	–	–	(43,986)	–	(43,986)
Dividend paid (note 13)	–	–	–	(390,450)	(390,450)
As at 31 December 2022	6,523,049	121,273	(187,489)	498,842	6,955,675

Note: Under the Companies Act 1981 of Bermuda (as amended), no dividend shall be paid or distribution be made out of contributed surplus if to do so would render the Company unable to pay its liabilities as they become due or the realisable value of its assets would thereby become less than the aggregate of its liabilities and its issued share capital and share premium account.

Notes to the Consolidated Financial Statements

For the year ended 31 December 2022

42. MATERIAL RELATED PARTY TRANSACTIONS

- (a) In addition to the balances with associates as disclosed in note 20, related companies as disclosed in note 34 and immediate holding company as disclosed in note 36 during the years ended 31 December 2022 and 2021, the Group entered into following transactions with its related parties:

	2022 HK\$'000	2021 HK\$'000
Sales of goods to Yangxin Fuxin (note (i))	4,675	6,026
Purchases of goods from Yangxin Fuxin (note (i))	20,056	21,330
Sales of goods to the companies with common controlling shareholder: Huadong Medicine Co. Ltd and its related companies (note (ii))	129,427	111,932
中國遠大集團有限責任公司 and its related companies (unofficially translated as "China Grand Enterprises Incorporation" (note (ii))	4,449	1,032
Purchase of goods from the companies with common controlling shareholder: Hebei Grand Jiufu Biochemical Co., Ltd (formerly known as Baoding Jiufu Biochemical Company Limited) (note (iii))	248,604	133,800
Sirtex Medical Singapore Pte Ltd. and its related companies (note (iv))	24,720	–
Processing services from the companies with common controlling shareholder: Baoding Jiufu Biochemical Company Limited (note (iii))	–	532

Notes:

- (i) Transactions were conducted with terms mutually agreed with the contracting parties.
- (ii) The transactions constitute continuously connected transactions under Chapter 14A of the Listing Rules.
- (iii) The transactions are connected transaction in 2021 and continuing connected transaction in 2022 respectively under Chapter 14A of the Listing Rules.
- (iv) The transactions are connected transaction in 2022 under Chapter 14A of the Listing Rules.
- (b) Details of the financial guarantee given by China Grand Enterprises Incorporation to banks in respect of the loans granted to the Group as at 31 December 2022 and 2021 are set out in note 32.
- (c) Compensation of key management personnel

The remuneration of directors and other members of key management during the year was as follows:

	2022 HK\$'000	2021 HK\$'000
Short-term benefits	12,245	10,544
Post-employment benefits	569	261
	12,814	10,805

The remuneration of directors and key executives is determined by the board of directors having regard to the performance of individuals and market trends.

Notes to the Consolidated Financial Statements

For the year ended 31 December 2022

43. PLEDGE OF ASSETS

The Group has pledged the following assets to secure the bank borrowings and banking facilities granted to the Group:

	2022 HK\$'000	2021 HK\$'000
Right-of-use assets (note 17)	19,349	21,374
Buildings (note 16)	107,846	121,315
Interests in subsidiaries	123,028	134,016
Pledged bank deposits (note 29)	1,357	7,645
	251,580	284,350

44. COMMITMENTS

(a) Operating lease arrangements

The Group as lessor

The Group leases out certain of its office premises under operating lease arrangement. The rental income earned during the year was approximately HK\$557,000 (2021: HK\$1,421,000). The Group had future minimum lease receipts from tenants under non-cancellable operating lease which fall due as follows:

	2022 HK\$'000	2021 HK\$'000
Within one year	570	212
In the second to fifth year inclusive	77	–
	647	212

(b) Capital commitment

	2022 HK\$'000	2021 HK\$'000
Capital expenditure contracted but not provided for: Acquisition of property, plant and equipment	140,487	180,322

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For the year ended 31 December 2022

45. RETIREMENT BENEFITS SCHEMES

The Group operates a defined contribution Mandatory Provident Fund retirement benefits scheme (the “MPF Scheme”) under the Hong Kong Mandatory Provident Fund Schemes Ordinance. Under the MPF Scheme, employees are required to contribute 5% of their monthly salaries or up to a maximum of HK\$1,500 (2021: HK\$1,500) and they can choose to make additional contributions. Employers’ monthly contributions are calculated at 5% of the employee’s monthly salaries or up to a maximum of HK\$1,500 (2021: HK\$1,500) (the “mandatory contributions”). Employees are entitled to 100% of the employer’s mandatory contributions upon their retirement at the age of 65, death or total incapacity.

Employees of the subsidiaries and an associate in the PRC are members of the state-sponsored pension scheme operated by the PRC government. The subsidiaries and an associate were required to contribute a certain percentage of the payroll of their staff to the pension scheme to fund the benefits. The only obligation of the Group with respect to the pension scheme is to make the required contributions.

There were no forfeited contributions utilised to offset employers’ contributions for the year. And at the end of the reporting period, there was no forfeited contribution available to reduce the contributions payable in the future years.

The total costs charged to profit or loss of approximately HK\$92,670,000 (2021: HK\$82,231,000) represents contributions payable to these schemes by the Group in respect of the current accounting period.

46. RECONCILIATION OF LIABILITIES ARISING FROM FINANCING ACTIVITIES

The table below details changes in the Group’s liabilities arising from financing activities, including both cash and non-cash changes. Liabilities arising from financing activities are those for which cash flow were, or future cashflows will be classified in the Group’s consolidated statement of cash flows from financing activities.

	Amount due to the immediate holding company HK\$'000	Lease liabilities HK\$'000	Bank and other borrowings HK\$'000	Total HK\$'000
As at 1 January 2021	2,331	21,362	2,367,016	2,390,709
Accrued interest	–	2,773	90,191	92,964
Financing cash outflows	–	(5,705)	(1,615,733)	(1,621,438)
Interest paid	–	(2,773)	(90,191)	(92,964)
New leases entered	–	3,960	–	3,960
Financing cash inflows	–	–	1,981,036	1,981,036
Acquisition of subsidiaries (note 40(b))	–	–	72,013	72,013
Other borrowings under TRS transaction (note 20&32)	–	–	777,256	777,256
Exchange realignment	–	(583)	44,953	44,370
As at 31 December 2021 and 1 January 2022	2,331	19,034	3,626,541	3,647,906
Accrued interest	–	4,516	132,977	137,493
Financing cash outflows	–	(10,857)	(2,199,261)	(2,210,118)
Interest paid	–	(4,516)	(132,977)	(137,493)
New leases entered	–	64,579	–	64,579
Financing cash inflows	–	–	3,116,608	3,116,608
Exchange realignment	–	(2,888)	(138,474)	(141,362)
As at 31 December 2022	2,331	69,868	4,405,414	4,477,613

Notes to the Consolidated Financial Statements

For the year ended 31 December 2022

47. LITIGATION

With reference to the disclosure in the annual reports of the Company between 2016 to 2021, Tianjin Jingming, an indirect non-wholly owned subsidiary of the Company, is undertaking certain litigations related to a product quality incident, and it is also claiming the original shareholders of Tianjin Jingming for the indemnification of those possible loss suffered by the Company. Up to 31 December 2022, the court has concluded 72 cases, and 3 cases are under hearing processes at the people's court. Among the final and effective judgements, Tianjin Jingming has paid the compensation and the related legal charges of approximately RMB37,222,231 in according to the court orders. The other related litigations of the product quality incident have not yet been concluded. Given that (1) such product is not the core product of the Group, and (2) according to the terms of the agreement for the acquisition of Tianjin Jingming, the original shareholders of Tianjin Jingming should be responsible for the compensation of such product incident until 30 June 2015, and in April 2021 Grand Pharm (China) had claimed the original shareholders of Tianjin Jingming for the indemnification of those possible loss suffered. According to the final judgement by the court, the original shareholders of Tianjin Jingming should compensate to Tianjin Jingming approximately RMB27,090,000 as the existing compensate and liquidated damages at the point of the judgement. After the execution of the enforcement order from the people's court, Grand Pharm (China) has got properties and cash at approximately RMB7.27 million in aggregate from the original shareholders of Tianjin Jingming, and the outstanding amount is still under enforcement processes. Also Grand Pharm (China) has the right to raise litigation claiming the original shareholders of Tianjin Jingming for the subsequent payment of the indemnification related to such product quality incident made by Tianjin Jingming. Hence, the Directors are of the view that the said incident and the related litigations do not have material impact to the Group.

According to the terms of the agreement for the acquisition of Tianjin Jingming, the vendors have undertaken to the Group that the net profit after tax (the "Actual Profit") from domestic sales (only include the net profit generated from domestic sales and shall not include the profit generated from the sales of irrigating solutions (灌注液) of Tianjin Jingming for the period commencing on 1 January 2015 and ending on 30 June 2015 shall not be less than RMB5,000,000 (the "Performance Guarantee"). If the above Performance Guarantee cannot be met, the Group can claim for a refund of part of the share transfer consideration in according to the formula set out in the announcement of the Company dated 22 December 2014. The Group raised a litigation against those vendors in related to the said Performance Guarantee, and after the first trial, second trial and retrial from the court, the court granted the final judgement in December 2020. It was concluded that the Group can get back the RMB10,000,000 share transfer consideration deposited in the bank account jointly controlled by the Group and the vendors. The vendors should also additionally refund approximately RMB11,200,000 share transfer consideration to the Group in according to the terms of the agreement for the acquisition of Tianjin Jingming. Up to now, the Group has followed the judgement from the court and got back the RMB10,000,000 deposited in the bank account jointly controlled by the Group and the vendors.

In June 2016, the Group has successfully applied to the court to freeze RMB20,000,000 (equivalent to approximately HK\$22,414,000) assets of the original shareholders of Tianjin Jingming, an indirect non-wholly owned subsidiary of the Company since January 2015 in order to secure the Group's pending responsibilities regarding certain litigations related to an incident as stated in a press release issued by the China National Food and Drug Administration (the "NMPA") on 14 April 2016, which is about a product quality incident related to some Ophthalmic Perfluoro propane Gases produced by Tianjin Jingming. According to the terms of the sales and purchase agreement in relation to the acquisition of Tianjin Jingming, the original shareholders of Tianjin Jingming should be responsible for such product incident. The Group is claiming them for their responsibilities and also indemnified those related losses suffered by the Group.

Notes to the Consolidated Financial Statements

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47. LITIGATION (Continued)

(a) Writ issued in PRC by China Pharm (China) and original shareholders of Tianjin Jingming

Although such product incident is still under investigation, being taking up the social responsibilities and fulfilling related requirements, the Group had recalled all products of the related batches and also temporary suspended the production and sales of such related products. According to the terms of the Tianjin Jingming acquisition agreement, Tianjin Jingming had already fully settled the penalty of approximately RMB14,430,000 (equivalent to approximately HK\$16,361,000) imposed by the NMPA. As at the date of this report, Tianjin Jingming is undertaking certain claim actions for approximately RMB16,540,000 (equivalent to approximately HK\$18,762,000) given to the above incident. Given that (i) referring to the opinions from the professional organised by the NMPA, it is unable to identify the impurity that caused the product incident with the existing technology and it will need further investigation and research to find out the cause thereof; (ii) Ophthalmic Perfluoro propane Gases is not the core product of the Group, the Board considers that the suspension of the production of such product and the recall of the relevant batches by Tianjin Jingming do not have any material impact on the Group's operations or financial position; and (iii) according to the terms of the Tianjin Jingming Acquisition Agreement, the original shareholders of the Tianjin Jingming should be responsible for the compensation of such product incident. Hence, the Directors are of the view that the said incident and related litigations do not have material impact to the Group. For the detail information, please refer to the Group's interim report date on 20 September 2016.

On 22 August 2016, original shareholders of Tianjin Jingming filed its objection to the Rulings of Enforcement to the Wuhan Intermediate People's Court.

On 5 September 2016, the Group received the Wuhan Intermediate People's Court's dismissal to its objection.

(b) Writs issued in PRC by Tianjin Jingming and certain plaintiffs

In April and September 2016, the Group received writs issued by certain plaintiffs against Tianjin Jingming (as defendant) and demand for payment with claiming of plaintiffs legal charges.

On 17 January 2017, Tianjin Jingming received judgements dated 17 January 2017 issued by Beijing Haidian District People's Court. The court made orders to request Tianjin Jingming to provide the compensation payment with the relevant legal charges of approximately RMB3,952,000 (equivalent to approximately HK\$4,619,000).

As at the date of this report, the court has concluded 72 cases, and 3 cases are under hearing processes at the people's court. Among the final and effective judgements, Tianjin Jingming has paid the compensation and the related legal charges of approximately RMB37,222,231 in according to the court orders. The other related litigations of the product quality incident have not yet been concluded. Given that (1) such product is not the core product of the Group, and (2) according to the terms of the agreement for the acquisition of Tianjin Jingming, the original shareholders of Tianjin Jingming should be responsible for the compensation of such product incident, and GrandPharma (China) is also claiming the original shareholders of the Tianjin Jingming for the indemnification of those possible loss suffered. Hence, the Directors are of the view that the said incident and the related litigations do not have material impact to the Group.

Notes to the Consolidated Financial Statements

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47. LITIGATION *(Continued)*

(c) Writs issued in PRC by Grand Pharm (China)

Except the above litigation related to the product incident of Tianjin Jingming, according to the terms of the agreement for the acquisition of Tianjin Jingming, the vendors have undertaken to the Group that the net profit after tax (the "Actual Profit") from domestic sales (only include the net profit generated from domestic sales and shall not include the profit generated from the sales of irrigating solutions (灌注液)) of Tianjin Jingming for the period commencing on 1 January 2015 and ending on 30 June 2015 shall not be less than RMB5 million (the "Performance Guarantee"). If the above Performance Guarantee cannot be met, the Group can claim for a refund of part of the consideration in according to the formula set out in the announcement of the Company dated 22 December 2014. The Group was in a litigation against those vendors in related to the said Performance Guarantee, and in July 2017 obtained the judgement of first instance from the court and received the final judgement from the court in February 2018. It is concluded that the Group can get back the RMB10 million share transfer consideration currently deposited in the bank account jointly controlled by the Group and the vendors. The vendors should also additionally refund approximately RMB21.2 million share transfer consideration to the Group in according to the terms of the agreement for the acquisition of Tianjin Jingming. The vendors subsequently applied for rehearing of the aforesaid judgement, and the matter will be reheard according to the court's judgement in December 2019, but it has reached final judgement from Hubei Higher People's Court (湖北省高級人民法院) that the appeal from the vendors has been rejected and uphold the verdict.

Save as disclosed above, as at 31 December 2022, so far as the Directors were aware, the Group was not engaged in any litigation or claims of material importance, and no litigation or claims of material importance are pending or threatened against the Group.

48. MAJOR NON-CASH TRANSACTIONS

- (i) During the year, the Group entered into new lease agreements for the use of leased properties and motor vehicles for fixed terms of 2 years to 9 years. On the lease commencement, the Group recognised approximately HK\$64,579,000 of right-of-use assets and approximately HK\$64,579,000 of lease liabilities.
- (ii) During the year ended 31 December 2022, the Group entered into transfer agreement with independent third party in relation to transfer of limited partnership interests in CNCB Healthcare Investment Fund II L.P. (the "Fund"). Pursuant to the agreement, independent third party (the "Transferor") agreed to transfer and assign and Grand Strength Investment Limited, a wholly-owned subsidiary of the Company, (the "Transferee") agreed to accept a portion of limited partnership interests in the Fund equivalent to an amount equal to approximately US\$14,686,000 at a consideration of approximately US\$17,718,000 (the "Transfer"). The Transfer is yet to complete as at 31 December 2022.

Moreover, during the year ended 31 December 2022, the Group has entered into tripartite agreement with the borrower of loan receivables, the balance of which amounted to approximately HK\$113,190,000 as at 31 December 2021, (the "Borrower") and Transferor. Pursuant to the tripartite agreement, Borrower agreed to pay an amount equivalent to the consideration of Transfer, of approximately US\$17,718,000, to Transferor in respect of the Transfer on behalf of the Group and the Group agreed to offset the payment with principal and interest accrued on the loan receivables. Upon completion of the payment, the Group considered the right over loan receivable expired and to derecognise the loan receivables. As a result, the Group recognised non-cash addition to prepayment (note 28) of approximately US\$17,718,000 (equivalent to approximately HK\$138,420,000) and to derecognised loan receivables during the year.

The Group entered in the above non-cash activities which are not reflected in the consolidated statement of cash flows.

Notes to the Consolidated Financial Statements

For the year ended 31 December 2022

49. EVENTS AFTER THE REPORTING PERIOD

No subsequent events occurred after 31 December 2022 which may have a significant effect, on the assets and liabilities of future operations of the Group.

50. COMPARATIVE INFORMATION

Certain comparative figures have been reclassified to conform to current year's presentation.

51. APPROVAL OF THE CONSOLIDATED FINANCIAL STATEMENTS

The consolidated financial statements were approved and authorised for issue by the Board of Directors on 22 March 2023.