MicroPort®微创®

MicroPort Scientific Corporation

微創醫療科學有限公司

(Incorporated in the Cayman Islands with limited liability)
(Stock code:00853)

ANNUAL REPORT

2022

CONTENTS

CORPORATE INFORMATION

HONORARY CHAIRMAN
Mr. Hiroshi Shirafuji *(with Effect from 13 January 2023)*

DIRECTORS
EXECUTIVE DIRECTOR
Dr. Zhaohua Chang *(Chairman of the Board and Chief Executive Officer)*

NON-EXECUTIVE DIRECTORS
Mr. Norihiro Ashida
Dr. Yasuhisa Kurogi
Mr. Hongliang Yu

INDEPENDENT NON-EXECUTIVE DIRECTORS
Mr. Jonathan H. Chou
Dr. Guoen Liu
Mr. Chunyang Shao

COMPANY SECRETARY
Ms. Yuen Wing Yan Winnie, *FCG, HKFCG*

AUTHORIZED REPRESENTATIVES
Dr. Zhaohua Chang
Ms. Yuen Wing Yan Winnie

AUDIT COMMITTEE
Mr. Jonathan H. Chou *(Chairman)*
Mr. Norihiro Ashida
Mr. Chunyang Shao

REMUNERATION COMMITTEE
Dr. Guoen Liu *(Chairman)*
Dr. Zhaohua Chang
Mr. Jonathan H. Chou

NOMINATION COMMITTEE
Mr. Chunyang Shao *(Chairman)*
Mr. Hongliang Yu
Dr. Guoen Liu

STRATEGIC COMMITTEE
Dr. Zhaohua Chang *(Chairman)*
Dr. Yasuhisa Kurogi
Mr. Jonathan H. Chou
Mr. Hongliang Yu

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Cayman Islands

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The PRC

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5/F, Manulife Place
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Hong Kong

AUDITOR
KPMG
Public Interest Entity Auditor registered in accordance with the Accounting and Financial Reporting Council Ordinance

LEGAL CONSULTANT
Sidley Austin

SHARE REGISTRAR IN HONG KONG
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Shops 1712-1716, 17th Floor, Hopewell Centre
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Hong Kong

COMPANY WEBSITE
www.microport.com

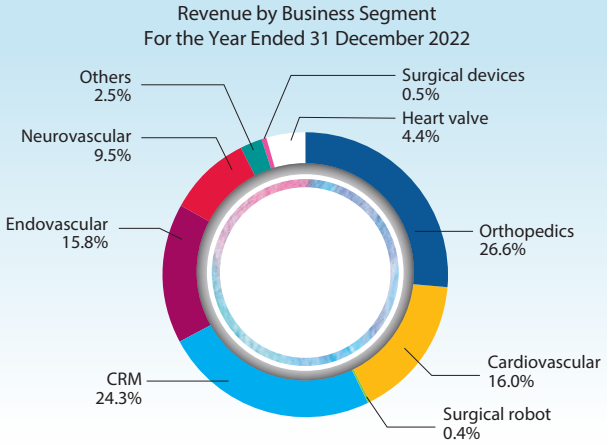
PRINCIPAL BANKERS
Bank of China (Hong Kong) Limited
China Construction Bank Corporation Shanghai Pudong Branch
Bank of China Limited Shanghai Zhangjiang Sub-Branch
China Minsheng Banking Corporation Limited
Bank of America
BNP Paribas

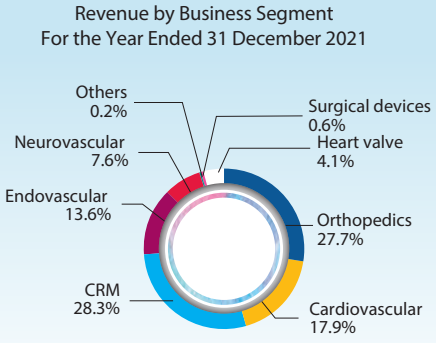
SECURITIES CODES
Stock: 00853.HK
Bonds: 40720.HK

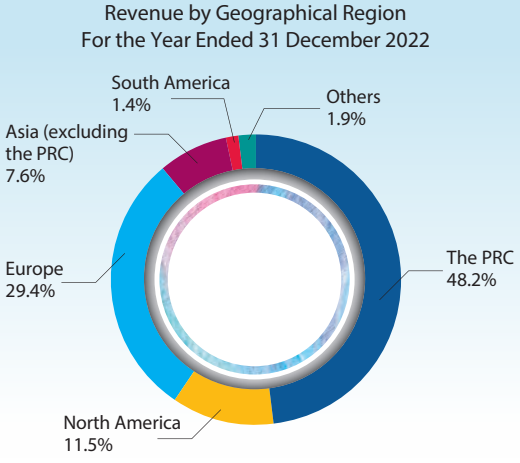
FINANCIAL HIGHLIGHTS

	Financial Year Ended		
	2022 US$'000	2021 US$'000	Change %
Revenue	**840,831**	778,639	8.0%
Gross profit	**501,771**	491,773	2.0%
Loss for the year	**(588,115)**	(351,295)	N/A
Loss attributable to equity shareholders of the Company	**(436,515)**	(276,484)	N/A
Loss per share –			
Basic (in cents)	**(24.08)**	(15.29)	N/A
Diluted (in cents)	**(24.94)**	(16.54)	N/A

Revenue Analysis







FIVE YEARS' FINANCIAL SUMMARY

	2022 US$'000	2021 US$'000	2020 US$'000	2019 US$'000	2018 US$'000
Revenue	**840,831**	778,639	648,732	793,493	669,490
(Loss)/profit for the year	**(588,115)**	(351,295)	(223,348)	29,009	18,381
Assets					
Non-current assets	**2,054,851**	1,993,762	989,270	856,997	719,756
Current assets	**1,939,234**	2,386,767	1,479,863	740,954	554,691
Total assets	**3,994,085**	4,380,529	2,469,133	1,597,951	1,274,447
Liabilities					
Current liabilities	**662,125**	546,757	519,379	431,801	440,390
Non-current liabilities	**1,539,292**	1,616,280	561,808	512,185	305,111
Total liabilities	**2,201,417**	2,163,037	1,081,187	943,986	745,501
Total equity	**1,792,668**	2,217,492	1,387,946	653,965	528,946

COMPANY PROFILE

MicroPort Scientific Corporation (the "Company" or "MicroPort") and its subsidiaries (collectively the "Group") is a leading medical device group focusing on innovating, manufacturing and marketing high-end medical devices globally. With a diversified product portfolio now being used in over 20,000* hospitals in the world, the Group operates in multiple international markets across multiple fields, including cardiovascular devices, orthopedics devices, cardiac rhythm management ("CRM"), endovascular and peripheral vascular devices, neurovascular devices, heart valve, surgical robot, surgical devices and other businesses. Every six seconds, one of MicroPort's products is being used worldwide to save life, improve life quality or help create life. The Group is dedicated to becoming a patient-oriented global enterprise that will continuously innovate and provide trustworthy and universal access to state-of-the-art solutions of prolonging and reshaping all lives.

The Group is human-oriented and is committed to improving people's lives through practical application of innovative science. We continually develop leading technologies and products for physicians and provide trustworthy and universal access to state-of-the-art solutions of prolonging and reshaping all lives to patients. We are a young group with an ambition to establish MicroPort as a globally recognized brand. Yet as the business grows, we strive to retain our unique entrepreneurial spirit and our commitment to improving the social well being, and continue to demonstrate entrepreneurial achievement and innovation spirit.

We have a large and growing intellectual property portfolio and a strong research and development ("R&D") team. We work in close cooperation with internationally recognized physicians and scientists worldwide, to develop a range of products that meet the highest quality and clinical standards. As we strive to provide state-of-the-art medical technologies and deliver new-generation medical devices and treatments for chronic ailments, our R&D team applies their expertise to ensure the sustained innovation of our latest products. With a large global footprint of R&D and manufacturing facilities in Shanghai, Suzhou, Jiaxing, Shenzhen in China, Memphis in the United States, Clamart in France, Saluggia in Italy and Dominican Republic, a strong focus on technological innovation with over 8,720* patents (including applications), and a global workforce of over 12,000*, MicroPort is committed to achieving its corporate vision.

Our products touch the lives of many people every day and we take this important responsibility very seriously. We are proud that MicroPort products will always achieve the highest standards of quality and ensure improved health for the patients. We know our products offer hope and relief to many people around the world, and every one of our employees takes personal responsibility to achieve our vision.

It is our commercial achievements that enable us to contribute back to the society, which makes our success deserved. Our commitment to social responsibility is an important aspect of our company culture and philosophy. MicroPort works diligently to build strong relationships with all our international partners and all our stakeholders, because we take our community as an essential part of our business, and we strive to pursue the essence to achieve the greatness.

OUR VISION

PEOPLE ORIENTED

Building a Super-Conglomerate of People Centric Enterprises of Emerging Medical Technologies.

OUR MISSION

CONTINUOUS INNOVATION

To Provide Trustworthy and Universal Access to State-of-the-Art Solutions of Prolonging and Reshaping All Lives.

** Note: Such numbers include the numbers of associated companies of the Group.*

CHAIRMAN'S STATEMENT

Dr. Zhaohua Chang
Chairman

In 2022, the inflationary pressure caused by the supply side in Europe and the US remained high due to geopolitical conflicts and local pandemic outbreaks, tightening the global liquidity. In China, the continued mutation of the Omicron strain had repeated impacts on many parts of the country, and the economic recovery was stifled. However, with the pandemic prevention and control stepping into a new stage at the end of 2022, domestic production and life order rapidly restored, and China embarked on a new journey for development. In line with our mission of "providing trustworthy and universal access to state-of-the-art solutions of prolonging and reshaping all lives", the Group will continue to promote high-quality innovative products worldwide, and make significant contributions to meeting the never-ending pursuit of "health and longevity" for all people.

During the Reporting Period, the Group achieved a rapid growth in global revenue of USD840.8 million, an increase of 15.6%[Note] over the same period last year, despite multiple external factors including the domestic pandemic and overseas inflation. Among our business sectors, neurovascular devices business, endovascular and peripheral vascular devices business, heart valve business and surgical robot business all achieved significant increases in revenue, with growth of 43.0%, 31.0%, 25.0% and 904.8% respectively over the same period last year. The orthopedics devices, CRM and cardiovascular devices businesses saw stable revenue growth of 9.5%, 3.5% and 2.3% respectively over the same period last year. The revenue from emerging businesses saw exponential growth.

In the cardiovascular devices business, thanks to the continued presence in mature markets and the development of emerging markets, revenue in the international business increased significantly by 60.0% year on year, especially in EMEA and South America, where it recorded a year-on-year increase of 143.0% and 58.5%, respectively. During the Reporting Period, we completed the enrolment of all patients in the TARGET IV NA clinical trial on the Firehawk® Rapamycin Target Eluting Coronary Stent System, whose clinical data will support the US Food and Drug Administration and the Canadian regulator in approving the Firehawk Stent for the treatment of atherosclerotic coronary artery disease. In China, the Group won the bidding for three products in the national successive procurement of coronary stents, in which two of the previously bid-winning products will contribute incremental revenue with certain price increases. During the Reporting Period, key progress was made in the registration of a number of the Group's access products, including the approval from the National Medical Products Administration ("NMPA") to market the guiding wire and the submission of the microcatheter, guiding catheter and anchor balloon to the NMPA for registration.

In the orthopedics business, global operating revenue grew by 9.5% year on year thanks to the solid growth in overseas operations. International (non-China) revenue increased by 10.3% year on year, exceeding double-digit growth, with significant year-on-year growth of 32.6% in EMEA. In China, despite multiple disruptions such as the sporadic COVID-19 outbreaks, the popularity of the Group's joint products has been further enhanced thanks to our active channel rationalisation since the execution of the joint volume-based procurement results, and sales of joint products increased significantly by 192% period on period in the second half of the year as static control was lifted in Shanghai.

In the CRM business, global operating revenue grew by 3.5% year on year despite the combined effects of overseas inflation and the domestic Covid outbreaks. Overseas, the Group's core defibrillation product matrix was further improved during the Reporting Period. We received CE mark for our Invicta™ defibrillation leads featuring MRI-compatibility that can be used with our implantable cardioverter defibrillators ("ICDs") and cardiac resynchronization therapy defibrillators ("CRT-Ds") already launched in Europe. Domestically, Rega®, the first and only Chinese magnetic resonance imaging ("MRI")-conditional pacemaker, and Platinium™ implantable cardioverter defibrillator, were launched upon approval, which is expected to further enhance the revenue and profitability of the CRM segment.

CHAIRMAN'S STATEMENT

In the endovascular and peripheral vascular devices business, the Group saw a 31.0% year-on-year increase in overall operating revenue, largely due to the rapid growth in sales of innovative products approved in recent years. In the meantime, the Group, which insists on technological innovation, had an adequate product pipeline, with a number of innovative products launched clinical trials during the Reporting Period. Overseas, the segment generated sales revenue of USD7.7 million, a significant year-on-year increase of 74.9%. As at the end of the Reporting Period, the Group's products covered 22 overseas countries and its business footprints were expanded to Europe, Latin America and other countries and regions in Asia Pacific.

In the neurovascular devices business, domestic operating revenue increased significantly by 43.0% year on year. Through continuous integration of pipeline resources and development of lower-tier markets, the Group has taken the lead in market share and ranked first among domestic manufacturers in terms of market share. Overseas, the international (non-China) business recorded revenue of USD3.2 million, an increase of 3,492% over the previous year. Significant progress was made in the registration and marketing of the Group's core products. As at the end of the Reporting Period, the NUMEN® Coil Embolization System was commercially implanted in seven overseas countries, and the first sale of APOLLO™ Intracranial Arterial Stent System was made in Brazil.

In the heart valve business, the Group recorded a 25.0% year-on-year revenue growth despite impacts of multiple external factors. The gross profit margin of this business segment rose by 6 percentage points year on year to 64.6%, with solid implementation of various cost reduction and efficiency improvement initiatives. The Group continued to establish a screening system that reaches out to the grassroots and covers a wide range of patients. As at the end of the Reporting Period, it has completed over 10,000 cases of screening. In overseas markets, the heart valve business achieved a breakthrough in commercialisation. Its full-year revenue soared by over 626% year on year to USD1.0 million. There was a rapid increase in the number of procedures in which VitaFlow® and VitaFlow Liberty™ were used in Argentina, and the two systems has also launched in multiple countries recently.

In the surgical robot business, thanks to the successful commercialisation of Toumai® Laparoscopic Surgical Robot ("Toumai®") and the accelerated in-hospital promotion and sales of the DFVision® 3D Electronic Laparoscope ("DFVision®"), the Group recorded an operating revenue of USD3.1 million, a significant year-on-year increase of 904.8%. In terms of registration, the SkyWalker™, a navigation and positioning system for orthopedic surgeries, was approved for marketing in China, the United States and Europe during the Reporting Period, marking a key milestone in globalisation. The Group acted actively in building the overall medical robot educational training system. As at March 2023, the Group has set up more than 40 clinical application and training centres nationwide, and Toumai® was applied in more than 600 human clinical surgeries, while SkyWalker® assisted in more than 400 total knee replacements (TKAs).

Thanks to the Group's strong emphasis in independent innovation, all R&D projects have yielded substantial results. During the Reporting Period, a total of 22 products of the Group and its associates were approved for marketing by the National Medical Products Administration ("NMPA") and 4 products were included in the special review procedures for innovative medical devices in China ("Green Path"), ranking first in the industry for the eighth consecutive year with a total of 29 Green Path products. In overseas markets, we also obtained the approval from the United States FDA for 7 products and the CE markings for 6 products.

In 2022, the Group's subsidiary MicroPort NeuroTech Limited and its associate Shanghai MicroPort EP MedTech Co., Ltd., were successfully listed on the Main Board of the Stock Exchange of Hong Kong and the Science and Technology Innovation Board of the Shanghai Stock Exchange, respectively, fully demonstrating the wide recognition of the capital market, further broadening the financing channels and consolidating the brand influence.

We are committed to our original aspiration of "helping hundreds of millions of earthlings to have a lifespan of over 115 years old in a healthy manner", and actively pursue our mission of "providing trustworthy and universal access to state-of-the-art solutions of prolonging and reshaping all lives", and promote our medical device products and disease solutions to more places of the world. We insist on green, sustainable development to drive the overall development of the medical industry and the society. We adhere to people orientation, care for employees and protect patients. In the face of the resurgence of COVID-19 in 2022, all of our employees stood by each other and overcame the difficulties together to ensure the normal operation of our production lines and the sustainable supply of our products, and worked side by side with clinicians to provide strong medical protection for patients, demonstrating our relentless pursuit of "a brand that belongs to patients".

In the future, we will remain true to the original aspiration, strive to realise the vision of solving clinical pain points and filling medical gaps, and actively fulfill our corporate mission. Meanwhile, close attention will be paid to the demands of stakeholders. We will insist on "people-orientation" and seek steady development to create long-term common value for our stakeholders while providing cutting-edge medical solutions to patients worldwide in the pandemic and post-pandemic era.

Note All the revenue growth rates mentioned above are the information compared to the corresponding period of last year and excluding the foreign exchange impact.

MANAGEMENT DISCUSSION AND ANALYSIS

BUSINESS REVIEW

OVERVIEW

The year 2022 has witnessed lingering pandemic, high inflation in most economies, as well as fragile and uneven recovery of the global economy. In China, under the impact of multiple unexpected factors, we have seen increased downward pressure on the economy at this stage. However, as the pandemic prevention and control entered a new stage at the end of the year, the production and living order restored rapidly, and the rebound in the number of outpatient visits and surgeries in medical institutions has also been accelerating. In the long run, it is expected that the proportion of aging population and the average life expectancy will continue to increase, creating significant clinical needs as well as favourable conditions for the stable growth of the global medical market.

In the international market, driven by robust demand, the medical industry continues to show strong potential as the impact of the pandemic eases and global trade resumes gradually. In terms of regulation, the entry threshold has been further raised in developed countries and regions, while the requirements for product clinical evidence, specifications, and continuous monitoring after launch have been further strengthened in emerging market. Faced with the complex and ever-changing market environment, to truly establish the core competitiveness and international influence of their brands, the industry players must focus on independent innovation, full life cycle supervision and management of products, and on creating a diversified product portfolio as well as sophisticated sales channels, while enhancing their sense of social responsibilities.

In China, the reform of the medical and health system continues to deepen, with the aim of promoting the construction of "Healthy China" and satisfying the growing needs of people for a better and healthy life. The government puts the protection of people's health as a strategic priority, and is committed to enhancing the expansion and balanced distribution of high-quality medical resources, as well as improving the basic public service system and the quality of public services. To bridge the gap in the supply side of medical resources, efforts and investment in building new medical infrastructure have been stepped up since the year 2022. The medical devices market has entered a stage of further expansion. In 2022, several national ministries and commissions issued a number of policies related to the pharmaceutical industry under the "14th Five-Year Plan", reinforcing the critical role of "innovation", emphasizing "taking innovation as the core task of promoting the high-quality development of the pharmaceutical industry", and setting the targets of "by 2025, achieving outstanding innovation results in frontier areas, strengthening our innovation capabilities, and tapping the high-end segments in the international business". Since 2022, policies related to high-value consumables have been intensively rolled out. In terms of centralized procurement on volume basis, the National Healthcare Security Administration ("NHSA") clearly pointed out that a new round of state-led centralised procurement for high-value consumables will be determined in a case-by-case manner. In the meantime, at the payment level, positive signals have been released for innovative medical devices. Beijing took the lead in implementing the CHS-DRG Payment Management Measures for New Drugs and New Technology Exclusions (《CHS-DRG 付費新藥新技術除外支付管理辦法》), which boosted the motivation for technological innovation, and innovative medical device companies are embracing opportunities for development. Overall, the promulgation of various policies will steer the high-quality development of the medical industry, and leading companies are expected to benefit from multiple favourable factors and achieve long-term steady growth.

In terms of reportable segments based on financial report, the Group features eight major business segments: cardiovascular devices, orthopedics devices, CRM business, endovascular and peripheral vascular devices, neurovascular devices, heart valve, surgical robot and surgical devices. As at the end of the Reporting Period, the Group (also with its equity-accounted investees) held more than 8,720 patents (including applications) around the world, penetrated over 20,000 hospitals in more than 100 countries and regions. The Group also offered over 600 medical solutions to patients worldwide, covering the circulatory system, nervous system, exercise system, endocrine system, urinary system and reproductive system. As a leading global enterprise of innovative high-end medical devices, the Group has made every effort to promote the rapid development of its businesses, with multiple innovative products approved in domestic and overseas markets for launch during the Reporting Period, delivering a steady stream of driving forces for the high-quality growth of the future businesses.

MANAGEMENT DISCUSSION AND ANALYSIS

During the Reporting Period, the Group's business segments suffered the disruption caused by multiple external factors. However, by actively exploring overseas and domestic market, the Group recorded global revenue of US$840.8 million, a significant increase of 15.6% excluding the foreign exchange impact as compared to the corresponding period of last year; among which, revenue of the international (non-China) business amounted to US$435.2 million, a significant increase of 10.1% excluding the foreign exchange impact as compared to the corresponding period of last year. We are pleased to note that in 2022, the surgical robot business of the Group reached the milestone of commercialization, with its revenue growing significantly by 904.8% excluding the foreign exchange impact as compared to the corresponding period of last year; the neurovascular devices business, endovascular and peripheral vascular devices business and the heart valve business experienced rapid growth, increasing by 43.0%, 31.0% and 25.0% respectively excluding the foreign exchange impact as compared to the corresponding period of last year; the orthopedics devices business, CRM business and cardiovascular devices business achieved steady growth, increasing by 9.5%, 3.5% and 2.3% excluding the foreign exchange impact as compared to the corresponding period of last year; the Group also recorded an exponential growth in revenue in the emerging business segments. During the Reporting Period, the Group recorded a net loss of US$588.1 million (loss attributable to equity holders of the Group: US$436.5 million).

On 15 July 2022, MicroPort NeuroTech Limited ("MicroPort NeuroTech") was successfully listed on the Main Board of the Stock Exchange of Hong Kong Limited (stock code: 02172.HK), becoming the fourth subsidiary of the Group to accomplish a public listing.

Shanghai MicroPort EP MedTech Co., Ltd.* (上海微創電生理醫療科技股份有限公司 , "EP") which the Group has significant influence over and account for under equity method, was successfully listed on the STAR Market of the Shanghai Stock Exchange ("the STAR Market") on August 31, 2022 (stock code: 688351.SH), becoming the first innovative medical device company qualified for the fifth set of listing standards for listing on the STAR Market of the Shanghai Stock Exchange.

CARDIOVASCULAR DEVICES BUSINESS

The cardiovascular devices business offers integrated medical solutions for the treatment of coronary artery-related diseases, develops, manufactures and commercialises industry-leading coronary stents and related delivery systems, along with balloon catheters, passive accessories and active devices, in fulfilling the overall demands of doctors and patients worldwide.

Cardiovascular diseases are the leading causes of human death and loss of healthy life span, and rank first in terms of burden of disease around the globe. With the expansion of the global aging population, the incidence of cardiovascular disease is rising, and therefore the overall demand for coronary interventional therapies will maintain a steady growth. As for the diagnosis and treatment methods, the concept of percutaneous coronary intervention ("PCI") precision treatment, which is characterized by intracavity imaging technology, robot-assisted surgery and artificial intelligence, has become a development trend, and innovative treatment methods represented by active intervention continue to expand the boundaries of treatment, driving the continued growth in the global end market of coronary intervention treatment.

As at the end of the Reporting Period, this segment has 6 drug-eluting stents and 4 balloon products on sale, with products available in over 40 countries and regions around the world, and has become the global leader in the area of coronary interventional precision treatment. During the Reporting Period, the Group's cardiovascular devices business recorded global revenue of US$134.1 million, representing an increase of 2.3% excluding the foreign exchange impact as compared to the corresponding period of last year. In the overseas market, the segment recorded overseas revenue of approximately US$25.4 million during the Reporting Period, representing a significant increase of approximately 60.0% excluding the foreign exchange impact as compared to the corresponding period of last year. Regionally, revenue in Europe, the Middle East and Africa ("EMEA"), South America and India grew by approximately 143.0%, 58.5% and 24.7%, excluding the foreign exchange impact, as compared to the corresponding period of last year respectively.

As for the stent products, during the Reporting Period, the renewal of volume-based procurement ("VBP") contracts bidding for coronary stents in China was completed. The Group won the bid for three of its products, of which, the terminal prices of two previous bid-winning products, namely Firebird2® Rapamycin Eluting Coronary CoCr Stent System ("Firebird2®") and Firekingfisher™ Rapamycin Eluting Coronary CoCr Stent System ("Firekingfisher™"), recorded an increase in this renewal. Thanks to the significant increase of nearly 80% in total bid-winning volume this time, as compared with the first-year bid-winning volume in 2020, the Group has further consolidate its dominant market position in the cardiovascular interventional treatment area. Meanwhile, the Group will continue to leverage its cost advantage building on economies of scale and upstream and downstream integration. As at the end of the Reporting Period, our drug eluting stent products have covered approximately 3,200 hospitals nationwide, with the Firebird2® newly penetrating into over 400 hospitals and the Firehawk® Rapamycin Target Eluting Coronary Stent System ("Firehawk®") newly penetrating about 180 hospitals during the Reporting Period. Since its launch in 2017, the "Swallow Program", which focuses on serving the unsatisfied healthcare needs in lower-tier regions, has penetrated into over 1,300 county-level hospitals across the country and saved more than 210,000 patients' lives. By ways of medical education, construction of internet systems for primary hospitals, improvement on patient management and referral capabilities, the program is committed to helping county hospitals increase their ability in precision interventional treatment, enabling patients in lower-tier regions to enjoy quality and affordable high-end medical solutions.

In overseas market, The group kept on promoting market access and channel exploring. During the Reporting Period, the Group's coronary stent products had obtained 8 initial registrations in 4 countries or regions, and have been certified for commercialisation in 40 countries or regions accumulatively. Through the layout of diversified sales model, the Group continued to explore emerging markets and cultivate mature markets; as of the end of the Reporting Period, the sales of coronary stent products has covered 69 overseas markets, among which, Morocco, Sudan, Saudi Arabia and other overseas markets are entered for the first time. The Group has achieved significant commercial progress in a number of countries during the Reporting Period: as the Group's products continue to be selected in national campaigns in Argentina, our stent products took up more than half of the total market shares; in India, sales revenue continued to grow rapidly during the Reporting Period, leveraging the benefits of the multi-product portfolio created through the transition to the Firehawk stents; with the upgrading and adjustment of product structure, sales revenue increased significantly year on year in Brazil; supported by rich clinical data from the TARGET studies, the Group has won numerous government and hospital projects in multiple countries in the EMEA region, and has captured a leading market share in the countries.

As for the balloon products, during the Reporting Period, the Group's has recorded global revenue of US$22.1 million, representing a large increase of 28.1%, as compared to the corresponding period of last year. In China, our balloon products have covered about 1,500 hospitals nationwide, newly entering around 200 hospitals during the Reporting Period. As for overseas market, our balloon products had obtained 10 initial registrations in 6 countries or regions during the Reporting Period, and have been certified for commercialisation in 35 countries or regions accumulatively. As of the end of the Reporting Period, the sales of balloon products have covered 63 overseas markets. Thanks to the accelerated progressing of market coverage, the sales of our balloon products had achieved a breakthrough and recorded revenue of US$2.3 million in the Reporting Period, a significant increase of 81.1% as compared with the previous year.

MANAGEMENT DISCUSSION AND ANALYSIS

ORTHOPEDICS DEVICES BUSINESS

The orthopedics devices business offers total solutions for the treatment of orthopedic problems, with an extensive range of orthopedics products that include reconstructive joints, spine and trauma products, and other professional implants and instruments.

Despite the impact of the global pandemic and VBP of artificial joints in the PRC, the Group's orthopedics devices business achieved global operating income of US$223.6 million during the Reporting Period, an increase of 9.5% excluding the foreign exchange impact as compared to the corresponding period of last year, driven by the steady growth of overseas business.

In the overseas market, benefited from the Group's continuous channel development and campaigns of medical education and promotion, during the Reporting Period, the international (non-China) orthopedics business recorded revenue of US$202.4 million, an increase of 10.3% excluding the foreign exchange impact as compared to the corresponding period of last year, among which EMEA recorded a significant increase of 32.6% in revenue excluding the foreign exchange impact, driven by strong double digit growth in our direct selling markets (Italy, France, Germany, UK) and distributor markets (Greece, Austria/Switzerland, and Middle East), excluding the foreign exchange impact as compared to the corresponding period of last year. In addition to the regions mentioned above, the Group's growth in the Latin America, Canada, and Australia market were also driving force behind the overall revenue growth. During the Reporting Period, the international orthopedics business performed the first robotic surgery case in the United States using the FDA approved Skywalker™ robot system with Evolution® Medial-Pivot Knee system ("Evolution® Knee").

In China, despite the impact of multiple factors such as the decline in unit prices of products due to the inclusion into VBP, logistics disruptions caused by frequent outbreaks of the pandemic, and fewer elective surgeries in hospitals, during the Reporting Period, orthopedic business in the PRC continued to grow against the trend, and recorded revenue of US$21.1 million, an increase of 2.9% excluding the foreign exchange impact as compared to the corresponding period of last year. In terms of joint business, in the second half of 2022, the sales of the products showed a strong momentum of recovery, and achieved an increase of 192% period on period as compared to the first half of 2022; since the implementation of VBP, thanks to the adequate combing of the Group on commercial channels, the hospital coverage increased rapidly thus further enhancing the brand awareness of minimally invasive joint products. In terms of spine and trauma business, attributed to the successful bids of products in national and provincial volume-based procurement, major breakthroughs were made in channel expansion, and the number of hospitals covered doubled during the Reporting Period. In addition, the Group has launched a number of global cost optimisation measures, and steadily reduced the cost of key products by means of upgrading the manufacturing process and improving production efficiency. During the Reporting Period, we have fully realised the independent production for our domestic orthopedic tools, and our global supply capacity of orthopedic tools has been greatly improved. Looking ahead, the Group will continue to strengthen the market presence for its diversified products, and provide more accessible medical solutions for precision diagnosis and treatment to patients with osteoarticular diseases around the world.

CRM BUSINESS

The CRM business is committed to creating the world's leading comprehensive CRM total solutions, and principally engages in the development, manufacturing and marketing of products for the diagnosis, treatment, and management of heart rhythm disorders and heart failure, with products covering pacemakers, defibrillators and cardiac resynchronisation therapy devices.

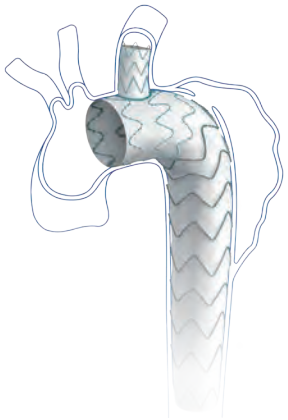
During the Reporting Period, owing to the rapid market promotion of new products, the global CRM business achieved revenue of US$204.2 million, an increase of 3.5% excluding the foreign exchange impact as compared to the corresponding period of last year.

During the Reporting Period, the international (non-China) CRM business recorded revenue of US$191.1 million, representing an increase of 3.3% excluding the foreign exchange impact as compared to last year. In terms of regions, Middle East, Latin America, and Australia achieved significant growth in sales revenue of 292.9%, 249.0%, and 35.3%, excluding the foreign exchange impact as compared to the corresponding period of last year respectively. The Group's self-developed Invicta™ Defibrillation Lead, which is compatible to 1.5T and 3T magnetic resonance imaging ("MRI"), has obtained CE Marking during the Reporting Period. It can be used together with Ulys™ and Edis™ implantable cardioverter-defibrillators ("ICD"), which have been launched into the European market, Gali™ Cardiac Resynchronization Therapy and Defibrillation (CRT-D) and NAVIGO™ Left Ventricular Pacing Lead. With the increase in the production volume of Invicta™, the Group will fully unleash the potential of the Group's portfolio of ICD and CRT-D products and provide a rapid growth in revenue and profitability. In terms of registration of new products, the wireless Bluetooth SmartTouch™ programmer obtained the CE Mark during the Reporting Period, allowing physicians to program the device in the operation room, during the implant procedure; Alizea™ Bluetooth Pacemaker received approval in Japan, and has been widely recognised by clinicians and patients for its state-of-art remote monitoring capabilities; a number of core products of the Group have been approved for marketing in Australia, and is expected to achieve rapid growth in sales volume based on portfolio advantages; the full range of defibrillation equipment and related lead products have been approved in Argentina. In the future, with the increase in the sales volume of high-margin new products overseas, coupled by the active promotion of registration for pipeline products, the revenue and profitability of the CRM segment is expected to improve continuously.

During the Reporting Period, the CRM business in the PRC achieved revenue of US$13.1 million, an increase of 6.7% excluding the foreign exchange impact as compared to the corresponding period of last year. Through the creation of a differentiated product portfolio. The Group's various types of dual-chamber pacemakers have successfully won the bids in the provincial and inter-provincial league VBPs, bringing in a significant increase in market share and penetration rates. In the first half of the year, our business team successfully enabled Rega®, the first and currently the only Chinese-developed MRI-conditional implantable pacemaker, to be certified for commercialisation and realize mass-production, making a major breakthrough for domestic products in this field. In terms of cardiac defibrillation products, the self-developed Platinium™ ICD was approved by the National Medical Products Administration ("NMPA") for launching to the market during the Reporting Period, and the building of the first domestic defibrillation product production line has been completed. With the full launch of MRI-compatible and high-voltage defibrillation product series, the competitiveness and influence of the CRM business will continue to grow, substantially solidifying our leading position with the largest market share among domestic players. Despite the impact of volume-based procurement on the terminal pricing system within the industry, the Group, leveraging on its advantages of rich pipeline, adjusted its product mix to cope with changes in terminal market prices, while actively promoting domestic brands to continue to increase their awareness and influence, and striving to accelerate the realisation of import substitution. In addition, the Group strives to tap the county-level hospital market, and further enhance the application of the pacemaker implantation procedure in primary medical institutions; actively improves the automation and digitalisation of production lines, and lays a solid foundation for the continuous and stable supply in the future.

MANAGEMENT DISCUSSION AND ANALYSIS

ENDOVASCULAR AND PERIPHERAL VASCULAR DEVICES BUSINESS



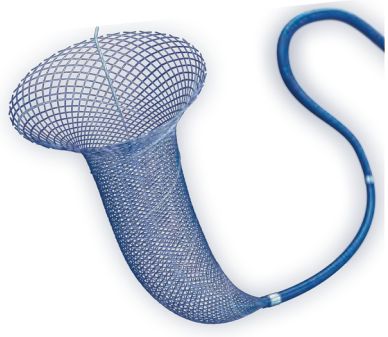
The endovascular and peripheral vascular devices business focuses on providing integrated disease solutions for aortic and peripheral vascular diseases such as thoracic and abdominal aortic aneurysm, aortic dissection, atherosclerosis, and lower extremity arteriosclerotic occlusion.

During the Reporting Period, the aortic and peripheral vascular intervention business achieved revenue of US$133.2 million, an increase of 31.0% excluding the foreign exchange impact as compared to the corresponding period of last year, which is mainly attributable to the rapid increase in the revenue of the innovative products, and the further consolidation of the Group's leading position in the field of aortic and peripheral vascular devices area.

In China and as for the endovascular business, thanks to the continued construction of sales channels, the Castor® Branched Aortic Stent Graft System ("Castor®" Branched Stent), being the world's first branched aortic stent graft and delivery system, has entered a total of nearly 900 hospitals across the country, and has achieved steady growth in sales revenue as of the end of the Reporting Period. The new generation of Minos® Abdominal Aortic Stent Graft System ("Minos® Abdominal Aortic Stent") has covered more than 600 hospitals across the country, and the sales achieved a significant increase year on year; the newly launched product Talos® Thoracic Stent Graft System ("Talos® Thoracic Stent") and Fontus® Branched Surgical Stent Graft System ("Fontus® Branched Surgical Stent") also successfully started to enter hospitals and achieved rapid sales increase during the Reporting Period. In terms of peripheral business, as of the end of the Reporting Period, Reewarm® PTX Drug Coated Balloon has been promoted and applied in more than 600 hospitals across the country, of which, nearly 250 hospitals were newly covered during the Reporting Period, and the market share has continued to increase; with the approval of Reewarm® PTX (0.035" series) Drug Coated Balloon during the Reporting Period, the scope of clinical application of the product has been broadened, and it is expected that the development will further drive the volume of this series of products and benefit more patients with peripheral artery disease.

Overseas, as of the end of the Reporting Period, the endovascular and peripheral vascular devices product sales have covered 22 overseas countries and regions such as Europe, Latin America, and Southeast Asia. During the Reporting Period, Minos® abdominal aortic stent was approved for commercialisation in Colombia and South Korea; Reewarm® PTX Drug Coated Balloon was approved for commercialisation in Brazil; Hercules® balloon dilation catheter was approved for commercialisation in Japan; 6 key products were approved for commercialisation in Belarus. Thanks to the continued market coverage, the overseas business of this segment achieved a sales revenue of US$7.7 million, representing a significant increase of over 74.9%. During the Reporting Period, the Company continued to step up its efforts in exploring the international market. Through the equity investment in Optimum Medical Device Inc., the mature agent network and professional sales personnel in Europe are expected to facilitate the penetration of its products in the European market. As of the end of the Reporting Period, 5 CE Markings had been obtained for the products of this business segment, and supported by the channels, and are expected to benefit more patients around the world.

NEUROVASCULAR DEVICES BUSINESS



The neurovascular devices business specialises in providing total solutions for the treatment of neurovascular diseases, including hemorrhagic stroke, cerebral atherosclerotic stenosis and acute ischemic stroke, continuously focused in R&D, production and commercialisation of neurovascular therapeutic and access devices.

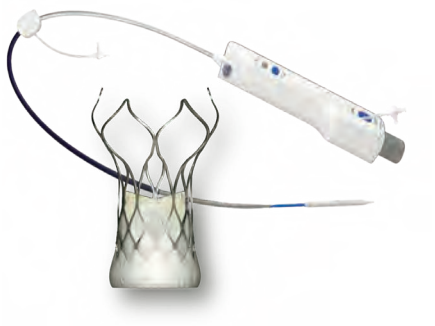
During the Reporting Period, the neurovascular devices business recorded revenue of US$79.9 million, and achieved a significant growth of 43.0% excluding the foreign exchange impact as compared to the corresponding period of last year; and specifically, the international (non-China) business recorded approximately US$3.2 million in revenue, achieving a year on year increase of 3,492.0%.

In China, the Group continues to consolidate its channel resources and tap low-tier markets to further strengthen its leading position in the neurovascular device field. During the Reporting Period, the Group's products entered approximately 500 new hospitals, covering a total of approximately 2,600 hospitals accumulatively nationwide. Focusing on serving stroke patients in the primary market, the Eagle & Swallows program has newly entered more than 250 new county hospitals during the Reporting Period, covering a total of nearly 600 hospitals in more than 200 lower tier cities and counties. The Group has been consolidating its share of the primary market. In the field of hemorrhagic stroke treatment, the clinical use and sales of Tubridge® ("Tubridge®") , the first Chinese-developed flow-diverting stent, continued to increase during the Reporting Period, with its market share reaching the first place in China. Benefited from bid-winning of the entire provincial and provincial-league VBPs, sales of NUMEN® Coil Embolisation System ("NUMEN® Coil") climbed up rapidly during the Reporting Period, achieving a breakthrough growth in market share. In the treatment of cerebral atherosclerotic stenosis, attributed to the application in stenosis cases of emergency thrombectomy in lower-tier hospitals, the APOLLO™ Intracranial Arterial Stent System ("APOLLO™") has seen a continuous and steady growth in surgeries with its market share maintaining the first in the industry for many consecutive years. The Bridge® Rapamycin Target Eluting Vertebral Artery Stent System ("Bridge®") accelerated the bidding and hospitalization process, with its revenue increased rapidly. In the treatment of acute ischemia, the Group continued to improve its product portfolio, with new products such as Neurohawk® Stent Thrombectomy Device ("Neurohawk®") and X-track® Distal Access Catheter commercialized during the Reporting Period, contributing to incremental revenue.

In overseas markets, the Group has continued to promote the registration and launch of its core products and has made significant progress in internationalization. As of the end of the Reporting Period, the Group's NUMEN® Coil products have realised commercial implantation in seven overseas countries and regions, including Korea, the United States, Brazil, Chile and many European countries. During the Reporting Period, the first sales of APOLLO™ were also made in Brazil, adding new momentum to the overseas business. The rapid increase in demand for NUMEN® Coils in Korea, where they have been included in the national health insurance reimbursement catalog since early 2022, has led to significant revenue growth. The Group also actively embraces commercial partnerships: in the United States, with the rich channel resources of its associate company Rapid Medical, NUMEN® Coils are rapidly becoming commercially available. NUMEN® Coils can also be used with Rapid Medical's own Comaneci® Embolization Assist Device (an FDA breakthrough medical device) to create a full product portfolio in the field of coil embolization surgery. In addition, the Group has established subsidiaries in the United States, the United Kingdom, the Netherlands and Brazil, as well as regional sales headquarters in Europe, the Middle East and Africa (collectively referred to as "EMEA"), North America, Latin America and the Asia Pacific region, with commercial footprint spanning four continents, laying a solid foundation for its core products to establish overseas presence.

MANAGEMENT DISCUSSION AND ANALYSIS

HEART VALVE BUSINESS



The Group's heart valve products include two self-developed and commercialised products: VitaFlow® Transcatheter Aortic Valve Implantation and Delivery System ("VitaFlow®") (including the auxiliary Alwide® Balloon Catheter), VitaFlow Liberty™ Transcatheter Aortic Valve Implantation and Retrievable Delivery System (VitaFlow Liberty™) (including the auxiliary Angelguide® tip-preshaped super-stiff guidewire and Alwide® Plus Balloon Catheter), and various transcatheter aortic valve implantation ("TAVI") products, transcatheter mitral valve ("TMV") products, transcatheter tricuspid valve ("TTV") products, surgical valve products and procedural accessories at different development stage. Apart from its self-developed product portfolio, the Group also cooperates with international business partners (namely 4C Medical and Valcare) on certain TMV and TTV products, and has the exclusive right to commercialisation of these products in the PRC.

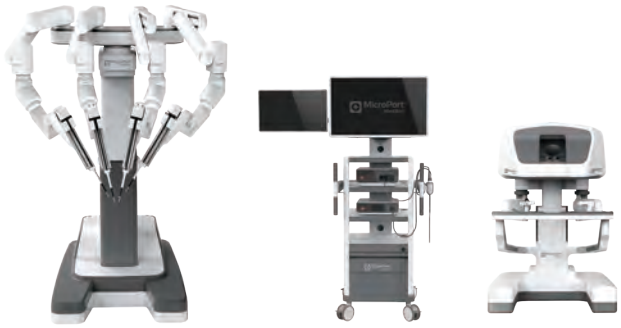
During the Reporting Period, the heart valve business recorded revenue of US$36.8 million, an increase of 25.0% excluding the foreign exchange impact as compared to the corresponding period of last year, which was mainly attributable to the increase of market shares due to progress in hospitalizations of TAVI products. Driven by steady promotion of the production process optimisation, production efficiency improvement and continuous development of multiple-supply resources and other measures to reduce costs and increase efficiency, and improved bargaining power in raw material procurement driven by economies of scale, the gross profit margin of the business segment also increased significantly by 6 percentage points year on year to 64.6%.

The Group has accelerated the integration of its rich resources in the pan-cardiac field to further promote the penetration of the innovative transcatheter solutions for structural heart diseases to the lower-tier regions through medical education and marketing activities. During the Reporting Period, VitaFlow® and VitaFlow Liberty™ products have covered a total of nearly 440 hospitals, and the number of surgeons able to perform procedures independently with the Group's TAVI products has also recorded rapid growth. In terms of market development, the TAVI business team continued to strengthen collaboration with the coronary business and the "Rosefinch Swallow" team, making full use of the Group's nationwide channel network and clinical resources to jointly carry out patient screening, diagnosis and referral. During the Reporting Period, the Group has completed more than ten thousand patient screenings. The screening system, which has a strong presence in lower-tier regions and wide coverage, effectively breaks geographical restrictions, and is expected to continue to fill the gaps in medical services in lower-tier regions. In terms of product development, during the Reporting Period, the Group successfully promoted the self-developed transcatheter mitral valve replacement system into the clinical trial stage, further improving its presence in the field of structural heart diseases.

In the international market, the commercialisation of the heart valve products achieved a breakthrough, and the annual revenue amounted to US$1.0 million, a substantial increase of 626% year on year. During the Reporting Period, the number of surgeries involving VitaFlow® and VitaFlow Liberty™ in Argentina realized significant increase, and VitaFlow Liberty™ and the auxiliary Angelguide® were successfully registered in Colombia in August 2022 and achieved commercial implantation during the Reporting Period, marking that the Group has taken another solid step in its international layout. As of the end of the Reporting Period, the heart valve business has successfully developed around 40 overseas centres and recorded nearly 100 cases of commercial implantation. Meanwhile, the Group has also been actively promoting the registration of products in multiple overseas emerging markets. Alwide® Plus was approved for registration by Brazil Food and Drugs Supervision Agency (ANVISA) during the Reporting Period; In February 2023, VitaFlow Liberty™ and Alwide® Plus obtained registration approval from the Food and Drug Administration of Thailand ("Thai FDA").

SURGICAL ROBOT BUSINESS

The surgical robot business is dedicated to designing, developing and commercialising innovative surgical robots. Relying on our strong ability in product industrialisation and operation, we provide an innovative turnkey solution of robotic intelligent surgical total solutions that can prolong and reshape life. To meet the most cutting-edge development needs of minimal invasive surgeries, the Group focuses on the R&D of five underlying technologies in relation to surgical robots, including robot ontology, control algorithm, electrical engineering, image-based navigation and precision imaging, covering the whole life cycle of surgical robot development.



The Group is the only company in the global surgical robot industry with a product portfolio covering five major and fast-growing surgical specialties, namely laparoscopic, orthopedic, panvascular, natural orifice and percutaneous surgical procedures. One of the Group's flagship products, Toumai® Laparoscopic Surgical Robot ("Toumai®"), was approved by the NMPA for launch to the market during the Reporting Period, and became the first four-arm laparoscopic robot developed by a Chinese company and used in clinical application. The product also recorded its first sale and won multiple bids in this period. Another flagship product, the SkyWalker™ Orthopedic Surgical Robot ("SkyWalker™"), obtained approval from the NMPA, 510(k) clearance from the U.S. Food and Drug Administration ("FDA") and CE Marking, becoming the first and the only Chinese surgical robot cleared by the NMPA and FDA and with CE Marking for launch to date. During the Reporting Period, SkyWalker™® won the first domestic bid; several devices of this type have also completed trial running in overseas markets. With the continuous expansion of our global business, it is expected that more patients from various countries and regions will be benefited from the product. Apart from independent R&D, the Group's cooperative development project with Biobot, the world's leading surgical robot company, is also progressing smoothly. The Mona Lisa prostate puncture surgery robot achieved its first sales during the Reporting Period and successfully opened up the market in the PRC's Taiwan region. We have completed the enrolment of all patients for the multi-centre clinical trial which is conducted for the purpose of obtaining NMPA, and the world's first localised treatment of prostate cancer based on a prostate positioning robot combined with a cryoablation platform has also been completed. The R-ONE® vascular interventional surgery robot jointly developed by the Group and Robocath has also completed all registration clinical trials, becoming the first cardiovascular interventional robot system in the PRC to complete multi-centre clinical trials for registration. In the future, the Group will continue to promote the development of human health with high-quality, high-reliability robotic products, and realise our mission of "Make surgery easier, safer, and less invasive".

During the Reporting Period, the surgical robot business achieved breakthrough in growth, recording operating income of US$3.1 million, a substantial increase of 904.8% excluding the foreign exchange impact over the previous year, mainly driven by the successful commercialisation of Toumai® and the accelerated promotion and sales of DFVision® 3D electronic laparoscope ("DFVision®") in the hospitalization process. In June 2022, Toumai® successfully completed the longest-distance 5G ultra-remote robotic surgery in the world to date, fully demonstrating the leading technical strength and advantages of Chinese-developed surgical robots in the field of 5G ultra-remote robotic surgery. As of the end of the Reporting Period, the Group has deployed more than 40 clinical application and training centres across the country, among which four training centres were built in Beijing, Shanghai, Guangzhou and in the form of mobile surgical vehicles, and deployed channels in over ten provinces and cities to provide professional education, technical services, digital learning platforms and other one-stop comprehensive supporting services, empowering primary medical institutions across the country and around the world, while enabling universal access to the inclusive process of intelligent robot-assisted surgery technology at a faster pace. As of the date of this announcement, Toumai® completed more than 600 human clinical surgeries, and over 400 SkyWalker™ Total Knee Arthroplasty ("TKA") human clinical surgeries. The Group also established Shanghai Engineering Research Center of Minimally Invasive Surgical Robots (上海微創手術機器人工程技術研究中心) to build an open service platform covering research and development, verification, clinical and industrialization support through the cooperation between the industry, universities and research institutions.

MANAGEMENT DISCUSSION AND ANALYSIS

SURGICAL DEVICES BUSINESS

Surgical devices business focuses on providing overall solutions for cardiac surgery and emergency life support, including: extracorporeal membrane oxygenation system ("ECMO") for cardiopulmonary support, extracorporeal circulation series consumable products such as oxygenation system (artificial lungs), occlusion series products used in congenital heart disease treatment (atrial septal defect occluder and delivery system, ductus arteriosus occluder and delivery system, ventricle septal defect occluder and delivery system) and general surgical polypropylene herniorrhaphy series products.

During the Reporting Period, the surgical devices business recorded revenue of US$4.5 million. As of the end of the Reporting Period, the products of this business segment have entered 16 overseas markets. The surgical intubation products and the occluder products have successfully entered the Egyptian and Mexican markets during the Reporting Period, and realised the first batch of commercial sales. During the Reporting Period, the self-developed Vitasprings® integrated membrane oxygenator ("Vitaspring®") was approved by the NMPA for launch to the market. This product is also the first integrated membrane oxygenator admitted into the "Green Path" in the PRC. MOBYBOX® ECMO system ("MOBYBOX"), which is a core product of the Group's wholly-owned subsidiary, Hemovent GmbH, has obtained CE Marking for its excellent clinical effects. During the Reporting Period, the Group is actively promoting the domestic registration, industrialisation and commercialisation of this highly innovative product. In November 2022, the first set of MOBYBOX products completed the production in the Shenzhen production line and passed the test.

EMERGING BUSINESS SEGMENTS

In addition to the rapid development of mature business segments, the Group is also actively developing a number of emerging businesses through its subsidiaries or affiliates, committed to building a business loop covering the entire human life cycle from prevention and diagnosis to treatment and rehabilitation. The product portfolio covers interventional imaging, non-vascular intervention, rehabilitation treatment, quinturology, sports medicine, assisted reproduction, skin and body management, etc.. At the same time, the Group has also been actively developing platform-based businesses to bridge the upstream industry chain, covering areas such as active pharmaceutical ingredients, smart manufacturing of medical devices, disinfection and sterilization, to fully utilize the efficiency and synergy of group operations.

In the interventional imaging field, during the Reporting Period, the commercialization of the MicroPort Argus™ intravascular optical coherence tomography ("OCT") system, the only purge-free disposable imaging catheter in China, achieved a breakthrough. Leveraging on the mature commercialization channel of the coronary segment, the Group accelerated hospital admissions and built a distributor network for the OCT system, leading to a rapid increase in market share. The Group's domestic medical digital subtraction angiography ("DSA") system, jointly developed with Siemens, was successfully adopted by 3 hospitals during the Reporting Period. In terms of research and development, the Group's self-developed intravascular ultrasound ("IVUS") imaging system and the accompanying disposable catheter commenced type testing, and the dual-mode intravascular imaging system ("IVUS+OCT") completed prototype development. In the field of non-vascular interventions, the Group continued to improve its diversified strategic deployment in urology, respiratory, gastroenterology and gynecology. During the Reporting Period, the Group's two major products, namely the single-use flexible digital ureteroscope catheter and the single-use hemostatic clip device, were approved by the NMPA for launch in China, and five new products were approved for marketing in Brazil, Thailand and Colombia. In terms of registration and R&D, the Group's self-developed single-use biliary-pancreatic duct imaging catheter has been approved by the NMPA for registration in March 2023, and The "Green Path" product, the prostatic urethral lift system, has completed the first-in-man (FIM) clinical trial and entered into registration clinical trial stage. For rehabilitation treatment segment, the Group has been actively expanding into the areas of musculoskeletal rehabilitation, cardiopulmonary rehabilitation and neurological rehabilitation. As at the end of the Reporting Period, seven products in these areas have been approved for marketing, and the commercialization of the first active product, the TherMotion® Cryo-Thermo Compression Device, has been progressing smoothly with over 100 hospital admissions following its approval for marketing in China, and was successfully approved in the United States and Colombia in March 2023. In addition, the lower-limb rehabilitation robot-assisted system, the first rehabilitation robot product, was approved for marketing in China during the Reporting Period. As for the construction of outpatient clinics, the Suzhou rehabilitation clinic has entered the trial operation stage and the Shanghai rehabilitation clinic proposal was approved during the Reporting Period.

At the same time, the Group has continued to expand its presence in emerging racing lanes through its equity-accounted investees. The Group is committed to building a platform for integrated solutions include glucose management, oncology chemotherapy and pain management: for glucose management, since the launch of the first La Fenice® insulin pump, the Group has continued to promote the upgrade of iterative and new product development. As of the end of the Reporting Period, the second generation of insulin pump products have been submitted for registration and the continuous glucose monitoring system ("CGM") has entered the prototype examination stage. As for oncology chemotherapy, the first chemotherapy injection pump, AutoEx®, was successfully commercialized during the Reporting Period and the application for registration of the Peripheral Venous Puncture Central Catheter ("PICC") was submitted. As for pain management, the analgesic pump is in the process of registration with the NMPA. In terms of sports medicine, seven products were approved for marketing during the Reporting Period, including the Galaxy Insight™ True 4K high-resolution arthroscope system, the Endosharp® sterile disposable shaving tip series, and the Cross Ligament Reconstruction Kit, Javelot® titanium wireline anchor system and PEEK wireline anchor system received registration approval in February and March 2023, respectively, with multiple new products entered the assessment for registration phase. The multi-center registrational clinical trial for Archimedes®, the world's first long-term implantable balloon rotator cuff system self-developed by an associate, has completed a multi-center clinical trial and all of its subjects were enrolled in China during the Reporting Period. The product was also submitted to the European Union for registration during the Reporting Period and was in the pre-application stage of FDA preparation, and China's first tunnel-form rotator cuff repair system has entered clinical registration and has completed the assessment before approval. In the field of assisted reproduction, the Daylily® Embryo Transfer Catheter received FDA 510 (K) marketing clearance during the Reporting Period. The artificial insemination catheter was cleared for marketing in Thailand, and the vitrified frozen carrier rod, single-use sterile culture dish and sperm centrifuge test tube were cleared for marketing in China during the Reporting Period, and the Group continues to explore and expand potential business scenarios of the segment. In July 2022, the first medical laboratory was established in Shenzhen, covering a more comprehensive business in the field of assisted reproduction.

RESEARCH AND DEVELOPMENT ("R&D")

During the Reporting Period, the R&D programs of the Group achieved fruitful results: the Group and its associated companies had 22 products obtaining the Class III medical devices registration certificates from the NMPA, and have obtained the FDA clearances for 7 products and the CE Marking for 6 products; 4 products newly admitted in the Innovative Medical Device Special Review and Approval Procedure (the "Green Path"), reaching a total of 29 "Green Path" products, ranking the first in the medical device industry for eight consecutive years.

As for the cardiovascular devices business, the Group has a variety of innovative and iterative products under R&D, including coronary stent and balloon catheter, active interventional devices, passive access consumables and other products under development. During the Reporting Period, the Group's two stent iterative products, Firehawk Pro™ Coronary Rapamycin Target-eluting Stent System ("Firehawk Pro™ Stent") and Firebird Pro+ Coronary Rapamycin Target-eluting Stent System ("Firebird Pro+ Stent") were approved for launch to the market by the NMPA. Meanwhile, we have completed the enrolment of all patients in the TARGET IV NA clinical trial of the Firehawk® Rapamycin Target Eluting Coronary Stent System ("Firehawk® Stent"). The clinical data of this study will support the approval by the FDA and Canadian regulatory authorities of Firehawk® Stent for the treatment of atherosclerotic coronary artery lesions; for the second-generation bioabsorbable vascular stent system – Firesorb® Rapamycin Target Eluting Coronary Stent System ("Firesorb® Stent"), we have completed key registration clinical endpoint follow-up and will submit a registration application in the near future. During the Reporting Period, the results of the OCT clinical study of Firehawk® applied in high-risk populations were first announced at the Euro-PCR, further verifying its safety and effectiveness as the world's lowest drug-loaded coronary stent in high-risk patients with complicated conditions. In terms of coronary balloon products, during the Reporting Period, we have completed the enrolment of all patients in the pre-marketing clinical trial of the coronary rapamycin drug-coated balloon catheter ("PROMISE-BIF Study") on the treatment of primary coronary bifurcation lesions. In terms of active products, the pre-marketing clinical trial of the rotational atherectomy system ("CORRECT Study") on the treatment of coronary artery calcification is progressing smoothly, and the product was admitted in the Innovative Medical Device Special Review and Approval Procedure (the "Green Path") in January 2023, providing a new option for clinical interventional treatment of coronary artery calcification lesions, especially for moderate to severe calcification. In terms of access products, the self-developed Beyond Prefer™ guiding wire was approved for launch to the market by the NMPA during the Reporting Period, and application registration in respect of the microcatheter has been submitted to the NMPA; in terms of special coronary balloon, the anchor balloon has been submitted to the NMPA for registration; the enrolment of the first patient in respect of the pre-marketing clinical trial ("CREST study") of spinous process balloon has been completed, marking the further improvement in the Group's entire product line mix in the coronary field.

MANAGEMENT DISCUSSION AND ANALYSIS

In terms of orthopedics devices business, a number of products of the Group's made significant progress in overseas regions. During the Reporting Period, final testing has been completed for the Group's self-developed Hinge Knee System, and the FDA application will be submitted for registration soon. The Group is actively promoting the Procotyl® P Acetabular Cup globally after it was launched in Europe, and plans to submit an application for registration with the US FDA in the near future. The product is currently undergoing pre-submission verification; in addition, a Dual Mobility version and Revision solution of the cup system will follow the initial release. In the PRC market, the registration and R&D of various products progressed smoothly during the Reporting Period, and the VenusOne Acetabular System with plasma spray was successfully approved for launch to the market. The Group continues to supplement and optimise the domestic product line. The new generation of China-made Medial-Pivot Knee System has been approved for launch to the market. Zirconium-Niobium Alloy Femoral Head Prosthesis, which was admitted in the "Green Path", and uni-condylar-fixed-platform prosthesis have been submitted to the NMPA for approval. In order to better promote the overall solution for orthopedic joints, the Group's knee joint image processing software, joint bone guides and other products were approved by the NMPA during the Reporting Period; the innovative products such as interphalangeal joints, wrist joints, and ankle joints to meet the diverse needs of clinical practice. In the field of spinal trauma, four products including spinal orthopedic equipment kits, laminectomy system kits, non-locking metal hollow bone screw kits and vertebroplasty tools were certified for commercialisation in the PRC during the Reporting Period.

As for the CRM business, the Group's R&D pipeline covers a new generation of Implantable Cardioverter Defibrillator ("ICD") and Cardiac Resynchronisation Therapy and Defibrillation ("CRT-D") equipped with Bluetooth technology; in the field of patient management and arrhythmia assessment, we are also developing an online platform analysis of ECG Holter recordings, which also includes an Artificial Intelligence module. In the PRC market, the Group actively promoted the R&D progress of MRI-compatible products. Registration application in respect of the next-generation 3T whole-body MRI-compatible pacemaker ENO™ and its matching Vega pacing lead has been submitted to the NMPA during the Reporting Period; in terms of MRI compatible leads, the BonaFire® whole-body MRI-compatible passive pacing lead, a self-designed "Green Path" product, has completed all clinical follow-up and will be submitted to the NMPA for approval and registration. In terms of cardiac defibrillation products, the Group reached a registration milestone during the Reporting Period. The Platinium™ ICD was successfully approved for commercialisation during the Reporting Period. Platinium™ CRT-D was also under approval by the NMPA. During the Reporting Period, the Group continued to promote the domestic development of implantable cardioverter-defibrillators (ICDs), and the Ministry of Science and Technology's 14th Five-Year Plan officially established a key project for it, laying the foundation for the first localisation of high-energy defibrillators.

In the endovascular and peripheral vascular devices business, a number of innovative and iterative products reached milestones: in the field of aortic intervention, the Talos® Thoracic Stent Graft System was approved by the NMPA for launched to the market at the beginning of the year; the first pre-marketing clinical implantation of the new generation Cratos® Thoracic Endovascular Stent Graft System ("Cratos® Branched Stent") was completed during the Reporting Period; the first pre-market clinical implantation of Aegis® II Abdominal Aortic Stent Graft System ("Aegis® II stent"), which is based on the Aegis® Bifurcated Aortic Stent-graft ("Aegis®") after being fully upgraded and iterated, was completed in January 2023; the thoracic main multibranch stent-graft system has entered the pre-market clinical trial stage, and is expected to further consolidate the Group's leading presence in the aortic field. In the field of peripheral vascular intervention, the "Green Path" product Vflower® venous stent system has completed all registration clinical follow-up; Fishhawk® mechanical thrombectomy catheter has completed the enrolment of several pre-market clinical trials, and entered the national innovative medical device Special Review Process ("Green Path"), during the Reporting Period becoming the seventh product of the aortic and peripheral vascular intervention business segment to be included in the "Green Path"; Vewatch® vena cava filter also successfully entered the pre-market clinical trial stage in October. In the field of tumor intervention, the key product TIPS (transjugular intrahepatic portosystemic shunt) covered stent system successfully completed the first pre-market clinical implantation in November, and the Group also simultaneously deployed innovative products such as developing embolization microspheres. As the Group continues to increase research and development of innovative products, new products are expected to continue to disrupt the leading position of international companies and benefit more patients.

In the neurovascular devices business, the Group continued to promote the development of new products in the three major areas of neurovascular diseases. In the field of hemorrhagic stroke, the Rebridge® Intracranial Artery Stent ("Rebridge® Stent") entered the national innovative medical device special review process ("Green Path") during the Reporting Period, becoming the fourth neurovascular devices of the business segment to be included in the "Green Path"; the results of IMPACT, a post-launch clinical trial of Tubridge® flow-diverting stent ("Tubridge® Stent") showed that the complete occlusion rate of 12M aneurysms, the primary endpoint was 79.1%, further verifying the high occlusion rate and low recurrence rate of Tubridge® in the treatment of unruptured internal carotid artery and vertebral artery aneurysms of various sizes. In the field of cerebral atherosclerotic stenosis, the Diveer® Intracranial Balloon Dilatation Catheter ("Diveer® Balloon Catheter") was approved by the NMPA for launch during the Reporting Period, further enriching the product line in this segment. In the field of acute ischemic stroke, the Group is the only Chinese company with stent embolization devices compatible with different size vessels. During the Reporting Period, the self-developed Neurohwak® Stent Thrombectomy Device, a stent retriever system with full visualization device, was successfully approved and commercialised. The study was published in an authoritative journal "Frontiers in Neurology", showing that the safety and effectiveness of Neurohawk® have reached a world-leading level among the industry. Moreover, the Group is the exclusive agent of Rapid Medical's world's first adjustable, fully developed stent-type thrombectomy device Tigertriever® ("Tigertriever® Thrombectomy Stent"), which is in the registration application stage of the NMPA, and will help formulate a unique "dual stent" thrombectomy product portfolio strategy.

In the heart valve business, the Group efficiently synergizes internal and external resources, and has been promoting the research and development of all-round medical solutions for structural heart diseases that include TAVI products, TMV products, TTV products, surgical valve products and procedural accessories in an organised manner. In terms of TAVI, the Group's self-designed third-generation TAVI product achieved key technological breakthroughs, and animal trials had been started for the product. While inheriting all the advantages of VitaFlow Liberty™, the product has realised the world's first adjustable bending function, which further improves surgical efficiency, and relaxes error tolerance, precision and accuracy, creating better usability experience for doctors. In terms of TMV, in July 2022, the Group's self-developed transcatheter mitral valve replacement product successfully completed the first human implantation, becoming the world's first clinically applied dry valve TMVR model, and in January 2023, a six-month post-operation follow-up of patients was completed, showing significant improvement in mitral regurgitation and quality of survival, which preliminarily proved the safety and effectiveness of the product. The Group is also actively promoting the clinical application of this innovative product in multiple centres. TheAltaValve™ Transcatheter Mitral Valve replacement product and Amend™ Transcatheter Mitral Valve repair product developed by international partners are in the stage of early feasibility study overseas and have completed a number of clinical applications. Currently, the Group is also preparing for humanitarian applications in the PRC.

As for the surgical robot business, the Group is committed to leading the technological innovation and progress of domestic surgical robots by addressing the cutting-edge development needs of minimally invasive surgery. A number of core products received significant registrations and clinical advancements during the Reporting Period. Following the approval of the Toumai® Laparoscopic Surgical Robot ("Toumai®") for urological surgery in January 2022, the Group has continued to advance the evidence-based construction of Toumai® and has completed a number of difficult robotic-assisted clinical validation surgeries, setting many "firsts" records. Toumai® Single-arm Laparoscopic Surgical Robot ("Toumai® Single-arm") was also enrolled in a registered clinical trial initiated during the Reporting Period. During the Reporting Period, SkyWalker™ Orthopedic Surgical Robot was successively approved for marketing in the PRC, the United States, and the European Union, reaching a key milestone in the Group's globalization strategy. The Group also continues to explore breakthrough applications of SkyWalker in other procedures of surgeries. As of February 2023, SkyWalker has performed the first total hip replacement surgery and the first unicondylar knee replacement surgery. In addition, the Group has continued to build an innovative platform for surgical robot technology. The Trans-bronchial Surgical Robot has completed the first-in-man trial, marking a major breakthrough in the field of minimally invasive surgery. Both the R-one® panvascular surgical robots and Mona Lisa percutaneous surgical robots jointly developed were submitted to the NMPA for registration during the Reporting Period. During the Reporting Period, Mona Lisa successfully completed the world's first localised treatment of prostate cancer based on a prostate positioning robot combined with a cryoablation platform, marking the clinical validation of Mona Lisa's precision therapy in the field of percutaneous puncture. In terms of cutting-edge technology, the Group continues to promote the practice of 5G surgery in the clinical field. Toumai® successfully completed two ultra-long-distance 5G robotic urological surgeries involving two places with a distance of about 5,000 kilometres during the Reporting Period; in February 2023, Toumai® again broke through spatial and regional barriers and successfully carried out a ultra-remote hepatobiliary surgery, reaching a new milestone in 5G remote robotic surgery and bringing the possibility to perform more difficult and complex surgeries in more remote and less developed areas.

As for the surgical devices business, the Group has complete expertise in all the fundamental technologies in the extracorporeal membrane oxygenation ("ECMO") system, including membrane oxygenators, blood pumps, sensors, intubation and control systems, and has established its capability in continuous innovation and iteration for the whole series of products. During the Reporting Period, the VitaSprings® Spiral Diversion Integrated Membrane Oxygenator ("VitaSprings®") was registered and approved by the NMPA, becoming the first made-in-China highly integrated membrane oxygenator. In February 2023, the first batch of post-launch clinical applications was realised, breaking the current reliance on overseas suppliers in high-end integrated membrane oxygenators. At the same time, the self-developed new generation of disposable arterial and venous cannulas has been submitted to the NMPA for registration, and design iterations has been completed for the self-developed ECMO, and the design of the model has been finalised. MOBYBOX, the world's first ECMO system that uses the combination of a displacement pump with an artificial lung, developed by Hemovent GmbH, a wholly-owned subsidiary of the Group, and its supporting MOBYO artificial lung kit, had been submitted as an innovative application for import registration to the NMPA during the Reporting Period. The animal study in respect of MOBYO artificial lung kit has also completed to support the application of the Food and Drug Administration ("FDA"), and the Hemovent WATCHA blood oxygen saturation monitoring sensor has been awarded with CE Marking.

HUMAN RESOURCES AND TRAINING

As of the end of the Reporting Period (31 December, 2022), the Group had a total of 9,435 employees around the world, of which 1,928 or 20.4% were overseas employees in the Asia Pacific region, Europe, the Middle East, Africa, North America and Australia.

Through the construction mechanism of organisational competence, the Group improves organisational efficiency and the overall ability of employees, and establishes a comprehensive talent development platform. Focus is placed on the enhancement and development of the intellectual, emotional, reactive and instrumental quotient of staff and the organic integration within the organisation. Adhering to the principle of "maturity, usage, cultivation, remuneration and care" regarding human resources, and the employee career path of "2 ways, 3 levels, 6 paths, 18 steps and 108 posts", we provide employees with sufficient room for advancement in combined directions horizontally and vertically. Within the Group, we have set up four internal learning institutions, namely the "Earth-Down Leadership Academy", "Innovation Qualification & Competency Institute", "Emerging Technology Knowledge & Action Institute", and "Culture & Philosophy Academy". Through the extraction of internal knowledge and experience and the transmission of the spirit of "passing on the knowledge to others", and with an aim of comprehensively cultivating "professional, excellent, special and uncommon" technical talents and future enterprise leaders, we accompany our employees to grow together by building a learning organisation, and work together to achieve our mission of "breaking barriers to support billions of people thriving beyond the age of 115 years old".

PROSPECTS

With the expanding ageing population in the world, the improved living standards of the people and the economic growth of the developing countries, the global market demand for medical devices has steadily increased. As for the PRC market, thanks to the economic and social development, the health awareness among its people has been raised significantly, and the reform of the medical system has also brought policy bonus. The medical device market in China has huge development opportunities, while at the same time attracting more and more multinational medical enterprises. In order to seize the development opportunities and enhance the Group's core competitiveness in the increasingly fierce market competition, the Group will continue to actively implement its business strategies, including but not limited to the following:

1. Consolidating its leading position in the medical device market in the PRC. With its strong brand recognition, extensive distribution network, and the economies of scale achieved by the deployment of multiple channels, the Group will further increase its market share in the PRC and continue to give full play to the advantages of being a leading enterprise in the industry and make all-round breakthroughs in the domestic high-end medical device industry, thereby maximising value for the shareholders, customers, employees and society.

2. Expediting the global penetration to realise integration of our brand and global operations. The Group will continuously deepen the globalised branding and operation strategy based on local language families by consistently implementing the operation model of "globalisation in operational strategy, localised implementation, deployment with diversification, and unified positioning", thereby realising global deployment through effective integration of resources and markets around the world, which in turn will bring the products of MicroPort® to more countries or regions and benefit patients and doctors around the world.

3. Constantly improving its existing products and actively promoting the development of innovative products to create a diversified product portfolio. While continuously improving the performance and manufacturing processes of existing products and carrying out a vast variety of R&D activities, the Group will expedite the R&D and commercialisation of innovative products which align with the Group's strategy, with an aim to provide patients and doctors with quality integrated medical solutions at affordable charges.

4. Deepening the reform of its management system. In order to further enhance its competitiveness and risk prevention capability, the Group will constantly improve the system development and enhance the efficiency of internal governance by integrating resources and streamlining processes, thereby maintaining the unique entrepreneurial vitality, flexibility and efficiency of MicroPort® to the greatest extent while expanding its business scale rapidly.

FINANCIAL REVIEW

OVERVIEW

Despite facing an increasingly fierce competition in the rapidly growing medical device industry in China and abroad as well as the impact of the COVID-19 pandemic, the revenue of the Group increased by 15.6% excluding the foreign exchange impact or 8.0% in US$ for the year ended 31 December 2022 as compared to the year ended 31 December 2021. The Group persisted in providing a diversified product portfolio and pursued the Group's globalization strategy with non-China sales contributing to 51.8% of the total revenue. The Group aims to continuously bring its innovations, technologies and services to millions of global patients and become a patient oriented global enterprise capable of leading minimally invasive and other emerging medical technologies.

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

REVENUE

US$'000	Year ended 31 December		Percent change	
	2022	2021	in US$	excluding the foreign exchange impact
Cardiovascular devices business	**134,130**	139,541	(3.9%)	2.3%
Orthopedics devices business	**223,555**	215,614	3.7%	9.5%
CRM business	**204,239**	220,421	(7.3%)	3.5%
Endovascular and peripheral vascular devices business	**133,179**	106,028	25.6%	31.0%
Neurovascular devices business	**79,900**	59,053	35.3%	43.0%
Heart valve business	**36,808**	31,324	17.5%	25.0%
Surgical robot business	**3,092**	329	839.8%	904.8%
Surgical devices business	**4,511**	4,727	(4.6%)	0.0%
Other business (Note)	**21,417**	1,602	1,236.9%	1,284.4%
Total	**840,831**	778,639	8.0%	15.6%

Note:

Other business did not meet the quantitative thresholds for determining reportable segments.

The Group's revenue for the year ended 31 December 2022 was US$840.8 million, representing an increase of 8.0% compared to US$778.6 million for the year ended 31 December 2021. The Group's reported revenue was impacted by exchanging from non-dollar functional currencies of the Group's subsidiaries to US dollars, the presentation currency of the Group, due to the impact of the appreciation or depreciation of US dollars against functional currencies. Excluding the foreign exchange impact, the Group's revenue increased by 15.6%. Such growth was principally attributable to the rapid market penetration and new product revenue contribution. The following discussion is based on the Group's major business segments.

– *CARDIOVASCULAR DEVICES BUSINESS*

The Group's cardiovascular devices business recorded revenue of US$134.1 million for the year ended 31 December 2022, representing an increase of 2.3% excluding the foreign exchange impact or a decrease of 3.9% in US$ compared to the year ended 31 December 2021. The increase in revenue was mainly because the overseas business drove the revenue to grow through bid wins and deliveries in key countries in Asia Pacific, Middle East, Africa, Russia and Latin America, and by optimising distributorship model, expanding sales channels, iterating products, and accelerating the development of uncharted markets.

– *ORTHOPEDICS DEVICES BUSINESS*

US$'000	**Year ended 31 December**		**Percent change**	
	2022	2021	in US$	excluding the foreign exchange impact
Orthopedics devices business	**223,555**	215,614	3.7%	9.5%
– US	**87,282**	86,727	0.6%	0.6%
– Europe, Middle East and Africa	**63,888**	51,926	23.0%	32.6%
– Japan	**30,848**	37,423	(17.6%)	(2.0%)
– the PRC	**21,129**	22,363	(5.5%)	2.9%
– Others	**20,408**	17,175	18.8%	18.4%

The Group's orthopedics devices business recorded revenue of US$223.6 million for the year ended 31 December 2022, representing an increase of 9.5% excluding the foreign exchange impact or 3.7% in US$ compared to the year ended 31 December 2021. The change in revenue was mainly due to solid business growth from continued channel development and product promotion, mainly including the rapid growth in knee revenue driven by the widespread recognition of the rollout of digital orthopedic technology combined with medial pivot knee among clinicians and patients, and channel expansion in regions such as the Middle East and Vietnam.

– *CRM BUSINESS*

US$'000	**Year ended 31 December**		**Percent change**	
	2022	2021	in US$	excluding the foreign exchange impact
CRM business	**204,239**	220,421	(7.3%)	3.5%
– Europe, Middle East and Africa	**172,191**	188,028	(8.4%)	2.4%
– Japan	**12,308**	13,230	(7.0%)	6.7%
– The PRC	**13,139**	13,647	(3.7%)	6.7%
– US	**2,623**	2,541	3.2%	3.2%
– Others	**3,978**	2,975	33.7%	41.5%

The CRM business recorded revenue of US$204.2 million for the year ended 31 December 2022, representing an increase of 3.5% excluding the foreign exchange impact or a decrease of 7.3% in US$ compared to the year ended 31 December 2021, mainly due to the new generation of pacemakers and home monitors, which are equipped with Bluetooth technology, has been widely recognised by local clinicians and patients for its convenient remote monitoring functions since its launch in Europe and Japan, driving the rapid growth in sales of pacemakers; and the rapid growth in market share in the Middle East, Latin America, and Australia.

– *ENDOVASCULAR AND PERIPHERAL VASCULAR DEVICES BUSINESS*

The Group's endovascular and peripheral vascular devices business achieved revenue of US$133.2 million for the year ended 31 December 2022, representing a growth of 31.0% excluding the foreign exchange impact or a growth of 25.6% in US$ compared to the year ended 31 December 2021. The increase was mainly because the innovative products, including Castor® Branch Aortic Overlay Stent and Delivery System, Minos® Abdominal Aortic Overlay Stent and Delivery System and Reewarm PTX® Drug Balloon Dilatation Catheter, continued to achieve rapid growth during the Reporting Period, and the aforementioned products further consolidated and improved this Group's competitiveness in the aortic and peripheral vascular intervention market despite the recurrence of the pandemic which had a certain impact on the performance of some procedures. At the same time, as the Group continued to increase its efforts in expanding the international market for its innovative products, the revenue from overseas business has also achieved rapid growth.

– *NEUROVASCULAR DEVICES BUSINESS*

The Group's neurovascular devices business recorded revenue of US$79.9 million for the year ended 31 December 2022, representing a growth of 43.0% excluding the foreign exchange impact or a growth of 35.3% in US$ compared to the year ended 31 December 2021. The increase was mainly due to: (i) overseas revenue surpassed US$3 million for the first time, with revenue mainly coming from the United States, Korea and Europe; (ii) the rapid ramp-up of sales of the innovative products approved in recent years, including NUMEN® Coil Embolisation System, the Bridge® Rapamycin Target Eluting Vertebral Artery Stent System and U-track™ Intracranial Support Catheter System; and (iii) the continuous growth in clinical use of market-leading products (including the Tubridge® flow-diverting stent and the Asahi® series of neurovascular guidewires).

– *HEART VALVE BUSINESS*

The heart valve business recorded revenue of US$36.8 million for the year ended 31 December 2022, representing a growth of 25.0% excluding the foreign exchange impact or a growth of 17.5% in US$ compared to the year ended 31 December 2021. The increase was mainly due to the rapid growth in sales and implant volumes of VitaFlow® and VitaFlow Liberty™ heart valves system as a result of their positive market recognition.

– *SURGICAL ROBOT BUSINESS*

The surgical robot business recorded revenue of US$3.1 million for the year ended 31 December 2022, representing a growth of 904.8% excluding the foreign exchange impact or a growth of 839.8% in US$ compared to the year ended 31 December 2021. This increase was mainly due to the rapid growth in revenue from DFVision® 3D electronic laparoscopy, the first in a kind to get licensed, and the revenue incurred as a result of the successful hospital installation of the core product, Toumai®, in the same year when it was licensed.

– *SURGICAL DEVICES BUSINESS*

The Group's surgical devices business recorded revenue of US$4.5 million for the year ended 31 December 2022, remaining stable excluding the foreign exchange impact or representing a decrease of 4.6% in US$ compared to the year ended 31 December 2021.

– *OTHER BUSINESS*

The Group's other businesses recorded revenue of US$21.4 million for the year ended 31 December 2022, representing an increase of 1,284.4% excluding the foreign exchange impact or an increase of 1,236.9% in US$ compared to the year ended 31 December 2021. The increase was mainly due to the sales revenue contribution of Fujian Kerui Pharmaceutical Co., Ltd ("Kerui Pharma") and Suzhou MicroPort Argus Medtech Co., Ltd. ("Suzhou Argus"), the newly acquired subsidiaries of the Group in the second half of 2021, and the revenue contribution as a result of the multiplication of sales revenue of MicroPort Urocare (Jiaxing) Co., Ltd. ("Urocare"). These businesses individually did not meet the quantitative thresholds for determining reportable segments.

COST OF SALES

For the year ended 31 December 2022, the Group's cost of sales was US$339.1 million, representing a 18.2% increase compared to US$286.9 million for the year ended 31 December 2021. Such increase was primarily attributable to the increased sales volume of the major businesses.

GROSS PROFIT AND GROSS PROFIT MARGIN

As a result of the foregoing factors, the Group's gross profit increased by 2% from US$491.8 million for the year ended 31 December 2021 to US$501.8 million for the year ended 31 December 2022. Gross profit margin is calculated as gross profit divided by revenue. The Group's gross profit margin decreased to 59.7% for the year ended 31 December 2022 as compared to 63.2% for the year ended 31 December 2021, which mainly attributable to unfavourable sales mix and cost increase from COVID-19 lockdowns, new manufacturing plants and inflation.

OTHER NET INCOME

The Group recorded other net income of US$36.2 million for the year ended 31 December 2022, representing a 52.7% decrease as compared to US$76.5 million for the year ended 31 December 2021. The decrease was mainly due to the the movement in the Group's financial instrument carried at fair value through profit or loss as the Group recorded gains on change in fair value of US$25.7 million for the year ended 31 December 2021.

RESEARCH AND DEVELOPMENT COSTS

Research and development costs increased by 41.0% from US$297.8 million for year ended 31 December 2021 to US$419.8 million for the year ended 31 December 2022. The increase was primarily due to the increased investments in the on-going and newly kicked off research and development projects.

DISTRIBUTION COSTS

Distribution costs increased by 10.3% from US$297.5 million for the year ended 31 December 2021 to US$328.2 million for the year ended 31 December 2022. The increase was mainly due to the market development and an increase in product promotion of the surgical robots and heart valve businesses.

ADMINISTRATIVE EXPENSES

Administrative expenses decreased by 1.0% from US$250.0 million for the year ended 31 December 2021 to US$247.5 million for the year ended 31 December 2022.

OTHER OPERATING COSTS

Other operating costs increased by 197.8% from US$16.5 million for the year ended 31 December 2021 to US$49.3 million for the year ended 31 December 2022. The increase was mainly due to: (i) increase in impairment losses on individual non-current assets during the Reporting Period; (ii) provision for the payback that the Italian government seeks for from medical device companies as reimbursement for overspending on medical devices in the relevant regions.

FINANCE COSTS

Finance costs increased by 63.7% from US$47.9 million for the year ended 31 December 2021 to US$78.4 million for the year ended 31 December 2022. Such increase was mainly due to the increase in the accrued interest of convertible bonds issued by the Company and preferred shares issued by the subsidiaries of the Group.

GAIN ON DEEMED DISPOSAL OF INTERESTS IN EQUITY-ACCOUNTED INVESTEES

The gain on the deemed disposal of interests in equity-accounted investees surged by 326.1% from US$9.2 million for the year ended 31 December 2021 to US$39.3 million for the year ended 31 December 2022. The increase was primarily due to the fact that the Group's effective interests in EP was diluted to 32.7% as a result of EP's listing on the STAR Market on 31 August 2022.

INCOME TAX

Income tax decreased from US$14.0 million for the year ended 31 December 2021 to US$6.6 million for the year ended 31 December 2022. The change was mainly due to the decrease in profit before taxation of the domestic subsidiaries in the PRC.

CAPITAL MANAGEMENT

The primary goal of the Group's capital management is to maintain the Group's stability and growth, safeguard its normal operations and maximize shareholders' value. The Group reviews and manages its capital structure on a regular basis, and makes timely adjustments to it in light of changes in economic conditions. To maintain or realign the capital structure, the Group may raise capital by way of bank loans or issuance of equity or convertible bonds.

LIQUIDITY AND FINANCIAL RESOURCES

As at 31 December 2022, the Group had US$1,203.0 million of cash and cash equivalents on hand, as compared to US$1,754.4 million as at 31 December 2021. The decrease was mainly attributable to (i) operating expenditure on research and development, registration, and commercialisation of businesses such as surgical robots and heart valves; (ii) capitalised expenditure of the Group; (iii) investments in equity-accounted investees; and (iv) share repurchases. The Board's approach to managing liquidity of the Group is to ensure sufficient liquidity at any time to meet its matured liabilities in order to avoid any unacceptable losses or damage to the Group's reputation.

BORROWINGS AND ASSET LIABILITY RATIO

Total borrowings of the Group, including interest-bearing borrowings and convertible bonds, as at 31 December 2022 were US$1,291.6 million, representing an increase of US$266.8 million as compared to US$1,024.8 million as at 31 December 2021. The Group's asset liability ratio (calculated as total liabilities divided by total assets) increased from 49.4% as at 31 December 2021 to 55.1% as at 31 December 2022.

MANAGEMENT DISCUSSION AND ANALYSIS

NET CURRENT ASSETS

The Group's net current assets as at 31 December 2022 were US$1,277.1 million, as compared to US$1,840.0 million as at 31 December 2021.

FOREIGN EXCHANGE EXPOSURE

The Group is exposed to currency risk primarily from sales, purchases, borrowing and lending which give rises to receivables and payables that are denominated in a foreign currency (mainly RMB, Euro and JPY). For the year ended 31 December 2022, the Group recorded a net exchange gain of US$4.5 million, as compared to a net exchange loss of US$5.7 million for the year ended 31 December 2021. The Group did not have any significant hedging arrangements to manage foreign exchange risk but has been actively monitoring and overseeing its foreign exchange risk.

CAPITAL EXPENDITURE

During the year ended 31 December 2022, the Group's total capital expenditure amounted to approximately US$257.3 million, which was used in (i) construction of building; (ii) acquiring equipment and machinery; and (iii) expenditures for R&D projects in development stage.

CHARGE ON ASSETS

As at 31 December 2022, the Group had mortgaged its buildings held for own use and land use right for the purpose of securing bank loans with a carrying value of US$92.7 million; In order to obtain a bank loan with a carrying value of US$143.8 million for acquisition or capital contribution, the Group pledged its equity interests in Suzhou Argus, Shanghai MicroPort Huanbo Medical Technology Co., Ltd., MicroPort Vision Power MedTech (Shanghai) Co., Ltd. and Hemovent GmbH as collateral.

FUTURE INVESTMENT PLANS AND EXPECTED FUNDING

Looking ahead, the Group will continue to expand its business in both domestic and overseas markets, explore its potential and create more value for the benefit of its shareholders. The Group will continue to grow and strengthen core segments and key capabilities through focusing on cost reduction and improving operating efficiency. The Group's future operating plans will be supported by various sources of financing to support capital expenditure, including but not limited to internal funding and bank loans. Currently, the Group has sufficient banking facilities.

DIRECTORS

EXECUTIVE DIRECTOR

Dr. Zhaohua Chang (常兆華), born in 1963, is the Chairman, Executive Director and Chief Executive Officer of the Company. He has over 32 years' experience in the medical device industry, and currently also serve as a full professor at School of Medical Device, University of Shanghai for Science and Technology. Before establishing Shanghai MicroPort Medical (Group) Co., Ltd. (上海微創醫療器械(集團)有限公司) in 1998, from 1996 to 1997, Dr. Chang served as Vice President of R&D at Endocare Inc., a NASDAQ listed medical device company based in California, U.S.. From 1990 to 1995, he served as Senior Engineer, Chief Scientist, Director of R&D and Vice President of Engineering at Cryomedical Sciences Inc., a public medical device company in Maryland U.S.. Dr. Chang received his bachelor's degree in refrigeration engineering in 1983 and master's degree in cryogenic engineering in 1985, both from University of Shanghai for Science and Technology. In 1992, he received his doctoral degree in Biological Science from State University of New York (Binghamton). Dr. Chang has published extensively in biomedical fields and holds several dozens of patents in the United States and in China.

NON-EXECUTIVE DIRECTORS

Mr. Norihiro Ashida (蘆田典裕), born in 1954, is a Non-executive Director of the Company. Mr. Ashida has served as a Director since 1 November 2006. He is currently holding directorship in certain subsidiaries of the Group. Mr. Ashida has served as a director of J-Pharma Co., Ltd since June 2021. From February 2011 to June 2022, Mr. Ashida successively served as a director and advisor of Otsuka Medical Devices Co., Ltd., a subsidiary of Otsuka Holdings Co., Ltd ("Otsuka Holdings"). Mr. Ashida was an executive operating officer of Otsuka Holdings and the director of its business development and planning department until 2015. Before joining Otsuka Pharmaceutical Co., Ltd. ("Otsuka Pharmaceutical") in April 2003, he was a general manager of Mizuho Corporate Bank Ltd. from 2002 to 2003. From 1999 to 2002, Mr. Ashida was a general manager of the Industrial Bank of Japan ("IBJ"), where he headed the credit department for western Japan. From 1995 to 1999, Mr. Ashida served as vice president responsible for business development at 3iBJ Ltd., a venture capital firm formed by 3i Group plc and IBJ. From 1989 to 1995, Mr. Ashida was a senior vice president of IBJ (Canada). He joined IBJ in 1977 in its Tokyo branch. Mr. Ashida received his bachelor's degree in economics from the University of Tokyo in 1977.

Dr. Yasuhisa Kurogi (黒木保久), born in 1964, was appointed as our Non-executive Director in June 2020. Dr. Kurogi is Head of Business Development of Otsuka Holdings, a substantial Shareholder of the Company, and currently holding directorship in certain subsidiaries of Otsuka Holdings. He is also a director of the Licensing Executive Society JAPAN. Before joining Otsuka Holdings in August 2017, he was a deputy director of Business Development of Otsuka Pharmaceutical from 2015 to 2017. From 2007 to 2015, he was responsible for business development at Astex Pharmaceutical, Inc. and OPC. From 1992 to 2007, he was responsible for Research & Development at Cambridge Isotope Laboratories, Inc., Otsuka Maryland Research Laboratory, Inc., OPC, and Otsuka Pharmaceutical Factory, Inc. Dr. Kurogi received his Ph.D. degree in medicinal chemistry from the Hiroshima University in 1992 and was a fellow at Okazaki National Research Institutes in 1990. He also was a visiting lecturer of Tohoku University in 2000.

Mr. Hongliang Yu (余洪亮), born in 1974, was appointed as our Non-executive Director on 21 June 2018. Mr. Yu is currently the general manager of Zhangjiang Science & Technology Venture Capital Co., Ltd.. Mr. Yu joined Shanghai Zhangjiang (Group) Co., Ltd. in November 2000, and successively served as the vice manager and executive vice manager of investment management department of Shanghai Zhangjiang (Group) Co., Ltd., vice general manager of Shanghai Zhangjiang Biotech & Pharmaceutical Base Development Co., Ltd., vice general manager of Shanghai Zhangjiang Science & Technology Venture Capital Co., Ltd. and general manager of Shanghai Zhangjiang Technology Microfinance Co., Ltd.. Mr. Yu graduated from East China University of Metallurgy majoring in Ferrous Metallurgy with a bachelor degree in July 1996, and graduated from University of Shanghai for Science and Technology majoring in management engineering with a master degree in April 2001. Mr. Yu holds the professional title of economist and qualification of certified public accountant.

BOARD OF DIRECTORS AND SENIOR MANAGEMENT

INDEPENDENT NON-EXECUTIVE DIRECTORS

Mr. Jonathan H. Chou (周嘉鴻), born in 1964, was appointed as our Independent Non-executive Director on 3 September 2010. He is a seasoned finance and operations executive with more than 31 years of professional experience from banking to various senior leadership positions with Fortune 500 companies. These companies include Honeywell International, Tyco (ADT), Lucent Technologies/Bell Labs, and Public Service Enterprise Group. His publicly listed company CFO roles include CFO for Feihe International, where his efforts led to a successful listing on the Main Board of the New York Stock Exchange in 2009. He held the CFO plus other C-level roles from 2010 to 2018 for Kulicke & Soffa Industries, Inc. (NASDAQ: KLIC), a leading provider of semiconductor packaging and electronic assembly solutions supporting the global automotive, consumer, communications, computing, and industrial segments. More recently in January 2021, Mr. Chou was appointed as an independent non-executive director of MicroPort CardioFlow Medtech Corporation, a subsidiary of the Company, which gained successful listing on the Hong Kong Stock Exchange on February 4, 2021. Mr. Chou joined the Singapore headquartered UTAC Group in February 2021 as its CFO. The UTAC Group is an independent provider of assembly and test services for a broad range of semiconductor chips offering a full range of semiconductor assembly and test services. Mr. Chou holds an MBA from Duke University's Fuqua School of Business and a B.A. from the University at Buffalo.

Dr. Guoen Liu (劉國恩), born in 1957, was appointed as our Independent Non-executive Director on 3 September 2010. Dr. Liu is a noted scholar in the fields of health and development economics, health reform and pharmaceutical economics. Dr. Liu currently serves as Peking University BOYA Distinguished Professor of Economics, Dean of Peking University Institute for Global Health and Development, MOH Yangtze River Scholar professor of economics at the Peking University National School of Development. From 2000 to 2006, Dr. Liu was tenured associate professor of University of North Carolina at Chapel Hill. From 1994 to 2000, Dr. Liu was assistant professor of University of Southern California. Dr. Liu also serves as editor or associate editor in various journals in the field of health economics and pharmaceutical economics. Dr. Liu received his bachelor's degree in mathematics from Southwestern University for Nationalities in 1981, his master's degree in statistics from Southwestern University of Finance and Economics in 1985, his Ph.D. in economics from the City University of New York Graduate Center in 1991, and postdoctoral training in health economics from Harvard University in 1994.

Mr. Chunyang Shao (邵春陽), born in 1964, was appointed as our Independent Non-executive Director on 23 September 2016. Mr. Shao is currently a partner of JunHe LLP and a member of the All China Lawyers Association and Shanghai Bar Association. Mr. Shao specializes in practice such as corporate, foreign investment, real estate, mergers and acquisitions, securities, infrastructure and project finance. From July 1988 to October 1993, Mr. Shao worked in Anhui Foreign Economy Law Office. From November 1995 to March 2002, Mr. Shao worked in the London, Hong Kong and China offices of major international law firms, including in Simmons & Simmons as PRC legal counsel and Sidley Austin as a senior PRC legal consultant. Mr. Shao joined JunHe LLP in April 2002. From August 2018 to September 2021, Mr. Shao was an independent director of Changjiang & Jinggong Steel Building (Group) Co., Ltd. (長江精工鋼結構(集團)股份有限公司, a company listed on Shanghai Stock Exchange (stock code: 600496)). Mr. Shao is currently an independent director of Zhejiang Aishida Electric Co., Ltd. (浙江愛仕達電器股份有限公司, a company listed on Shenzhen Stock Exchange (stock code: 002403)), Pharma Resources (Shanghai) Co., Ltd. (上海泓博智源醫藥股份有限公司, a company listed on Shenzhen Stock Exchange, (stock code:301230)), and Brite Semiconductor (Shanghai) Co., Ltd. (燦芯半導體(上海)股份有限公司). Mr. Shao received his bachelor degree in law from East China University of Political Science and Law in 1987, and was admitted to practice PRC law in 1988. From 1993 to 1994, Mr. Shao worked as visiting lawyer in Sino-Britain Young Lawyers' Exchange Program in the UK. In 2002, he received his master degree in law from East China University of Political Science and Law.

SENIOR MANAGEMENT

The Company currently consists of three geographically distinctive operational units which are Greater China Executive Committee ("CEC"), InterContinental Orthopedics Committee ("IOC") and InterContinental CRM Committee ("ICC"). The above committees are under management of Dr. Zhaohua Chang (常兆華), Executive Director, the Founder, Chairman and CEO of the Company. Please refer to the section headed "Directors Executive Director" above for the details of his biography.

GREATER CHINA EXECUTIVE COMMITTEE

Mr. Bo Peng (彭博), is the Chief Marketing Officer of MicroPort Sinica Co., Ltd. and the Chairperson of CEC. Prior to current position, Mr. Peng served as Senior Vice President of Domestic Sales and Marketing of the Company. Mr. Peng has over 24 years of experience in marketing and sales. Prior to joining the Company in 2001, Mr. Peng served as the Director, Vice President and Sales General Manager of Xianxing Electronics Group. Mr. Peng received his bachelor's degree in Computer Science from Changchun University of Science and Technology in 1990 and his master's degree in Business Administration from Shanghai University of Finance & Economics in 2003.

Mr. Hongbin Sun (孫洪斌), is the Chief Financial Officer of the Company, the Co-Chairperson of CEC and a member of ICC. Mr. Sun has over 25 years of finance experience. Mr. Sun was the Director and General Manager of Otsuka China from 2006 to 2010. From 2004 to 2006, he served as a Financial Director of Otsuka China. From 1998 to 2003, Mr. Sun was an Assistant Manager of the Shanghai office of KPMG. Mr. Sun is a member of the Chinese Institute of Certified Public Accountants and is also a Chartered Financial Analyst. Mr. Sun received his bachelor's degree in Economics from Shanghai Jiao Tong University in 1998.

Dr. Qiyi Luo (羅七一), is the Chief Technology Officer ("CTO") of the Company and a member of CEC and ICC. Dr. Luo has over 31 years of experience in the medical device industry. Prior to joining the Company in 2003, he worked as a Principal Research and Development Engineer and a Senior Manufacturing/Development Engineer at Medtronic AVE from 1995 to 2002. From 1991 to 1995, he worked as a Supervisor and an Engineer of the angioplasty research and development team at Vas-Cath Inc., a subsidiary of C.R. Bard, Inc.. Dr. Luo is the inventor or a co-inventor of over 200 patents in China, the United States, Japan and the European Union. Dr. Luo received his bachelor's degree in Applied Science from Yunnan University of Technology in 1983, his master's degree in Applied Science from Queen's University in Canada in 1990 and doctor's degree in Biomedical Engineering from University of Shanghai for Science and Technology in 2015.

Mr. Yimin Xu (徐益民), is the Senior Executive Vice President of Regulatory Affairs & Property Management of MicroPort Sinica Co., Ltd. and a member of CEC. Prior to current position, Mr. Xu has served as the Vice President of Quality and Regulatory of the Company. He has over 23 years of experience in medical device industry. Prior to joining us in 2000, Mr. Xu served as project manager in Shanghai Zhangjiang Hi-Tech Development Co., Ltd. and Shanghai Zhangjiang Hi-Tech Innovation Centre, from 1995 to 2000. Mr. Xu also served as quality engineer in Nanjing No.2 Air Compressor Factory from 1988 to 1992. Mr. Xu received his master's degree in Mechanical and Electronic Engineering from Shanghai Jiao Tong University in 1995.

Dr. Chengyun Yue (樂承筠), is the Executive Vice President of Business Development and Project Management of MicroPort Sinica Co., Ltd. and a member of CEC. Prior to current position, Dr. Yue has served as the Senior Vice President of Business Development and Project Management, Vice President of Planning and Project Management, Senior Director of Project Management Office, and Director of R&D Support of the Company. Before joining the Company, Dr. Yue worked in a Biotech company in Southern California for 7 years for developing islets transplantation product. Dr. Yue received both her bachelor's and master's degree from Nanjing University, Ph.D. in Material Science from University of Alabama, and conducted her postdoctoral research in Biomedical Engineering at the California Institute of Technology.

Mr. Yiyun Que (闕亦雲), is the Executive Vice President of Intelligent Manufacturing & Global Supply Chain of MicroPort Sinica Co., Ltd. and a member of CEC. Prior to current position, Mr. Que served as the First Vice President of Coronary Manufacturing and Engineering, Vice President of Manufacturing and Engineering of the Company and has over 17 years' experience in medical device industry. Prior to joining the company in 2006, Mr. Que served as an engineering manager in Shanghai Lenovo Electronic Co., Ltd. Mr. Que received his bachelor's degree in Industrial Engineering from Sichuan University in 2001 and his master's degree in Biomedical Engineering from University of Shanghai for Science and Technology in 2015.

Mr. Jiang Lei (蔣磊), is the Chairman of the board of directors of Shanghai MicroPort Medical (Group) Co., Ltd. and a member of CEC. Mr. Jiang has over 25 years of experience in pharmaceutical and medical device industry. From 1998 to 2006, Mr. Jiang worked in Mitsubishi Chemical in Japan and Abbott Medical Vascular Intervention Department. He joined the Coronary Artery Marketing Department of Shanghai Medical (Group) Co., Ltd. in 2006. In 2010, Mr. Jiang was appointed as the Group's National coronary product Sales Director. In 2019, Mr. Jiang was appointed as Advanced Vice President of National coronary artery marketing. In 2020, Mr. Jiang was appointed as Senior Vice President of National marketing. In 2021, Mr. Jiang was appointed as the President of Shanghai MicroPort Medical (Group) Co., Ltd. In December 2022, Mr. Jiang was appointed as the Chairman of the board of directors of Shanghai MicroPort Medical (Group) Co., Ltd. Mr. Jiang graduated from Nanjing Medical University in 1998 and obtained an EMBA degree from Shanghai Jiaotong University in 2020.

INTERCONTINENTAL ORTHOPEDICS COMMITTEE

Mr. Jonathan Chen, is the Chief International Business Officer ("CIBO") of the Company, Chairperson of ICC and Co-Chairperson of IOC. Prior to current positions, he has served as the Executive Vice President of International Operations and Investor Relations of the Company. Mr. Chen's primary responsibilities include expanding the Company's International business in markets of the U.S., Europe, Asia Pacific and South America. Mr. Chen has over 26 years of experience in the medical device industry. Prior to joining the Company, Mr. Chen worked for Angiotech Pharmaceuticals, Inc. for 6 years, where he was Senior Vice President of Business Development & Financial Strategy. He led the management team to build a diversified medical products business through several transformational acquisitions and licensing transactions. Prior to joining Angiotech, Mr. Chen was a life sciences investment banker for Credit Suisse and Alex. Brown & Sons where he advised his clients on equity and debt capital raising as well as on Mergers & Acquisitions transactions. Mr. Chen holds a Bachelor of Arts degree in Economics and a Bachelor of Sciences degree with honors in Biological Sciences from Stanford University.

Mr. Todd Smith, is the Vice President of Finance of MicroPort Orthopedics Inc. and a member of IOC. Following the Company's asset purchase of Wright Medical Technology's OrthoRecon Business in January 2014, he had served as Vice President of Finance of MicroPort Orthopedics Inc. Prior to his current position, Mr. Smith had been Wright's Senior Director of Strategic and Financial Planning from 2011 to 2014; from 2001 to 2010, he served as Wright's Director and Senior Director of International Finance. Prior to joining Wright, Mr. Smith was the Vice President and Finance Controller of Vision America, Inc. and was an audit staff in the Memphis office of KPMG. He holds a Bachelor of Arts degree at Rhodes College and is a member of the American Institute of Certified Public Accountants (AICPA).

Mr. Patrick Yu (俞天白), is the acting General Manager of MicroPort Orthopedics China, a member of IOC and a director of Suzhou MicroPort Orthopedics Scientific (Group) Co., Ltd.. Mr. Yu joined our Group in 2015, and has served as Vice General Manager of Suzhou MicroPort OrthoRecon Co. Ltd.. From May 2022, Mr. Yu has served as Executive General Manager of MicroPort Orthopedics China. Prior to joining in our Group, he was an engineering manager of Johnson & Johnson Medical (Suzhou) Ltd. and was a management trainee of DePuy Ace Sarl. Mr. Yu holds a master degree of Mechanical Manufacturing and Automation and a master degree of Business Administration at Zhejiang University.

Mr. Robert Alan Cripe, is the Chief Commercial Officer of MicroPort Orthopedics Inc. and a member of IOC. He joined the Group in November 2021 and is responsible for the marketing of orthopedic business in North America. Mr. Cripe has over 30 years of global management experience in medical devices industry, mainly managing the sales, marketing, product development and clinical affairs of large joints, hip joints and knee joints. Mr. Cripe had served in several well-known enterprises and start-ups, including Chief Commercial Officer in Integrated Endoscopy, Chief Marketing Officer and Consultant in Biogennix, Executive Vice President of North American Commercial Operations and Global Marketing in Freedom Innovations, Vice President of Marketing in Tibion, Senior Vice President of Strategic Marketing in DJO GLOBAL, Vice President of Marketing and Development of PEGASUS BIOLOGICS, Vice President of Marketing and Development of Global Hip Franchise in SMITH & NEPHEW, INC., Vice President of Marketing and Development in KINETIKOS MEDICAL, INC., Vice President of Marketing in INTERPORE CROSS, INTERNATIONAL and regional manager in BIOMET, INC. He holds a Bachelor of Science degree of Business Administration at Grace College.

Mr. Jean Marc D'hondt, is the Vice President of International Marketing of MicroPort Orthopedics Inc. and a member of IOC. Mr. D'hondt has served as Vice President of International Marketing of MicroPort Orthopedics Inc. since August 2019. Mr. D'hondt has comprehensive experience in orthopedic business, he has successively served as Vice President of International Marketing and Vice President of International Marketing & Medical Education of MicroPort Orthopedics Inc.. Prior to the Company's asset purchase of Wright Medical Technology's OrthoRecon Business in January 2014, Mr. D'hondt had been vice president of OrthoRecon Marketing in Europe, East Asia and Africa of Wright from 2011 to 2013, regional vice president of Sales in Northern Europe of Wright from 2010 to 2011 and managing director of Wright Medical Belgium from 2007 to 2011. Prior to joining Wright, he was sales manager of Stryker Belgium and sales representative of Innovex. Mr. D'hondt holds a Master's degree in Health Sciences and Physical Education.

INTERCONTINENTAL CRM COMMITTEE

Mr. Jonathan Chen, CIBO of the Company, Chairperson of ICC and Co-Chairperson of IOC. Please refer to the above for the details of his biography.

Mr. Benoît Clinchamps, is President of MicroPort CRM and Co-Chairperson of ICC. Mr. Benoit Clinchamps has 24 years of experience in the medical device industry and 9 years of experience in the aerospace industry. Previously, Mr. Clinchamps served as Vice-President & General Manager of the CRM business in LivaNova and he served as Vice-President for Product Development & Regulatory Affairs, Vice President for Quality Assurance & Regulatory Affairs, Director of Plant Manager and Quality Assurance & Regulatory Affairs in Sorin group. Prior to joining Sorin group, Mr. Clinchamps spent 6 years at GE Healthcare and was the Director of Operations in Europe where he was 6 Sigma Champion. Before entering into the healthcare and medical product industry, Mr. Clinchamps served as Project Manager in several international projects in the aerospace industry. Mr. Clinchamps holds an Engineering Degree from ICAM Lille France (Institut Catholique des Arts et Métiers). He furthermore completed a Management Course in Aerospace in ENSAE Toulouse France (Ecole Nationale Supérieure de l'Aéronautique et de l'Espace) and in TUM Germany (Technische Universitat München). He is a certified 6 Sigma Black Belt and also took an Executive Course at INSEAD Fontainebleau France.

Mr. Hongbin Sun (孫洪斌), CFO of the Company, Co-Chairperson of CEC and a member of ICC. Please refer to the above for the details of his biography.

Dr. Qiyi Luo (羅七一), CTO of the Company, a member of CEC and ICC. Please refer to the above for the details of his biography.

BOARD OF DIRECTORS AND SENIOR MANAGEMENT

Mr. Philippe Wanstok, is Senior Vice President of Sales & Marketing & Customer Service & Market Access of MicroPort CRM and a member of ICC. Following the Company's asset purchase of LivaNova PLC's CRM Business in May 2018, he has served as Senior Vice President of Global Sales of MicroPort CRM since August 2018. He has over 31 years of experience in medical device industry. He was acting as Chief Commercial Officer for CVRx. Before that, he served as the International General Manager of Cardiac Rhythm Disease Management – Commercial Operations at Medtronic, leading an international team of near 3,000 colleagues generating more than $2.4 billion of revenues in active markets of implantable devices. Mr. Wanstok participated in the establishment and development of cardiac rhythm business of Medtronic. He also worked at Guidant, where he served in a variety of management roles during which he established successful country and regional operation personnel, sales organization and distribution channels in France and Spain. After Guidant's merger with Boston Scientific, Mr. Wanstok served as Vice President of International Marketing for Boston Scientific, where he established and launched global marketing strategies. Mr. Wanstok holds a master's degree in Economics from the University of Paris-Assas and a Ph.D in Finance and International Marketing from the University of Pantheon-Sorbonne.

Mr. Paul Vodden, is Vice President of Finance of MicroPort CRM and a member of ICC, roles he has had since the Company's asset purchase of LivaNova PLC's CRM Business in May 2018. From 2011 to 2018, Mr. Vodden was with the Sorin Group, latterly LivaNova, where as Vice President of Finance he held financial responsibility for its business in the European and Japanese markets as well as globally for CRM. From 2003 to 2011, he held European finance management roles within Boston Scientific. Prior to 2003, he worked in Hewlett Packard, in both the UK and France, with several roles including financial operations manager of the commercial desktop business. Mr. Vodden has worked in PricewaterhouseCoopers in the UK, where he qualified as a Chartered Accountant with ICAEW. Mr. Vodden graduated in Business Economics and Accounting from the University of Southampton.

Mr. Xiaoming Zhu (朱曉明), is the general manager ("GM") of MicroPort Soaring CRM (Shanghai) Co., Ltd, ("MSC") and a member of ICC. Prior to the GM position, he served as senior director of sales & marketing at MSC since 2014. Mr. Zhu has over 22 years of CRM experience. He was the marketing Director of Cardiac Rhythm & Heart Failure at Medtronic Great China from 2013 to 2014. From 2011 to 2013, Mr. Zhu served as senior marketing manager of Critical Care at Edwards Great China. From 2009 to 2011, Mr. Zhu was National Manager of Operation at St. Jude Medical China, and from 2006 to 2009, he was the head of Cardiac Rhythm Management Division business. Before that, he served as a manager of Vitatron business division at Medtronic China.

The board (the "Board") of directors (the "Directors") of MicroPort Scientific Corporation (the "Company" and together with its subsidiaries, the "Group") presents this report to the shareholders of the Company (the "Shareholders") together with the audited consolidated financial statements of the Group for the year ended 31 December 2022.

PRINCIPAL ACTIVITIES

The principal activity of the Company is investment holding and the activities of its subsidiaries are set out in Note 13 to the consolidated financial statements. There's no significant changes in the nature of Group's activities during the year.

FINANCIAL STATEMENTS

The financial position of the Group as at 31 December 2022 and the financial performance of the Group for the year then ended are set out in the consolidated financial statements on pages 78 to 200 of this annual report.

BUSINESS REVIEW

OVERVIEW

In 2022, the Group has witnessed lingering pandemic, high inflation in most economies, as well as fragile and uneven recovery of the global economy. Despite the negative impact of certain unforeseen factors, the Group continued to achieve double digit growth in revenue excluding the foreign exchange impact by actively exploring overseas and domestic market. For the year ended 31 December 2022, the Company recorded revenue of US$840.8 million, representing an increase of 15.6% excluding the foreign exchange impact as compared to 2021. Meanwhile, the Company recorded a loss of US$588.1 million (loss attributable to equity shareholders: US$436.5 million). The Group aims to continuously bring its innovations, technologies and services to millions of global patients and become a patient oriented global enterprise who provides trustworthy and universal access to state-of-the-art solutions of prolonging and reshaping all lives.

A review of the business of the Group during the year ended 31 December 2022, which includes an analysis of the Group's performance using financial key performance indicators are set out in the section headed "Management Discussion and Analysis" on page 9 to 28 of this report. The financial risk management objectives and policies of the Group are set out in Note 31 to the consolidated financial statements. An analysis of the Group's performance indicators are set out in the section headed "Financial Highlights" on page 4 of this report. The compliance with relevant laws and regulations which have significant impact on the Group is set out in this Directors' report. The reviews form part of this statement.

ENVIRONMENTAL POLICIES AND PERFORMANCE

The Company adheres to the concept of green management and actively responds to the call for low-carbon sustainable development. We attach great importance to the impact of our production and operation on the environment, and we are committed to creating an eco-friendly model for operation and management development through the establishment of a sound environmental management system and the strengthening of environmental awareness.

We have established and improved our environmental management system to regulate the environmental protection of our production sites. Under the coordination, guidance and supervision of the Environment, Health and Safety (EHS) Management Committee, each functional department actively implements its environmental protection responsibilities in accordance with the principle of "whoever's in charge is responsible".

COMPLIANCE WITH LAWS AND REGULATIONS

The Company recognizes the importance of compliance with legal and regulatory requirements, as well as the risk of non-compliance. The Company has allocated system and staff resources to ensure ongoing compliance with applicable laws, rules and regulations including but not limited to, those laws, rules and regulations promulgated by the NMPA, MOFCOM, State Administration for Market Regulation, the government of the Hong Kong Special Administrative Region, and such regulators' global counterparts in countries where MicroPort conducts business. We maintain cordial working relationships with regulators through effective communications. Throughout the year ended 31 December 2022, we have strived to conduct business in accordance with all applicable laws, rules and regulations in all material respects and there is no investigation, disciplinary proceeding or inquiry by, or order, decree, decision or judgment of any authority outstanding, or, to the best of the Company's knowledge, threatened or expected to be issued against any member of the Company or its respective assets or any person for whose acts or defaults it may be vicariously liable, and which is of a material nature.

PRINCIPAL RISKS AND UNCERTAINTIES

FINANCIAL RISKS

The Group's principal business activities are exposed to a variety of financial risks including but not limited to credit risk, interest rate risk, liquidity risk, currency risk. Details of the aforesaid key risks and risk mitigation measures are elaborated in Note 31 "Financial Risk Management and Fair Values" to the financial statements of this annual report.

MARKET RISKS

The Group is also exposed to market risks brought on by the government. The implementation of bidding policy and other national policies and legislations may bring stress for the retails prices of our products. Ongoing decreases in the retails prices of our products or limitations on the profit margins we earn could materially and adversely affect our business, financial condition and results of operation. In addition, as our sales depend to a large extent on the level of insurance reimbursement patients receive for treatments using our products, and China has a complex medical insurance system that is currently undergoing reform, the governmental insurance coverage or reimbursement level in China for treatments using new medical devices such as vascular and orthopedics devices is subject to significant uncertainty and varies from region to region, the Group is therefore exposed to the uncertainty of market share reduction due to the reasons above.

LEGAL RISKS

From time to time, the Company is subject to various pending or potential legal actions and proceedings, including those that arise in the ordinary course of our business, some of which involve claims for damages that are substantial in amount. These actions and proceedings may relate to, among other things, product liability, intellectual property, distributor, commercial, and other matters. These actions and proceedings could also result in losses, including damages, fines, or penalties, any of which could be substantial, as well as criminal charges. Although such matters are inherently unpredictable, and negative outcomes or verdicts can occur, we believe that we have significant defenses in all of them, and do not believe any of them will have a material adverse effect on our financial position. However, we could incur judgments, pay settlements, or revise our expectations regarding the outcome of any matter. Such developments, if any, could have a material adverse effect on our results of operations in the period in which applicable amounts are accrued, or on our cash flows in the period in which amounts are paid.

RELATIONSHIPS WITH KEY STAKEHOLDERS

The Group's success also depends on the support from key stakeholders which comprise employees, customers, and shareholders.

EMPLOYEES

The Company builds its success on employees' dedication and commitment. MicroPort is committed to providing as much opportunities as possible for employees' skills enhancement and career development. The Company aims at cultivating talents in a long run, encouraging employees to realise their full potential and to keep pace with growth of the Company.

As at 31 December 2022, the Group had 9,435 employees (31 December 2021: 8,019 employees).

CUSTOMERS

The Group's principal customers are distributors, hospitals, physicians and surgeons, and patients throughout the world. We have been devoted to providing excellent customer service with the purpose of maintaining long term cooperation, enhancing product quality, increasing sales volume and improving profitability.

The Group is committed to building a brand where "The Patient Always Comes First", with patients as its center. We consistently work towards the mission of "To Provide Trustworthy and Universal Access to State-of-the-Art Solutions of Prolonging and Reshaping All Lives" for the society through stringent quality control, continuous product innovation, dedicated customer service, responsible supply chain development and active participation in industry academic exchanges and training.

SHAREHOLDERS

The Company considers that effective communication with shareholders is essential for enhancing investor relations ("IR") and investor understanding of the Company's business performance and strategies. Apart from transparent and timely disclosure of corporate information in accordance with the Rules Governing the Listing of Securities on The Stock Exchange of Hong Kong Limited (the "Listing Rules"), the Company has kept effective communication with shareholders through the Company's website, Wechat platform, shareholder's hotline, and IR mailbox. Senior managements are also pleased to receive shareholders' on-site visit and have one-on-one meetings with them to share the information which they are concerned and enable them to make rational investment decisions.

FUTURE BUSINESS DEVELOPMENTS

In 2023, facing the increasingly fierce competition and price pressure of global medical devices industry, we will continuously perform proactive strategies to maintain sustained development and enhance competitiveness through integrating resources, optimizing management structure, deepening globalization, intensifying innovation, expanding market, and building total solution capability, establishing intelligent information technology systems, and so on.

REPORT OF THE DIRECTORS

MAJOR CUSTOMERS AND SUPPLIERS

For the financial year ended 31 December 2022, purchases from the Group's largest supplier and the five largest suppliers in aggregate accounted for 6.26% and 18.74% respectively of the Group's cost of sales for the year. Sales to the Group's largest customer and the five largest customers in aggregate accounted for 11.54% and 26.00% respectively of the Group's total revenue for the year.

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

SHARE CAPITAL

Details of movements in the share capital of the Company during the year ended 31 December 2022 are set out in Note 29 to the consolidated financial statements.

DISTRIBUTABILITY OF RESERVES

At 31 December 2022, the aggregate amount of reserves available for distribution to equity shareholders of the Company, was US$612,801,000 (2021: US$600,927,000).

GROUP FINANCIAL SUMMARY

A summary of the Group's results and assets and liabilities for the past five financial years is set out in the section Five Year's Financial Summary of this annual report.

DIRECTORS

Directors during the year ended 31 December 2022 and up to the date of this report were:

EXECUTIVE DIRECTOR

Dr. Zhaohua Chang *(Chairman)*

NON-EXECUTIVE DIRECTORS

Mr. Norihiro Ashida
Dr. Yasuhisa Kurogi
Mr. Hongliang Yu

INDEPENDENT NON-EXECUTIVE DIRECTORS

Mr. Jonathan H. Chou
Dr. Guoen Liu
Mr. Chunyang Shao

In accordance with the Company's Articles of Association, Dr. Zhaohua Chang, Dr. Yasuhisa Kurogi, Mr. Hongliang Yu and Mr. Chunyang Shao shall retire from offices as Directors at the forthcoming annual general meeting. Except for Dr. Kurogi, who wants to devote more time to his other endeavours and does not offer himself for re-election, all of the above retiring Directors, being eligible, will offer themselves for re-election.

BOARD OF DIRECTORS AND SENIOR MANAGEMENT

Biographical details of the Directors and senior management of the Group are set out on pages 29 to 34 of this annual report.

DIRECTORS' SERVICE CONTRACT

None of the Directors, including those to be re-elected at the forthcoming annual general meeting, has a service contract which is not determinable by the Company within one year without the payment of compensation (other than statutory compensation).

COMPETING BUSINESS INTERESTS OF DIRECTORS

During the year ended 31 December 2022, none of the Directors were interested in any business apart from the Company's business, which competed or was likely to compete, either directly or indirectly, with the businesses of the Company and its subsidiaries pursuant to Rule 8.10 of the Listing Rules.

EMOLUMENT POLICY

The remuneration committee is responsible for reviewing the Group's emolument policy and structure for all remuneration of the Directors and senior management of the Group, having regard to the Group's operating results, individual performance and comparable market practices.

The Company has adopted a share option scheme as an incentive for Directors and eligible employees. Details of the scheme are set out in the section headed "Share Option Schemes" below.

REMUNERATION OF DIRECTORS AND FIVE INDIVIDUALS WITH HIGHEST EMOLUMENTS

Details of the emoluments of the Directors and the five individuals with highest emoluments are set out in Notes 7 and 8 to the consolidated financial statements.

PENSION SCHEME

According to relevant laws and regulations, as well as local policies, the Group's subsidiaries worldwide participate in retirement savings plans. Under these plans, the Group is required to pay the defined contribution to the plans by certain rules and up to certain maximums. The only obligation of the Group with respect to the retirement savings plans is to make required contributions under the plans. Contributions made under the retirement savings plans are charged in the statement of profit or loss as incurred.

The Company may not utilize any forfeited contributions in order to make fewer contributions than the current amounts.

INTERESTS AND SHORT POSITIONS OF THE DIRECTORS AND CHIEF EXECUTIVE IN SHARES, UNDERLYING SHARES AND DEBENTURES OF THE COMPANY AND ITS ASSOCIATED CORPORATIONS

As at 31 December 2022, interests and short positions in the shares of the Company (the "Shares"), underlying Shares and debentures of the Company or any of its associated corporations (within the meaning of Part XV of the Securities and Futures Ordinance ("SFO")) held by the Directors and chief executive of the Company which have been notified to the Company and the Stock Exchange pursuant to Divisions 7 and 8 of Part XV of the SFO (including interests and short positions which were taken or deemed to have under such provisions of the SFO) or have been entered in the register maintained by the Company pursuant to section 352 of the SFO, or otherwise have been notified to the Company and the Stock Exchange pursuant to the Model Code for Securities Transactions by Directors of Listed Companies (the "Model Code") as set out in Appendix 10 to the Listing Rules were as follows:

INTERESTS AND SHORT POSITIONS IN SHARES, UNDERLYING SHARES AND DEBENTURES OF THE COMPANY

Name of Director/ Chief Executive	No. of Shares	Notes	Capacity	Nature of interest	Approximate percentage of interest in the Company
Zhaohua Chang	31,206,891	1	Beneficial owner	Long position	1.70%
Jonathan H. Chou	1,161,290	2	Beneficial owner	Long position	0.06%
Guoen Liu	161,290	1	Beneficial owner	Long position	0.00%
Chunyang Shao	161,290	1	Beneficial owner	Long position	0.00%

Notes:

(1) Dr. Zhaohua Chang, Dr. Guoen Liu and Mr. Chunyang Shao are interested in the underlying Shares of the Company by virtue of the options granted to them under the share option scheme of the Company. For further details, please refer to the below section headed "Share Option Schemes".

(2) Mr. Jonathan H. Chou is interested in (i) 557,133 underlying Shares of the Company by virtue of the options granted to him under the share option scheme of the Company and (ii) 604,157 Shares of the Company. For further details, please refer to the below section headed "Share Option Schemes".

INTERESTS AND SHORT POSITIONS IN SHARES, UNDERLYING SHARES AND DEBENTURES OF THE ASSOCIATED CORPORATIONS

Name of Director/ Chief Executive	Name of associated corporation	No. of shares	Notes	Capacity	Nature of interest	Approximate percentage of interest in the associated corporation
Zhaohua Chang	MicroPort CardioFlow Medtech Corporation	6,000,000	1	Beneficial owner	Long position	0.24%

Notes:

(1) Dr. Zhaohua Chang is interested in the underlying shares of the associated corporation by virtue of the options granted to him under the share option scheme of that associated corporation.

Save as disclosed above, as at 31 December 2022, none of the Directors or chief executive of the Company had any interests or short positions in the Shares, underlying Shares and debentures of the Company or any of its associated corporations (within the meaning of Part XV of the SFO) which would be required to be notified to the Company and the Stock Exchange pursuant to Divisions 7 and 8 of Part XV of the SFO, or which would be required, pursuant to Section 352 of the SFO, to be entered in the register referred to therein, or otherwise notified to the Company and the Stock Exchange pursuant to the Model Code.

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

As at 31 December 2022, so far as is known to the Directors, the following persons (not being a Director or chief executive of the Company) had interests or short positions in the Shares or underlying Shares which would need to be disclosed to the Company under the provisions of Divisions 2 and 3 of Part XV of the SFO and recorded in the register required to be kept by the Company pursuant to section 336 of the SFO:

INTERESTS AND SHORT POSITION IN THE SHARES

Name of Substantial Shareholder	No. of Shares	Notes	Capacity	Nature of interest	Percentage of total number of Shares in issue (%)
Otsuka Holdings Co., Ltd.	382,994,120	1	Interest of controlled corporation	Long position	20.95
Otsuka Medical Devices Co., Ltd.	382,994,120	1	Beneficial owner	Long position	20.95
Maxwell Maxcare Science Foundation Limited	344,046,363	2	Interest of controlled corporation/Beneficial owner	Long position	18.82
We'Tron Capital Limited	264,291,373	2	Beneficial owner	Long position	14.46
Shanghai Zhangjiang (Group) Co., Ltd.	199,788,050	3	Interest of controlled corporation	Long position	10.93
Shanghai Zhangjiang Hi-Tech Park Development Co., Ltd.	199,788,050	3	Interest of controlled corporation	Long position	10.93
Shanghai Zhangjiang Science and Technology Investment Co.	199,788,050	3	Interest of controlled corporation	Long position	10.93
Shanghai Zhangjiang Haocheng Venture Capital Co., Ltd.	199,788,050	3	Interest of controlled corporation	Long position	10.93
Shanghai Zhangjiang Science and Technology Investment (Hong Kong) Company Limited	199,788,050	3	Interest of controlled corporation	Long position	10.93
Shanghai ZJ Holdings Limited	199,788,050	3	Interest of controlled corporation	Long position	10.93
Shanghai ZJ Hi-Tech Investment Corporation	199,788,050	3	Interest of controlled corporation/Beneficial Owner	Long position	10.93
Shanghai Zhangjiang Health Solution Holdings Limited	192,745,470	3	Beneficial Owner	Long position	10.54
Hillhouse Capital Advisors, Ltd.	153,694,000		Investment manager	Long position	8.41
Gaoling Fund, L.P.	147,009,000		Beneficial Owner	Long position	8.04

Notes:

(1) Otsuka Holdings Co. Ltd. holds the entire issued share capital of Otsuka Medical Devices Co., Ltd., and therefore, is deemed to be interested in the same number of Shares held by Otsuka Medical Devices Co., Ltd..

(2) Maxwell Maxcare Science Foundation Limited ("Maxwell") holds 100% interest of We'Tron Capital Limited, and therefore, is deemed to be interested in the same number of Shares held by We'Tron Capital Limited. Maxwell is also deemed to be interested in the 63,049,863 shares interests of the Company held by Hopeway Limited, a wholly-owned company of Maxwell. In addition, Maxwell is the beneficial owner of 1,022,119 Shares.

(3) Shanghai Zhangjiang (Group) Co., Ltd. is wholly-owned by the State-owned Assets Supervision and Administration Commission of the Shanghai Pudong New Area People's Government. Shanghai Zhangjiang (Group) Co., Ltd. holds 100% interest in Shanghai Zhangjiang Science and Technology Investment Co., which in turn holds 100% interest in Shanghai Zhangjiang Science and Technology Investment (Hong Kong) Company Limited, which in turn holds 50% interest in Shanghai ZJ Hi-Tech Investment Corporation. Shanghai Zhangjiang (Group) Co., Ltd. also holds 50.75% interest in Shanghai Zhangjiang Hi-Tech Park Development Co. Ltd., which in turn holds 100% interest in Shanghai Zhangjiang Haocheng Venture Capital Co., Ltd., which in turn holds 100% interest in Shanghai ZJ Holdings Limited, which in turn holds 50% interest in Shanghai ZJ Hi-Tech Investment Corporation. Shanghai ZJ Hi-Tech Investment Corporation holds 100% interest in Shanghai Zhangjiang Health Solution Holdings Limited. The interest in 199,788,050 Shares relates to the same block of Shares in long position held by the following companies:

Name of Controlled Corporation	No. of Shares	Approximate percentage of total number of Shares in issue (%)
Shanghai Zhangjiang Health Solution Holdings Limited	192,745,470	10.54
Shanghai ZJ Hi-Tech Investment Corporation	7,042,580	0.38
Total	199,788,050	10.93

Save as disclosed above, as at 31 December 2022, the Directors of the Company were not aware of any persons (who were not Directors or chief executive of the Company) who had an interest or short position in the Shares or underlying Shares which would need to be disclosed under Divisions 2 and 3 of Part XV of the SFO, or which would be required, pursuant to Section 336 of the SFO, to be entered in the register referred to therein.

MANAGEMENT CONTRACT

During the year ended 31 December 2022, no contract concerning the management and administration of all or any substantial part of the business of the Company was entered into or existed.

DIRECTORS' INTERESTS IN TRANSACTIONS, ARRANGEMENTS AND CONTRACTS OF SIGNIFICANCE

No Director had a material interest, either directly or indirectly, in any contract of significance to the business of the Group to which the Company or any its subsidiaries was a party during the year ended 31 December 2022.

Save as disclosed in Note 33 to the consolidated financial statements, no contract of significance was entered into between any member of the Group and a controlling shareholder of the Company or any of its subsidiaries corporations or contract of significance for the provision of services to any member of the Group by a controlling shareholder or any of its subsidiaries subsisted as at the end of the year of 2022 or during the year ended 31 December 2022.

PERMITTED INDEMNITY PROVISION

The Company's Articles of Association provides that every Director, Auditor or other senior management 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 as a Director, Auditor or other senior management of the Company in defending any proceedings, whether civil or criminal, in which judgment is given in his favour, or in which he is acquitted. Subject to the Companies Law of the Cayman Islands, if any Director or other person shall become personally liable for the payment of any sum primarily due from the Company, the Board may execute or cause to be executed any mortgage, charge, or security over or affecting the whole or any part of the assets of the Company by way of indemnity to secure the Director or person so becoming liable as aforesaid from any loss in respect of such liability.

The Company has maintained directors' liability insurance after Listing which provides appropriate cover for the Directors of the Company.

ARRANGEMENTS TO ENABLE DIRECTORS TO ACQUIRE SHARES AND DEBENTURES

Apart from the details as disclosed under the heading "Interests and short positions of the Directors and Chief Executive in Shares, underlying Shares and debentures of the Company and its associated corporations" above, at no time during the year were rights to acquire benefits by means of the acquisition of Shares in or debentures of the Company granted to any Director or their respective spouse or children under 18 years of age, or were any such rights exercised by them; nor was the Company, its holding company, or any of its subsidiaries or fellow subsidiaries a party to any arrangement to enable the Directors, or their respective spouse or children under 18 years of age, to acquire such rights in any other body corporate.

CONNECTED TRANSACTIONS

(I) DISTRIBUTION AGREEMENTS

On 15 December 2020, the Company and Otsuka Holdings entered into a distribution framework agreement ("Distribution Framework Agreement"), details of which were disclosed in the announcement of the Company dated 15 December 2020. According to the Distribution Framework Agreement, the Company appointed Otsuka Holdings' subsidiaries and associates as distributors for the products of the Group in certain countries or regions where the business of Otsuka Holdings and its subsidiaries and associates cover. The Distribution Framework Agreement has a term commencing from 1 January 2021 and ending on 31 December 2023 (both days inclusive).

The transactions under the Distribution Framework Agreement were conducted via specific distribution agreements between respective members of the Group and Otsuka Holdings' subsidiaries and associates, and were made at prices with reference to the prevailing market prices (including but not limited to the comparable tender prices approved by local governments or hospitals) of similar products within the respective markets.

As Otsuka Holdings is a substantial shareholder of the Company, it is a connected person of the Company for the purpose of the Listing Rules. Accordingly, the transactions conducted under the Distribution Framework Agreement constituted continuing connected transactions under Chapter 14A of the Listing Rules. The annual caps for the transactions under the Distribution Framework Agreement in 2021, 2022 and 2023 were US$8.9 million, US$9.0 million and US$9.8 million, respectively. For the year ended 31 December 2022, the transaction amount under the agreement was approximately US$0.94 million.

(II) MATERIALS PROCUREMENT AGREEMENT

On 24 July 2020, the Company entered into procurement framework agreement with MicroPort NeuroTech (Shanghai) Company Limited ("NeuroTech") for a term commencing from the completion date of the capital increase and ended on 31 December 2022, details of which were disclosed in the announcement of the Company dated 24 July 2020 and 10 August 2020. Under the procurement framework agreement, members of the Group would supply raw materials (including but not limited to medical device and equipment) to, and would provide procurement services for, the members of NeuroTech group. The annual caps for the transactions under the procurement framework agreement for the three years ended and ended 31 December 2020, 2021 and 2022 were RMB15.2 million, RMB22.25 million and RMB27.5 million respectively. The procurement framework agreement was replaced by a materials procurement agreement (the "Materials Procurement Agreement") entered into between the Company and MicroPort NeuroTech Limited ("MicroPort NeuroTech") upon its spin-off and separate listing on 15 July 2022, the details of which were set out in the announcements of the Company dated 29 June 2022, 9 August 2022 and 9 September 2022.

Under the Materials Procurement Agreement, MicroPort NeuroTech group will procure from or procure through the Group and its joint ventures and associates semi-finished products of stents and delivery systems and Rapamycin for use by it in its R&D, and production of its products. The annual caps for the transactions under the Materials Procurement Agreement for the two years ended and ending 31 December 2022 and 2023 are RMB7.4 million and RMB6.6 million respectively, and the annual caps were then revised by the Supplemental Materials Procurement Agreement between the parties dated 30 September 2022, the details of which were set out in the announcement of the Company dated 30 September 2022. The revised annual caps for the transactions under the Supplemental Materials Procurement Agreement for the two years ended and ending 31 December 2022 and 2023 are RMB11.3 million and RMB18.5 million respectively. For the year ended 31 December 2022, the actual aggregate transaction amount under the procurement framework agreement and the Materials Procurement Agreement (as supplemented) was approximately RMB11.26 million.

(III) SUPPORTING SERVICES AGREEMENT

On 29 June 2022, the Company entered into the Supporting Services Agreement with MicroPort NeuroTech which took effect from the listing date (i.e. 15 July 2022) of MicroPort NeuroTech until 31 December 2023. The details of the Supporting Services Agreement were disclosed in the announcements of the Company dated 29 June 2022, 9 August 2022 and 9 September 2022.

Under the Supporting Services Agreement, the Group and its joint ventures and associates will provide to the MicroPort NeuroTech group certain supporting services, including but not limited to animal testing services, product testing services, simulation technical services, sterilization services and administrative support services. The annual caps for the transactions under the Supporting Services Agreement for the two years ended and ending 31 December 2022 and 2023 are RMB5.0 million and RMB3.2 million respectively, and the annual caps were then revised by the Supplemental Supporting Services Agreement between the parties on 30 September 2022, please refer to the announcement of the Company dated 30 September 2022 for details. The revised annual caps for the transactions under the Supplemental Supporting Services Agreement for the two years ended and ending 31 December 2022 and 2023 are RMB7.6 million and RMB7.0 million respectively.

For the year ended 31 December 2022, the actual aggregate transaction amount under the Supporting Services Agreement (as supplemented) was approximately RMB7.13 million.

(IV) CAPITAL CONTRIBUTION TO A SUBSIDIARY

Reference is made to the announcements of the Company dated 30 September 2022 and 8 November 2022. On 30 September 2022, certain members of the Group, MicroPort MicroImaging, Shanghai Lizong, Zhangke Herun and other investors entered into an agreement in relation to capital contribution to MicroPort MicroImaging (the "Capital Contribution Agreement"). Under the Capital Contribution Agreement, Zhangke Herun and the investors agreed to contribute additional capital in the aggregate amount of RMB200 million to MicroImaging. As at 31 December 2022, the capital increase had been completed, and upon completion, MicroImaging was still accounted as a subsidiary of the Company.

The independent non-executive Directors have reviewed the continuing connected transactions of the Company and confirmed that the transactions have been entered into:

- in the ordinary and usual course of business of the Group;
- on normal commercial terms; and
- according to the agreement governing them on terms that are fair and reasonable and in the interests of the Company and its shareholders as a whole.

The Company's auditor was engaged to report on the Group's continuing connected transactions in accordance with Hong Kong Standard on Assurance Engagements 3000 "Assurance Engagements Other Than Audits or Reviews of Historical Financial Information" and with reference to Practice Note 740 "Auditor's Letter on Continuing Connected Transactions under the Hong Kong Listing Rules" issued by the Hong Kong Institute of Certified Public Accountants.

The auditor has provided a letter containing their findings and conclusions in respect of the continuing connected transactions of the Group in accordance with Rule 14A.56 of the Listing Rules.

The Company's auditor has confirmed that regarding the continuing connected transactions of the Group, nothing has come to their attention that causes them to believe that:

- the disclosed continuing connected transactions have not been approved by the Board;
- for transactions involving the provision of goods or services by the Group, such transactions were not, in all material respects, in accordance with the pricing policies of the Group;
- the transactions were not entered into, in all material respects, in accordance with the relevant agreements governing such transactions; and
- the transaction amounts of the disclosed continuing connected transactions as mentioned above have exceeded the annual cap set by the Company.

Save as the aforesaid, there were no discloseable non-exempted connected transaction or non-exempted continuing connected transaction under the Listing Rules during the year ended 31 December 2022.

Save as aforesaid, none of the "Material Related Party Transactions" as disclosed in Note 33 to the consolidated financial statements for the year ended 31 December 2022 constituted discloseable non-exempted connected transaction or non-exempted continuing connected transaction under the Listing Rules.

To the extent of the above "Material Related Party Transactions" constituted connected transactions or continuing connected transactions as defined in the Listing Rules, the Company had complied with the relevant requirements under Chapter 14A of the Listing Rules during the year ended 31 December 2022.

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

Save for the 2,755,400 Shares of the Company purchased by the trustee of the share award scheme at cash consideration of US$6,390,000 on the Stock Exchange for the share award scheme, neither the Company nor any of its subsidiaries has purchased, sold or redeemed any of the Company's listed securities during the year ended 31 December 2022.

MATERIAL ACQUISITION AND DISPOSAL OF SUBSIDIARIES AND ASSOCIATED COMPANIES

Save as disclosed in Note 30 to the financial statements in this report, there was no other material acquisition and disposal of subsidiaries and associated companies by the Company during the Reporting Period.

ISSUE OF ZERO COUPON CONVERTIBLE BONDS

On 1 June 2021, the Company and J.P. Morgan Securities plc and China International Capital Corporation (the "Managers") entered into a subscription agreement (the "Subscription Agreement") pursuant to which the Company agreed to issue zero coupon convertible bonds due 2026 (the "Bonds") with an aggregate principal amount of US$700 million. The Bonds may be convertible into shares of the Company ("Shares") at the initial conversion price of HK$92.8163 per Share. Assuming full conversion of the Bonds, the Bonds will be convertible into 58,519,678 Shares ("Conversion Shares"), representing approximately 3.22% of the issued share capital of the Company as at the date of Subscription Agreement and approximately 3.12% of the issued share capital of the Company as enlarged by the allotment and issue of the Conversion Shares. The Conversion Shares have a nominal value of approximately US$585.20 and a market value of approximately HK$4,099.3 million based on the closing price of the Shares of HK$70.05 on 1 June 2021. The net issue price of the Conversion Shares is approximately HK$91.4241 per Share. The net proceeds from the issue of the Bonds in the amount of approximately US$689.5 million were intended to be applied for research and development investment,

certain capital expenditure and for working capital purposes. The issue of the Bonds has been completed and the Bonds are listed on the Stock Exchange (Stock Code: 40720). As at 31 December 2022, approximately US$605.1 million from the proceeds have been utilized as intended and approximately US$84.4 million was still unused. The breakdown and description of the proceeds utilized during the year ended 31 December 2022 are as follows:

	US$ million
Certain capital expenditure	100.0
Research and development and working capital	193.5
Total	293.5

CODE OF CONDUCT REGARDING SECURITIES TRANSACTIONS BY DIRECTORS

The Company has adopted the Model Code as set out in Appendix 10 to the Listing Rules as the code of conduct regarding securities transactions by Directors. Having made specific enquiry by the Company, all Directors confirmed that they have complied with the required standard set out in the Model Code throughout the year ended 31 December 2022.

SHARE OPTION SCHEMES

A share option scheme (the "2010 Share Option Scheme") was approved and adopted pursuant to a written resolution of all the Shareholders on 3 September 2010.

The purpose of the 2010 Share Option Scheme was to provide the Company with a means of incentivizing eligible participants to work towards enhancing the value of our Company and promote the long-term growth of the Company. The 2010 Share Option Scheme will link the value of the Company with the interests of participants, enabling participants and the Company to develop together and promoting the Company's corporate culture.

The Directors of the Company may, at their discretion, invite any Directors (including Executive Directors, Non-executive Directors and Independent non-executive Directors), employees and officers of any members of the Group and any advisors, consultants, distributors, contractors, contract manufacturers, agents, customers, business partners, joint venture business partners and service providers of any members of our Group who the Board considers, in its sole discretion, have contributed or will contribute to the Group to participate in the 2010 Share Option Scheme.

The Company shall be entitled to issue options, provided that the total number of Shares which may be allotted and issued upon exercise of all outstanding options to be granted under the 2010 Share Option Scheme of the Company shall not exceed 10% of the aggregate Shares in issue as at the date when the Shares were first listed on the Stock Exchange, which was 140,411,234 Shares. The Company may at any time refresh this 10% limit, subject to compliance with the Listing Rules, provided that the total number of Shares which may be issued upon exercise of all outstanding options granted and yet to be exercised under the share option scheme and any other share option scheme of the Company does not exceed 30% of the Shares in issue from time to time.

Unless approved by Shareholders of the Company, the total number of Shares issued and to be issued upon exercise of the options granted under the 2010 Share Option Scheme and any other share option scheme of the Group (including both exercised or outstanding options) to each participant in any 12-month period shall not exceed 1% of the then issued share capital of the Company.

An option may be accepted by a participant within 28 days from the date of the offer of the grant of such share option. The amount payable by each grantee of option to the Company on acceptance of the offer for the grant of such share option is US$1.00.

The 2010 Share Option Scheme does not contain any minimum period for which an option must be held before it can be exercised. At the time of the grant of the options, the Company will specify such minimum period. The period within which the option must be exercised will be specified by the Company at the time of grant. Such period must expire no later than 10 years from the relevant date of grant (being the date on which the Board resolves to make an offer of options to the relevant grantee).

The Board will determine the price per Share upon the exercise of an option according to the terms of the 2010 Share Option Scheme, provided that it shall not be lower than the highest of: (i) the closing price of the Shares as stated in the daily quotation sheet issued by the Stock Exchange on the date of the offer of a grant; (ii) the average closing price of the Shares as stated in the daily quotation sheets issued by the Stock Exchange for the 5 business days immediately preceding the date of the offer of a grant; and (iii) the nominal value of a share on the date of grant.

As at 31 December 2022, the total outstanding options that has been granted under the 2010 Share Option Scheme was 95,629,725.

As the 2010 Share Option Scheme was nearing the expiry of its term, the shareholders of the Company has resolved at the annual general meeting held on 18 June 2020 to adopt a new share option scheme (the "2020 Share Option Scheme") with largely similar terms as that of the 2010 Share Option Scheme. Upon the adoption of the 2020 Share Option Scheme on 18 June 2020, the 2010 Share Option Scheme was cancelled. Options that have been granted under the 2010 Share Option Scheme prior to its cancellation shall remain valid in accordance with its terms.

The purpose of the 2020 Share Option Scheme is to enable the Company to grant options to selected eligible participants as incentives or rewards for their contribution or potential contribution to the Group. The Directors consider that the 2020 Share Option Scheme will serve to motivate the eligible participants to contribute to the Group's development. The 2020 Share Option Scheme, which will be in the form of options to subscribe for Shares, will enable the Group to recruit, incentivize and retain high-calibre staff, which the Directors consider that it is in line with modern commercial practice that eligible participants, which will include any directors (including executive directors, non-executive directors and independent non-executive directors), employees and officers of any members of the Group and any advisors, consultants, distributors, contractors, contract manufacturers, agents, customers, business partners, joint venture business partners and service providers of any member of the Group who have contributed or will contribute to the Group, be given incentives and align their interests and objectives with that of the Group.

The 2020 Share Option Scheme does not specify a minimum period for which an option must be held nor a performance target which must be achieved before an option can be exercised. However, the rules of the 2020 Share Option Scheme provide that the Board may determine, at its sole discretion, such terms and conditions on the grant of an option. Based on 1,736,355,940 Shares in issue as at the date of the annual general meeting, the maximum number of Shares that may be issued upon the exercise of the options that may be granted under the 2020 Share Option Scheme is 173,635,594 Shares, being 10% of the issued share capital of the Company as at the date of the adoption of the 2020 Share Option Scheme.

The maximum number of Shares in respect of which options may be granted under the 2020 Share Option Scheme to any eligible participant shall not exceed 1% of the Shares in issue within any 12-month period.

Any option offer will be deemed to have been granted and accepted by the grantee when the duplicate offer document constituting acceptance of the option duly signed by the grantee, and a remittance in favour of the Company of US$1.00 as consideration for the grant thereof is received by the Company within the prescribed period under the scheme.

The exercise price of the options is determined by the Board at its absolute discretion and will be not less than the highest price of the official closing price of the shares of the Company as stated in the daily quotations sheets issued by the Stock Exchange on the date of offer a grant, the average official closing prices of the Company's shares as stated in the daily quotations sheets issued by the Stock Exchange for the five business days immediately preceding the date of grant and the nominal value of the shares of the Company.

The aggregate number of Shares which may be issued upon the exercise of all share options that may be granted under the 2020 Share Option Scheme and all outstanding share options granted and yet to be exercised under the other share option schemes of the Company has not exceeded 30% of the Shares in issue.

On 21 January 2022, 1 April 2022, 16 May 2022 and 23 June 2022, the Company granted 4,116,337 options at the exercise price of HK$28.05 per Share, 10,977,650 options at the exercise price of HK$18.12 per Share, 19,120,255 options at the exercise price of HK$14.26 per Share and 300,000 options at the exercise price of HK$19.92 per Share respectively under the 2020 Share Option Scheme. As at 31 December 2022, the total outstanding options that has been granted under the 2020 Share Option Scheme was 60,057,875.

During the year, 34,514,242 share options of the Company were granted and the status of the share options the Company granted up to 31 December 2022 is as follows:

Category of participants	As at 30 Jun 2022	Granted during the Period	Exercised during the Period	Expired during the Period	Cancelled during the Period	As at 31 Dec 2022	Date of Grant of Share Options	Vesting Period	Exercise Period	Exercise Price	Share Price of the Company as at the date of grant of share options	Share Price of the Company Immediately before the exercise date of share options (Note 1)
Directors												-
Zhaohua Chang	13,500,000	-	-	-	-	13,500,000	23 Jan 2017	23 Jan 2017 – 23 Jan 2022	23 Jan 2022 – 22 Jan 2027	HKD5.628	HKD5.450	
	313,636	-	-	-	-	313,636	30 Mar 2017	30 Mar 2017 – 30 Mar 2022	30 Mar 2022 – 29 Mar 2027	HKD5.798	HKD5.700	
	214,535	-	-	-	-	214,535	29 Mar 2018	29 Mar 2023	29 Mar 2023 – 28 Mar 2028	HKD8.510	HKD8.510	
	15,594,188	-	-	-	-	15,594,188	24 Dec 2018	24 Dec 2018 – 30 Dec 2022	24 Dec 2020 – 23 Dec 2028	HKD7.692	HKD7.150	
	225,752	-	-	-	-	225,752	1 Apr 2019	1 Apr 2024	1 Apr 2024 – 31 Mar 2029	HKD7.448	HKD7.270	
	80,306	-	-	-	-	80,306	31 Mar 2020	31 Mar 2025	31 Mar 2025 – 30 Mar 2030	HKD17.54	HKD17.54	
	615,360	-	-	-	-	615,360	21 Jan 2022	21 Feb 2022 – 21 Jan 2023	21 Feb 2022 – 20 Jan 2032	HKD28.05	HKD28.05	
	47,754	-	-	-	-	47,754	1 Apr 2022	1 Apr 2027	1 Apr 2027 – 31 Mar 2032	HKD18.12	HKD17.70	
	615,360	-	-	-	-	615,360	1 Apr 2022	1 May 2022 – 1 Apr 2023	1 May 2022 – 31 Mar 2032	HKD18.12	HKD17.70	
Jonathan H. Chou	395,843	-	-	-	-	395,843	23 Jan 2019	23 Jan 2019 – 23 Jan 2023	2 3 Feb 2019 – 22 Jan 2029	HKD7.730	HKD7.730	
	80,645	-	-	-	-	80,645	14 May 2021	13 Jun 2021-13 May 2022	14 May 2021 – 13 May 2031	HKD57.59	HKD57.45	
	26,881	-	-	-	-	26,881	21 Jan 2022	21 Feb 2022 – 21 Jan 2023	21 Feb 2022 – 20 Jan 2032	HKD28.05	HKD28.05	
	26,881	-	-	-	-	26,881	1 Apr 2022	1 May 2022 – 1 Apr 2023	1 May 2022 – 31 Mar 2032	HKD18.12	HKD17.70	
	26,883	-	-	-	-	26,883	16 May 2022	16 Jun 2022-16 May 2023	16 Jun 2022 – 15 May 2032	HKD14.26	HKD14.26	
Guoen Liu	80,645	-	-	-	-	80,645	14 May 2021	13 Jun 2021-13 May 2022	14 May 2021 – 13 May 2031	HKD57.59	HKD57.45	
	26,881	-	-	-	-	26,881	21 Jan 2022	21 Feb 2022 – 21 Jan 2023	21 Feb 2022 – 20 Jan 2032	HKD28.05	HKD28.05	
	26,881	-	-	-	-	26,881	1 Apr 2022	1 May 2022 – 1 Apr 2023	1 May 2022 – 31 Mar 2032	HKD18.12	HKD17.70	
	26,883	-	-	-	-	26,883	16 May 2022	16 Jun 2022-16 May 2023	16 Jun 2022 – 15 May 2032	HKD14.26	HKD14.26	
Chunyang Shao	80,645	-	-	-	-	80,645	14 May 2021	13 Jun 2021-13 May 2022	14 May 2021 – 13 May 2031	HKD57.59	HKD57.45	
	26,881	-	-	-	-	26,881	21 Jan 2022	21 Feb 2022 – 21 Jan 2023	21 Feb 2022 – 20 Jan 2032	HKD28.05	HKD28.05	
	26,881	-	-	-	-	26,881	1 Apr 2022	1 May 2022 – 1 Apr 2023	1 May 2022 – 31 Mar 2032	HKD18.12	HKD17.70	
	26,883	-	-	-	-	26,883	16 May 2022	16 Jun 2022-16 May 2023	16 Jun 2022 – 15 May 2032	HKD14.26	HKD14.26	
In Aggregate	32,086,604	-	-	-	-	32,086,604						
Business associates												-
Maxwell Maxcare	11,575,000	-	-	-	-	11,575,000	20 Jan 2015	20 Jan 2015 – 20 Jan 2021	20 Jan 2016 – 19 Jan 2025	HKD3.210	HKD3.170	
Science Foundation	14,100,000	-	-	-	-	14,100,000	30 Mar 2016	30 Mar 2016 – 30 Mar 2021	30 Mar 2017 – 29 Mar 2026	HKD3.482	HKD3.360	
Limited	36,940	-	-	-	-	36,940	31 Mar 2021	31 Mar 2026	31 Mar 2026 – 30 Mar 2031	HKD43.75	HKD43.75	
	16,876,788	-	-	-	-	16,876,788	14 May 2021	13 Jun 2021-13 May 2022	14 May 2021 – 13 May 2031	HKD57.59	HKD57.45	
	15,683,008	-	-	-	-	15,683,008	16 May 2022	16 Jun 2022-16 May 2023	16 Jun 2022 – 15 May 2032	HKD14.26	HKD14.26	
In Aggregate	58,271,736	-	-	-	-	58,271,736						

Note 1: The share price of the Company disclosed is the weighted average closing price of the shares immediately before the exercise dates of share options during the period.

Category of participants	As at 30 Jun 2022	Granted during the Period	Exercised during the Period	Expired during the Period	Cancelled during the Period	As at 31 Dec 2022	Date of Grant of Share Options	Vesting Period	Exercise Period	Exercise Price	Share Price of the Company as at the date of grant of share options	Share Price of the Company Immediately before the exercise date of share options (Note 1)
Employees												HKD19.04
	1,013,600	–	943,600	–	–	70,000	28 Aug 2012	28 Aug 2018 – 28 Aug 2019	28 Aug 2019 – 27 Aug 2022	HKD3.350	HKD3.350	
	500,000	–	500,000	–	–	–	7 Sep 2012	7 Sep 2012 – 7 Sep 2017	7 Sep 2013 – 6 Sep 2022	HKD3.330	HKD3.330	
	736,000	–	736,000	–	–	–	10 Dec 2012	10 Dec 2012 – 10 Dec 2019	10 Dec 2019 – 9 Dec 2022	HKD4.600	HKD4.600	
	250,000	–	–	–	–	250,000	28 Aug 2013	28 Aug 2013 – 28 Aug 2018	28 Aug 2014 – 27 Aug 2023	HKD4.970	HKD4.970	
	630,000	–	–	–	–	630,000	20 Jan 2015	20 Jan 2015 – 20 Jan 2019	20 Jan 2016 – 19 Jan 2025	HKD3.210	HKD3.170	
	150,000	–	–	–	–	150,000	20 Jan 2015	20 Jan 2015 – 20 Jan 2021	20 Jan 2016 – 19 Jan 2025	HKD3.210	HKD3.170	
	8,186,000	–	985,000	–	–	7,201,000	30 Mar 2016	30 Mar 2016 – 30 Mar 2021	30 Mar 2017 – 29 Mar 2026	HKD3.482	HKD3.360	
	8,090,000	–	190,000	–	–	7,900,000	23 Jan 2017	23 Jan 2022	23 Jan 2022 – 22 Jan 2027	HKD5.628	HKD5.450	
	2,315,235	–	96,700	–	–	2,218,535	30 Mar 2017	30 Mar 2022	30 Mar 2022 – 29 Mar 2027	HKD5.798	HKD5.700	
	2,000,000	–	–	–	–	2,000,000	25 Aug 2017	25 Aug 2017 – 25 Aug 2022	25 Aug 2018 – 24 Aug 2027	HKD7.418	HKD7.020	
	2,082,366	–	–	–	107,427	1,974,939	29 Mar 2018	29 Mar 2023	29 Mar 2023 – 28 Mar 2028	HKD8.510	HKD8.510	
	9,980,309	–	139,969	–	39,682	9,800,658	24 Dec 2018	24 Dec 2018 – 30 Dec 2022	24 Dec 2020 – 23 Dec 2028	HKD7.692	HKD7.150	
	1,321,758	–	22,000	–	–	1,299,758	23 Jan 2019	23 Jan 2019 – 31 Jan 2023	23 Jan 2021 – 22 Jan 2029	HKD7.730	HKD7.730	
	225,320	–	25,320	–	–	200,000	23 Jan 2019	23 Jan 2019 – 23 Jan 2024	23 Jan 2020 – 22 Jan 2029	HKD7.730	HKD7.730	
	312,500	–	–	–	–	312,500	23 Jan 2019	23 Jan 2019 – 23 Jan 2020	23 Feb 2019 – 22 Jan 2029	HKD7.730	HKD7.730	
	3,756,614	–	–	–	136,017	3,620,597	1 Apr 2019	1 Apr 2024	1 Apr 2024 – 31 Mar 2029	HKD7.448	HKD7.270	
	500,000	–	–	–	–	500,000	30 Aug 2019	30 Aug 2019 – 30 Aug 2024	30 Aug 2020 – 29 Aug 2029	HKD6.95	HKD6.95	
	1,261,631	–	–	–	42,539	1,219,092	31 Mar 2020	31 Mar 2025	31 Mar 2025 – 30 Mar 2030	HKD17.54	HKD17.54	
	160,000	–	–	–	–	160,000	31 Mar 2020	31 Mar 2021 – 31 Mar 2025	31 Mar 2021 – 30 Mar 2030	HKD17.54	HKD17.54	
	145,225	–	12,739	–	9,100	123,386	31 Mar 2020	31 Mar 2022 – 31 Mar 2024	31 Mar 2022 – 30 Mar 2030	HKD17.54	HKD17.54	
	600,000	–	–	–	–	600,000	28 Aug 2020	28 Aug 2021 – 28 Aug 2025	28 Aug 2021 – 27 Aug 2030	HKD34.70	HKD34.70	
	1,150,000	–	–	–	–	1,150,000	28 Dec 2020	28 Dec 2021 – 28 Dec 2025	28 Dec 2021 – 27 Dec 2030	HKD42.20	HKD42.20	
	644,237	–	–	–	22,492	621,745	31 Mar 2021	31 Mar 2026	31 Mar 2026 – 30 Mar 2031	HKD43.75	HKD43.75	
	714,228	–	–	–	6,761	707,467	31 Mar 2021	31 Mar 2023–31 Mar 2025	31 Mar 2023 – 30 Mar 2031	HKD43.75	HKD43.75	
	6,200,000	–	–	–	400,000	5,800,000	31 Aug 2021	31 Aug 2028	31 Aug 2023 – 30 Aug 2031	HKD48.15	HKD48.15	
	690,000	–	–	–	–	690,000	2 Nov 2021	2 Nov 2028	2 Nov 2021 – 1 Nov 2031	HKD36.79	HKD34.65	
	3,388,375	–	–	50,256	54,351	3,283,768	21 Jan 2022	21 Feb 2022 – 21 Jan 2023	21 Feb 2022 – 20 Jan 2032	HKD28.05	HKD28.05	
	3,308,485	–	27,572	–	99,337	3,181,576	1 Apr 2022	1 May 2022 – 1 Apr 2023	1 May 2022 – 31 Mar 2032	HKD18.12	HKD17.70	
	5,093,029	–	–	–	125,421	4,967,608	1 Apr 2022	1 Apr 2024 – 1 Apr 2026	1 Apr 2024 – 31 Mar 2032	HKD18.12	HKD17.70	
	1,333,591	–	–	–	35,312	1,298,279	1 Apr 2022	1 Apr 2027	1 Apr 2027 – 31 Mar 2032	HKD18.12	HKD17.70	
	3,304,700	–	105,547	1,576	99,225	3,098,352	16 May 2022	16 Jun 2022-16 May 2023	16 Jun 2022 – 15 May 2032	HKD14.26	HKD14.26	
	300,000	–	–	–		300,000	23 June 2022	23 Jun 2023-23 Jun 2027	23 Jun 2023 – 22 Jun 2032	HKD19.92	HKD19.92	
In Aggregate	70,343,203	–	3,784,447	71,598	1,157,898	65,329,260						
Total	160,701,543	–	3,784,447	71,598	1,157,898	155,687,600						

Note 1: The share price of the Company disclosed is the weighted average closing price of the shares immediately before the exercise dates of share options during the period.

Pursuant to the proposed amendments to Listing Rules relating to share schemes of listed issuers and housekeeping rule amendment published by the Stock Exchange in July 2022 ("Consultation Conclusions"), Chapter 17 of the Listing Rules has been amended to govern both share option schemes and share award schemes with effect from 1 January 2023 (the "New Chapter 17").

The Company announced on 3 April 2023 that the Board resolved to propose to adopt a new share scheme (the "Share Scheme") to govern options and share awards in relation to new Shares in compliance with the New Chapter 17.

Further details of the Share Scheme are set out in the Company's circular to be despatched to the shareholders.

The proposed adoption of the Share Scheme is subject to (i) the Listing Committee of the Stock Exchange granting approval for the listing of, and permission to deal in, the Shares to be allotted and issued by the Company pursuant to the Share Scheme, and (ii) the shareholders passing of the relevant resolution to approve and adopt the Share Scheme at the upcoming annual general meeting of the Company.

SHARE AWARD SCHEME

The Company has adopted a share award scheme (the "Share Award Scheme") in 2011. The purposes of the Share Award Scheme are to provide incentives to attract and retain employees, consultants and advisers whose contributions will be beneficial to the growth and development of the Group. The Share Award Scheme has an initial term of ten years. On 27 August 2020, the Board resolved to extend the term of the Share Award Scheme for a further ten years from the date of resolution of the Board.

Details of the Share Award Scheme were set out in the announcements of the Company dated 15 September 2011 and 28 August 2020.

The maximum number of shares which could be granted under the Share Award Scheme is up to 10% of the issued share capital of the Company from time to time. The maximum number of Shares that may be awarded to a selected participant under the Share Award Scheme shall not exceed 1% of the issued share capital of the Company from time to time.

Awarded Shares to a selected participant will be subject to vesting and the trustee will transfer the vested awarded shares to the selected participant upon all the vesting conditions have been satisfied.

During the year ended 31 December 2022, the Company resolved to award an aggregate of 1,621,071 Shares to 151 selected participants through secondary Shares purchased by the trustee in the open market. As at 31 December 2022, the number of Shares held by the trustee that may be made available for future grant was 28,713,227, representing 1.57% of the total issued share capital of the Company as at 31 December 2022.

Particulars of the Share Award Scheme and the related accounting policy are set out in note 28(b)(i) and note 1(w)(iii) to the consolidated financial statements, respectively.

Movement in the number of awarded Shares during the year are as follows:

Category of participants	Unvested awarded Shares as at 1 Jan 2022	Granted during the Reporting Period	Vested during the Reporting Period	Expired during the Reporting Period	Lapsed during the Reporting Period	Unvested awarded Shares as at 31 Dec 2022	Date of grant of awarded Shares	Vesting period	Purchase price	Share price of the Company as at the date of grant of awarded Shares	Share price of the Company Immediately before the vested date of awarded Shares (Note 1)
Employees											HKD18.04
	45,813	–	40,066	–	5,747	–	23 Jul 2018	23 Jul 2019-23 Jul 2022	–	HKD9.08	
	228,240	–	71,949	–	12,351	143,940	31 Mar 2020	30 Mar 2021-30 Mar 2024	–	HKD17.54	
	18,204	–	4,551	–	13,653	–	22 Jan 2021	22 Jan 2022-22 Jan 2025	–	HKD58.55	
	13,334	–	6,666	–	–	6,668	31 Mar 2021	31 Mar 2021-30 Mar 2023	–	HKD43.75	
	286,587	–	69,185	–	9,850	207,552	31 Mar 2021	31 Mar 2022-31 Mar 2025	–	HKD43.75	
	–	1,578,325	1,578,325	–	–	–	1 Apr 2022	1 Apr 2022	–	HKD17.69	
	–	4,168	4,168	–	–	–	30 Jun 2022	30 Jun 2022	–	HKD22.75	
	–	433	433	–	–	–	5 Jul 2022	5 Jul 2022	–	HKD23.8	
	–	38,145	38,145	–	–	–	30 Dec 2022	30 Dec 2022	–	HKD20.55	
In Aggregate	592,178	1,621,071	1,831,488	–	41,601	358,160					
Others											–
Maxwell Maxcare Science	16,876,788	–	–	–	–	16,876,788	31 Mar 2020	Note 3	–	HKD17.54	
Foundation Limited	3,584,347	–	–	–	–	3,584,347	31 Mar 2021	Note 3	–	HKD43.75	
In Aggregate	20,461,135	–	–	–	–	20,461,135					
Total	21,053,313	1,621,071	1,813,488	–	41,601	20,819,295					

Notes:

1. The share price of the Company disclosed is the weighted average closing price of the Shares immediately before the vested dates of awarded Shares during the Reporting Period.

2. The number unvested awarded Shares as at 1 January 2022, granted, vested, expired and lapsed awarded Shares during the year, and unvested awarded Shares as at 31 December 2022 for five highest paid individuals (including one Director) in aggregate are 0, 0, 0, 0, 0 and 0 respectively.

3. The awarded Shares will be vested upon certain performance indicators have been achieved and approval by a Director.

Notwithstanding the proposed adoption of the Share Scheme, the Company intends to maintain the Share Award Scheme subject to the trustee will no longer subscribe for any new Shares for award under the Share Award Scheme.

EQUITY-LINKED AGREEMENTS

Other than the Share Option Scheme of the Company as disclosed above, no equity-linked agreements that will or may result in the Company issuing shares or that require the Company to enter into any agreements that will or may result in the Company issuing shares were entered into by the Company during the year ended 31 December 2022.

PUBLIC FLOAT

From information publicly available to the Company and within the knowledge of the Directors, at least 25% of the Company's total issued share capital was held by the public at all times during the financial year ended 31 December 2022 as required under the Listing Rules.

PRE-EMPTIVE RIGHTS

There are no provisions for pre-emptive rights under the Company's Articles of Association and the laws of the Cayman Islands, which would oblige the Company to offer new Shares on a pro-rata basis to existing shareholders.

DONATION

During the year ended 31 December 2022, the Group made donations of approximately US$8.1 million.

FINAL DIVIDEND

The Directors do not recommend the payment of a final dividend for the year ended 31 December 2022 (2021: nil).

TAX ALLOWANCES

The Company is not aware of any particular tax allowances granted to the Company's shareholders due to their interests in its securities.

CORPORATE GOVERNANCE

The Company's principal corporate governance practices are set out in the Corporate Governance Report of this annual report.

AUDITOR

KPMG has acted as auditor of the Company for the financial year ended 31 December 2022. KPMG has been the auditor of the Company for the past eleven years.

KPMG shall retire at the forthcoming AGM and, being eligible, will offer themselves for re-appointment. A resolution may be proposed at the forthcoming annual general meeting to re-appoint KPMG as auditor of the Company.

MISCELLANEOUS

The Company was not aware of any shareholders who had waived or agreed to waive any dividend arrangement for the year ended 31 December 2022.

By Order of the Board
Microport Scientific Corporation
Dr. Zhaohua Chang
Chairman

Shanghai, the PRC
30 March 2023

CORPORATE GOVERNANCE REPORT

The Board is pleased to present this Corporate Governance Report in the Group's annual report for the financial year ended 31 December 2022.

CORPORATE GOVERNANCE PRACTICES

The Company is committed to maintaining high standards of corporate governance and practices to protect the interests of the shareholders of the Company. The Board believes that good corporate governance is essential to the success of the Company and the enhancement of shareholders' value. The Company adopts the principles set out in the Corporate Governance Code ("**CG Code**") contained in Appendix 14 to the Listing Rules, and strives to maintain high standards of corporate governance to safeguard the interests of its shareholders and to enhance corporate value and accountability.

Throughout the year ended 31 December 2022, the Company has complied with all the applicable code provisions (the "**Code Provisions**") as set out in the CG Code, except for Code Provision C.2.1 as explained in the paragraph headed "**Chairman and Chief Executive Officer**" below.

The Company will continue to review and enhance its corporate governance practices to ensure compliance with the CG Code.

THE BOARD/BOARD OF DIRECTORS

ROLES AND RESPONSIBILITIES

The Company is headed by an effective Board which assumes responsibility for its leadership and control and be collectively responsible for promoting the Company's success by directing and supervising the Company's affairs. Directors take decisions objectively in the best interests of the Company.

The Board is responsible for all major matters of the Company, including policy matters, strategies and budgets, internal control and risk management, material transactions (in particular those that may involve conflict of interests), financial information, appointment of directors and other significant operational matters of the Company.

The day-to-day management, administration and operation of the Company are delegated to the Chief Executive Officer and the senior management. The delegated functions and work tasks are periodically reviewed. Approval has to be obtained from the Board prior to entering into any significant transactions by the above mentioned officers.

All Directors shall ensure that they carry out their duties in good faith, in compliance with applicable laws and regulations, and in the interests of the Company and its shareholders at all time.

All Directors have full and timely access to all relevant information and the advices/services of the company secretary, with a view to ensure that Board procedures and all applicable laws and regulations are properly followed. Each Director can seek independent professional advice as appropriate at the Company's expense, upon making request to the Board.

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

BOARD COMPOSITION

The Board structure is governed by the Company's Articles of Association. The composition of the Board is well balanced with each Director having sound industry knowledge, extensive corporate and strategic planning experience and/or expertise relevant to the business of the Group. The Board regularly reviews the contribution required from a Director to perform his responsibilities to the Company and whether the Director is spending sufficient time performing them that are commensurate with their role and the Board responsibilities.

As at 31 December 2022, the Board comprised of seven members, consisting of one Executive Director, three Non-executive Directors and three Independent Non-executive Directors.

The list of all Directors, which also specifies the posts, e.g. Chairman, and chairman and members of committees, held by each Director is set out under "**Corporate Information**" on page 3 of this annual report. The Independent Non-executive Directors are expressly identified in all corporate communications pursuant to the Listing Rules. The list of Directors (by category) is also disclosed in all corporate communications issued by the Company pursuant to the Listing Rules from time to time.

The Board of the Company comprised of the following Directors as of 31 December 2022:

EXECUTIVE DIRECTOR:

Dr. Zhaohua Chang *(Chairman and Chief Executive Officer)*

NON-EXECUTIVE DIRECTORS:

Mr. Norihiro Ashida
Dr. Yasuhisa Kurogi
Mr. Hongliang Yu

INDEPENDENT NON-EXECUTIVE DIRECTORS:

Mr. Jonathan H. Chou
Dr. Guoen Liu
Mr. Chunyang Shao

Save as disclosed in this annual report, there is no other relationship (including, financial, business, family or other material/relevant relationships) between the board members.

CHAIRMAN AND CHIEF EXECUTIVE OFFICER

Pursuant to Code Provision C.2.1 of the CG Code, the roles of chairman and chief executive officer should be separate and should not be performed by the same individual. The division of responsibilities between the chairman and chief executive officer should be clearly established and set out in writing.

The chairman and chief executive officer of the Company are held by Dr. Zhaohua Chang ("Dr. Chang"). Dr. Chang has assumed the responsibility of the executive Director and the chairman of the Board and is responsible for managing the Board and Group's business. As the Board considers that Dr. Chang has in-depth knowledge of the Group's business and can make appropriate decisions promptly and efficiently, he also assumed the position of the chief executive officer of the Company. Nevertheless, the Board will continue to review the efficacy of the Group's corporate governance structure to assess whether the separation of the positions of chairman and chief executive officer of the Company is necessary.

INDEPENDENT NON-EXECUTIVE DIRECTORS

Throughout the financial year ended 31 December 2022, the Board at all time met the requirements of the Listing Rules relating to the appointment of at least three independent non-executive directors representing one-third of the Board with at least one independent non-executive director possessing appropriate professional qualifications or accounting or related financial management expertise.

The Company has received written annual confirmation from each Independent Non-executive Director of his independence pursuant to the requirements of the Listing Rules. The Company considers all Independent Non-executive Directors to be independent in accordance with the independence guidelines as set out in Rule 3.13 of the Listing Rules.

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

INDEPENDENCE MECHANISM

The Company has established mechanisms to ensure independent views and input are available to the Board (the "**Mechanisms**"), so as to ensure a strong independent element on the Board, and allow the Board effectively exercises independent judgments to better safeguard Shareholders' interests.

The Mechanisms are established with reference to the Listing Rules and code provisions set out in the CG Code in relation to board composition, directors' independence and board decision making.

Pursuant to the Mechanisms, the Board will conduct an annual review of the implementation and effectiveness of these Mechanisms, and formulate the action plan for improvement, if appropriate.

During the year ended 31 December 2022, the Board reviewed the implementation and effectiveness of the Mechanisms and the results were satisfactory.

APPOINTMENT AND RE-ELECTION OF DIRECTORS

Code Provision B.2.2 of the CG Code stipulates that every director, including those appointed for a specific term, should be subject to retirement by rotation at least once every three years.

In accordance with the Company's Articles of Association, at every annual general meeting of the Company, one-third of the Directors for the time being (or if their number is not three or a multiple of three, then the number nearest to, but not less than one-third) shall retire from office by rotation provided that every Director (including those appointed for a specific term) shall be subject to retirement by rotation at least once every three years.

The Company has entered into a letter of appointment with each of the non-executive Directors including independent non-executive Directors of the Company with no fixed terms but subject to retirement by rotation at least once every three years.

The procedures and process of appointment, re-election and removal of directors are laid down in the Company's Articles of Association. The Nomination Committee is responsible for reviewing the Board composition, monitoring the appointment/re-election and succession planning of Directors.

INDUCTION AND CONTINUING DEVELOPMENT OF DIRECTORS

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

Development of Directors is an ongoing process, so that they can perform their duties appropriately. Directors are continually updated on the statutory and regulatory regime and the business environment to facilitate the discharge of their responsibilities. Continuing briefing and professional development for Directors will be arranged where necessary.

During the year of 2022, continuous trainings were conducted for all Directors, covering the updates on the Listing Rules and compliance training on code of business conduct and ethics.

BOARD MEETINGS

FUNCTIONS

The Board requires Directors to devote sufficient time and attention to their duties and responsibilities. The Board normally has scheduled meetings at quarterly interval each year and meets as and when required to discuss the overall business, development strategy, operations and financial reporting of the Company.

BOARD PRACTICES AND CONDUCT OF MEETINGS

Annual meeting schedules and draft agenda of each meeting are normally made available to Directors in advance.

Notice of regular Board meetings is served to all Directors at least 14 days before the meeting. For other Board and committee meetings, a reasonable notice is generally given.

Board documents together with all appropriate, complete and reliable information are sent to all Directors at least 3 days before each Board meeting or committee meeting to keep Directors apprised of the latest developments and financial position of the Company and to enable them to make informed decisions. The Board and each Director also have separate and independent access to the senior management where necessary.

The senior management attend all regular Board meetings and where necessary, other Board and committee meetings, to advise on business developments, financial and accounting matters, statutory and regulatory compliance, corporate governance and other major aspects of the Company.

The Board secretary and the company secretary are responsible for taking and keeping minutes of all Board meetings and committee meetings. Draft minutes are normally circulated to Directors for comments within a reasonable time after each meeting and final versions are open for Directors' inspection.

The Company's Articles of Association contain provisions requiring Directors to abstain from voting and not to be counted in the quorum at meetings for approving transactions in which such Directors or any of their associates have a material interest.

CORPORATE GOVERNANCE REPORT

DIRECTORS' ATTENDANCE RECORDS

During the year ended 31 December 2022, five Board Meetings were held for, among other things, reviewing and approving the financial and operating performance, considering and approving the overall strategies and policies of the Company. An annual general meeting was held on 23 June 2022 for receiving the audited financial statements, approving re-election of directors and re-appointment of auditor, etc. In addition, an extraordinary general meeting was held on 18 March 2022 for approving the resolutions relating to the subsidiaries' share option scheme.

The attendance records of each Director at the Board meetings, the annual general meeting and the extraordinary general meeting during the term of office as a Director during the year ended 31 December 2022 are set out below:

Name of Director	Attendance/Number of Board meetings held during the term of office of the Director Concerned	Attendance/Number of annual general meeting held during the term of office of the Director Concerned	Attendance/Number of extraordinary general meeting held during the term of office of the Director Concerned
Executive Director			
Dr. Zhaohua Chang	5/5	1/1	1/1
Non-executive Directors			
Mr. Norihiro Ashida	5/5	1/1	1/1
Dr. Yasuhisa Kurogi	5/5	1/1	1/1
Mr. Hongliang Yu	4/5	1/1	1/1
Independent Non-executive Directors			
Mr. Jonathan H. Chou	5/5	1/1	1/1
Dr. Guoen Liu	4/5	1/1	1/1
Mr. Chunyang Shao	5/5	1/1	1/1

Directors reviewed the documents of Board Meetings provided by the Company in advance.

MODEL CODE FOR SECURITIES TRANSACTIONS

The Company has adopted the Model Code set out in Appendix 10 to the Listing Rules as its code of conduct regarding Directors' securities transactions.

Specific enquiry has been made of all the Directors and the Directors have confirmed that they have complied with the Model Code for transactions in the Company's securities throughout the financial year ended 31 December 2022.

The Company has also established written guidelines on no less exacting terms than the Model Code (the "**Employees Written Guidelines**") for securities transactions by employees who are likely to be in possession of unpublished inside information of the Company.

No incident of non-compliance of the Employees Written Guidelines by the employees was noted by the Company.

DELEGATION BY THE BOARD

BOARD COMMITTEES

The Board has delegated a schedule of responsibilities to the chief executive officer and senior management of the Company. These responsibilities include directing and coordinating day-to-day operation and management of the Company in accordance with the management strategies and plans approved by the Board, formulating and monitoring the operating and production plans and budgets, and supervising and monitoring the control systems.

The Board has established four committees, namely, the Audit Committee, Remuneration Committee, Nomination Committee and Strategic Committee, for overseeing particular aspects of the Company's affairs. All Board committees of the Company are established with defined written terms of reference which are available to shareholders upon request. The Independent Non-executive Directors are invited to serve on these four Board committees. Aside from the aforesaid four Board committees, the Company has also established three Executive Committees to oversee the day-to-day operations of the Group.

CORPORATE GOVERNANCE FUNCTIONS

The Board is responsible for performing the corporate governance functions set out in Code Provision A.2.1 of the CG Code. During the year ended 31 December 2022, the Board has considered the corporate governance policies and practice and its relevant disclosures; the compliance of the Model Code and the Employees Written Guidelines; and policies and practices on compliance with legal and regulatory requirements as required under the applicable requirements of the Listing Rules.

AUDIT COMMITTEE

The Company established an audit committee in March 2010 with written terms of reference in compliance with the CG Code. The Audit Committee comprises three members:

Mr. Jonathan H. Chou *(Chairman)*
Mr. Norihiro Ashida
Mr. Chunyang Shao

Two of the members of the Audit Committee are Independent Non-executive Directors (including one Independent Non-executive Director who possesses the appropriate professional qualifications or accounting or related financial management expertise). None of the members of the Audit Committee is a former partner of the Company's existing external auditors.

The main duties of the Audit Committee include the following:

- Review of the financial information of the Group;
- Review of the relationship with and the terms of appointment of the external auditors;
- Review of the Company's financial reporting system, internal control system and risk management system.

The Audit Committee oversees the internal control system and risk management system of the Group, reports to the Board on any material issues, and makes recommendations to the Board.

During the year under review, the Audit Committee reviewed the Group's annual results and annual reports for the year ended 31 December 2021, and the interim results and interim report for the six months ended 30 June 2022, the financial reporting and compliance procedures, the Company's internal control and risk management systems and processes, and the re-appointment of the external auditor.

The Audit Committee held three meetings during the year ended 31 December 2022. The attendance records of each member at the Audit Committee meetings during the year ended 31 December 2022 are set out below:

Name of Members concerned	Attendance/Number of meetings held during the term of office of the Audit Committee member
Mr. Jonathan H. Chou (Chairman)	3/3
Mr. Norihiro Ashida	3/3
Mr. Chunyang Shao	3/3

REMUNERATION COMMITTEE

The Company established a remuneration committee in March 2010 with written terms of reference in compliance with the CG Code. The Remuneration Committee comprises three members:

Dr. Guoen Liu *(Chairman)*
Mr. Jonathan H. Chou
Dr. Zhaohua Chang

The majority of the members of the Remuneration Committee are Independent Non-executive Directors.

The primary objectives of the Remuneration Committee include making recommendations to the Board on the remuneration policy and structure of the Directors and the senior management and determining the remuneration packages of all executive Directors and senior management. The Remuneration Committee is also responsible for establishing transparent procedures for developing such remuneration policy and structure to ensure that no Director or any of his/her associates will participate in deciding his/her own remuneration, which will be determined by reference to the performance of the individual and the Company as well as market practice and conditions.

The Company has adopted a share option scheme as incentive to Directors and eligible employees. Details of the scheme are set out in the section headed "**Share Option Schemes**" in the Report of the Directors.

During the year of 2022, the Remuneration Committee reviewed and made recommendations to the Board on the year-end bonus of senior management and the related remuneration policy.

The Remuneration Committee held four meetings during the year ended 31 December 2022. The attendance records of each member at the Remuneration Committee meeting during the year ended 31 December 2022 are set out below:

Name of Members concerned	Attendance/Number of meetings held during the term of office of the Remuneration Committee member
Dr. Guoen Liu (Chairman)	4/4
Mr. Jonathan H. Chou	4/4
Dr. Zhaohua Chang	4/4

NOMINATION COMMITTEE

The Company established a nomination committee in March 2010 with written terms of reference in compliance with the CG Code.

The Nomination Committee comprises three members:

Mr. Chunyang Shao *(Chairman)*
Dr. Guoen Liu
Mr. Hongliang Yu

The majority of the members of the Nomination Committee are Independent Non-executive Directors.

The principal duties of the Nomination Committee include reviewing the Board composition, making recommendations to the Board on the appointment and succession planning of Directors, and assessing the independence of the Independent Non-executive Directors.

The Company has adopted a director nomination policy. The director nomination policy contains the criteria for nomination and appointment of directors, as well as nomination process. In evaluating and selecting any candidate for directorship, the following criteria should be considered: character and integrity; qualifications including professional qualifications, skills, knowledge and experience and diversity aspects under the board diversity policy of the Company that are relevant to the Company's business and corporate strategy; any measurable objectives adopted for achieving diversity on the Board; requirement for the Board to have independent directors in accordance with the Listing Rules and whether the candidate would be considered independent with reference to the independence guidelines set out in the Listing Rules; any potential contributions the candidate can bring to the Board in terms of qualifications, skills, experience, independence and diversity; willingness and ability to devote adequate time to discharge duties as a member of the Board and/or Board committee(s) of the Company's such other perspectives that are appropriate to the Company's business and succession plan and where applicable, may be adopted and/or amended by the Board and/or the Nomination Committee from time to time for nomination of directors and succession planning.

For the appointment of new Director, the Nomination Committee and/or the Board should, upon receipt of the proposal on appointment of new director and the biographical information (or relevant details) of the candidate, evaluate such candidate based on the criteria as set out above to determine whether such candidate is qualified for directorship. If the process yields one or more desirable candidates, the Nomination Committee and/or the Board should rank them by order of preference based on the needs of the Company and reference check of each candidate (where applicable). The Nomination Committee should then recommend to the Board to appoint the appropriate candidate for directorship, as applicable. For any person that is nominated by a shareholder for election as a director at the general meeting of the Company, the Nomination Committee and/or the Board should evaluate such candidate based on the criteria as set out above to determine whether such candidate is qualified for directorship. Where appropriate, the Nomination Committee and/or the Board should make recommendation to shareholders in respect of the proposed election of director at the general meeting.

For re-election of Director at a general meeting of the Company, the Nomination Committee and/or the Board should review the overall contribution and service to the Company of the retiring director and the level of participation and performance on the Board. The Nomination Committee and/or the Board should also review and determine whether the retiring director continues to meet the criteria as set out above.

The Nomination Committee held one meeting during the year ended 31 December 2022. The attendance records of each member at the Nomination Committee meeting during the year ended 31 December 2022 are set out below:

Name of Members concerned	Attendance/Number of meetings held during the term of office of the Nomination Committee member
Mr. Chunyang Shao (Chairman)	1/1
Dr. Guoen Liu	0/1
Mr. Hongliang Yu	1/1

The members reviewed the current composition of the Board and discussed the Board restructuring to ensure that it has a balance of expertise, skills and experience appropriate for the requirements of the business of the Company.

The Nomination Committee reviewed the time invested by Non-executive Directors in the Company's affairs, assess the independence of the Independent Non-executive Directors, evaluate the qualification of the candidate for election and recommended the re-appointment of the Directors standing for re-election at the annual general meeting of the Company.

STRATEGIC COMMITTEE

The Company established a strategic committee in March 2019 with written terms of reference. The Strategic Committee comprises four members:

Dr. Zhaohua Chang *(Chairman)*
Dr. Yasuhisa Kurogi
Mr. Jonathan H. Chou
Mr. Hongliang Yu

The primary objectives of the Strategic Committee include researching and making recommendations to the Board on long-term development strategies and rolling strategies, business, operational and financial/capital plans; reviewing and evaluating financial, marketing, operational and business performance of the Company; researching and discussing on trends in markets where the Group operates as well as reviewing and discussing on the implementation of the Group's strategies.

The Strategic Committee held one meeting during the year ended 31 December 2022. The attendance records of each member at the Strategic Committee meetings during the year ended 31 December 2022 are set out below:

Name of Members concerned	Attendance/Number of meetings held during the term of office of the Strategic Committee member
Dr. Zhaohua Chang (Chairman)	1/1
Dr. Yasuhisa Kurogi	1/1
Mr. Jonathan H. Chou	1/1
Mr. Hongliang Yu	1/1

EXECUTIVE COMMITTEE

The Company consists of three distinctive operational business units: Greater China and Inter-Continental respectively managed by Greater China Executive Committee ("**CEC**"), Inter-Continental Orthopedics Committee ("**IOC**") and Inter-Continental CRM Committee ("**ICC**").

As of 31 December 2022, the CEC comprised seven members: Mr. Bo Peng (Chairperson of CEC), Mr. Hongbin Sun (Co-chairperson of CEC), Dr. Qiyi Luo, Mr. Yimin Xu, Dr. Chengyun Yue, Mr. Yiyun Que and Mr. Lei Jiang. The majority are heads or Vice Presidents of operational departments.

As of 31 December 2022, the IOC comprised five members: Mr. Jonathan Chen (Co-chairperson of IOC), Mr. Todd Smith, Mr. Patrick Yu, Mr. Robert Alan Cripe and Mr. Jean Marc D'hondt.

As of 31 December 2022, the ICC comprised seven members: Mr. Jonathan Chen (Chairperson of ICC), Mr. Benoit Clinchamps (Co-chairperson of ICC), Mr. Hongbin Sun, Dr. Qiyi Luo, Mr. Philippe Wanstock, Mr. Paul Vodden and Mr. Xiaoming Zhu.

The CEC, IOC, ICC are responsible for overseeing the management of the Company relating to routine, administrative, operational and managerial matters that occur between regularly scheduled meetings of the Board and shall provide support to and be responsible to the Board. Subject to the provisions set out in the charters of CEC, IOC, ICC, the three committees basically will have and may exercise all the powers and authority granted by the Board in the management of business and affairs of MicroPort in Greater China, MicroPort Orthopedics and MicroPort CRM respectively.

During the year of 2022, CEC, IOC and ICC held meetings periodically and frequently to carry out their duties.

DIVERSITY

The Company has adopted a board diversity policy which aims to set out the approach to achieve diversity of the Company's Board of Directors. The Company recognizes and embraces the benefits of having a diverse Board and increasing diversity at the Board level as an essential element in maintaining the Company's competitive advantage. Certain measurable objectives (including gender-related objectives) have been set in the policy. These perspectives include but not be limited to gender, age, cultural and educational background, professional experience, skills, knowledge and industry and regional experience. The ultimate decision will be based on merit and contribution that the selected candidates will bring to the Board.

GENDER DIVERSITY

The Company values gender diversity across all levels of the Group. The following table sets out the gender ratio in the workforce of the Group, including the Board and senior management as at the date of this annual report:

	Female	Male
Board	0%	100%
Top Management	26%	74%
Middle Management	39%	61%
Overall Employee	48.2%	51.8%

Up to the date of this annual report, the Nomination Committee is in progress of identifying suitable female candidate(s) for appointment to the Board on merit against objective criteria.

The Board considers that the current gender diversity in the senior management and other employees of the Group is satisfactory.

Details on the gender ratio of the Group together with relevant data can be found in the 2022 Environmental, Social and Governance Report of the Company to be published on the websites of the Company and of the Stock Exchange on the same day.

ACCOUNTABILITY AND AUDIT

DIRECTORS' RESPONSIBILITIES FOR FINANCIAL REPORTING IN RESPECT OF FINANCIAL STATEMENTS

The Directors acknowledge their responsibilities for preparing the financial statements of the Company for the year ended 31 December 2022.

The Directors are responsible for overseeing the preparation of the financial statements of the Company with a view to ensuring that such financial statements give a true and fair view of the state of affairs of the Group and relevant statutory and regulatory requirements and applicable accounting standards are complied with.

The Board has received from the senior management the management accounts and such accompanying explanation and information as are necessary to enable the Board to make an informed assessment for approving the financial statements.

AUDIT COMMITTEE

In addition to the duties and responsibilities set out under its terms of reference, the Audit Committee assists the Board by providing an objective non-executive review of the effectiveness and efficiency of the internal control, risk management and governance processes of the Group on an annual basis.

The senior manager of the Company's Internal Audit Department attended Audit Committee meetings at the invitation of the committee.

Minutes of each Audit Committee meeting were circulated to all members of Audit Committee for their perusal prior to confirmation of the minutes at the subsequent Audit Committee meeting. Members might request for clarifications or raise comments before the minutes were confirmed. Upon receipt of confirmation from the members at the Audit Committee meetings, the minutes were signed by the Chairman of the meeting as a correct record of the proceedings of the meeting. The minutes of the Audit Committee meetings were also submitted to the Board and for further action of the Board where appropriate.

The activities carried out by the Audit Committee during the year are set out in this Corporate Governance Report on pages 61 to 62 of this annual report.

RISK MANAGEMENT AND INTERNAL CONTROLS

The Board acknowledges its responsibility for the risk management and internal control systems, reviewing their effectiveness at least once a year through Audit Committee. Such systems are designed to manage rather than eliminate the risk of failure to achieve business objectives, and can only provide reasonable and not absolute assurance against material misstatement or loss. During the year of 2022, the Audit Committee has reviewed the Group's internal control and risk management systems and processes which covered the whole financial year.

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

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

The Company has developed and adopted various risk management procedures and guidelines with defined authority for implementation by key business processes and office functions, including sales, purchasing, financial reporting, expense, fixed assets, contract management, human resources, information technology and so on.

Through interviews and questionnaires, the Internal Audit Department conducted independent risk assessment regularly to identify risks that potentially impact the business of the Group and various aspects including strategic risks, financial risks, market risks, operation risks, legal risks and so on.

The management, in coordination with division/department heads, assessed the likelihood of risk occurrence, the impact, the vulnerability and the velocity. Also they provided treatment plans, and monitored the risk management progress.

The Internal Audit Department is responsible for performing independent review of the adequacy and effectiveness of the risk management and internal control systems. The Internal Audit Department examined key issues in relation to the accounting practices and all material controls, provided its findings and recommendations for improvement to auditees and report the remediation periodically to the Audit Committee.

The Board, as supported by the Audit Committee, reviewed the risk management and internal control systems, including the financial, operational and compliance controls periodically and considered such systems are effective and adequate.

The Company has in place the whistleblowing policy in the Code of Business Conduct and Ethics and mechanism for employees of the Company and those who deal with the Company to raise concerns, in confidence and anonymity, with the compliance function about possible improprieties in any matters related to the Company. The Code of Business Conduct and Ethics is available on the website of the Company.

The Company has also in place the Anti-Bribery and Anti-Corruption Policy to safeguard against corruption and bribery within the Company. The Company has an internal reporting channel that is open and available for employees of the Company to report any suspected corruption and bribery. Employees can also make anonymous reports to the compliance/internal audit function, which is responsible for investigating the reported incidents and taking appropriate measures. The Company continues to carry out anti-corruption and anti-bribery activities to cultivate a culture of integrity, and actively organizes anti-corruption training and inspections to ensure the effectiveness of anti-corruption and anti-bribery. During the Reporting Period, there were no legal cases involving bribery, monopoly, extortion, blackmail, fraud and money laundering that had a significant impact on the Company, nor any legal cases related to corrupt practices by the Group or its employees.

During the year ended 31 December 2022, training on business conduct and ethics, anti-bribery and anti-corruption was organized for all employees of the Group, and the training pass rate was 100%. Please refer to the 2022 Environmental, Social and Governance Report of the Company to be published on the websites of the Company and of the Stock Exchange on the same day for more details.

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

The Company would appoint independent consultancy firm to conduct a thorough review of risk management and internal control systems of the Company and its subsidiaries on regular intervals basis when necessary.

EXTERNAL AUDITOR AND AUDITOR'S REMUNERATION

The statement of the external auditor of the Company about their reporting responsibilities for the financial statements is set out in the "Independent Auditor's Report" on pages 71 to 77 in this annual report.

For the financial year ended 31 December 2022, the fees for audit services and non-audit services rendered by external auditor, KPMG were as follows:

Audit Services

Auditors	Fees (US$'000)
KPMG	
– Annual audit services of the Company	696
– Other audit-related services	4,029
	4,725

The audit service performed by KPMG related to the statutory audit of the Group's consolidated financial statements for the financial year ended 31 December 2022.

Non-audit Services

Auditors	Fees (US$'000)
KPMG	948

During the year ended 31 December 2022, non-audit services performed by KPMG are primarily in relation to tax and certain acquisitions related services.

COMPANY SECRETARY

Ms. Yuen Wing Yan Winnie ("Ms. Yuen") of Tricor Services Limited, the external professional service provider, has been engaged by the Company as its company secretary in compliance with the Listing Rules since 15 January 2020.

Ms. Yuen had complied with Rule 3.29 of the Listing Rules by taking no less than 15 hours of relevant professional training during the year ended 31 December 2022.

During the year ended 31 December 2022, the primary contact person at the Company with whom Ms. Yuen had been contacting in respect of company secretarial matters was Ms. He Li, the Board Secretary of the Company, who was responsible for Board procedures and communications among Directors with shareholders and management.

COMMUNICATION WITH SHAREHOLDERS AND INVESTORS/INVESTOR RELATIONS

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

The Company's shareholders' communication policy aims at promoting effective communication with Shareholders and other stakeholders, encouraging Shareholders to engage actively with the Company and enabling Shareholders to exercise their rights as Shareholders effectively. The Board reviewed the implementation and effectiveness of the Shareholders' Communication Policy and the results were satisfactory.

The Company maintains a website at www.microport.com, where up-to-date information and updates on the Company's business operations and developments, financial information, corporate governance practices and other information are available for public access. Investors may write to the Company at its principal place of business in Hong Kong or China or via the Company's website for any enquiries. During the periods of interim results and annual results release, dual-languages conference calls, non-deal roadshows are held for ensuring effective and timely communication to shareholders and investors. Normally, the Company also accommodated shareholders' and investors' site visits by arranging meetings with senior managements.

The general meetings of the Company provide a forum and an important channel for communication between the Board and the shareholders. The Chairman of the Board as well as chairmen of the Nomination Committee, Remuneration Committee, Audit Committee and Strategic Committee or, in their absence, other members of the respective committees and, where applicable, the chairman of the independent Board committee, are available normally at the annual general meeting and other relevant shareholder meetings to answer questions.

SHAREHOLDER RIGHTS

To safeguard shareholder interests and rights, a separate resolution is proposed for each substantially separate issue at general meetings, including the re-election of individual Directors.

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

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

Pursuant to Article 12.3 of the Articles of Association of the Company, an extraordinary general meeting shall be convened on the written requisition of (1) any two or more members of the Company; or (2) a recognized clearing house (or its nominees(s)) deposited at the principal place of business of the Company in Hong Kong (5/F, Manulife Place, 348 Kwun Tong Road, Kowloon, Hong Kong) for the attention of the Board or, in the event the Company ceases to have such a principal place of business in Hong Kong, the registered office of the Company (PO Box 309, Ugland House, Grand Cayman, KY1-1104, Cayman Islands) for the attention of the Board.

The written requisition shall specify the objects of the extraordinary general meeting and signed by the requisitionist(s), provided that such requisitionist(s) held as at the date of deposit of the written requisition not less than one-tenth of the paid up capital of the Company which carries the voting right at general meetings of the Company.

If the Board does not, within 21 days from the date of deposit of the written requisition, proceed duly to convene the extraordinary general meeting to be held within a further 21 days, the requisitionist(s) or any of them representing more than one-half of the total voting rights of all of them, may convene the extraordinary general meeting in the same manner, as nearly as possible, as that in which extraordinary general meeting may be convened by the Board, provided that any extraordinary general meeting so convened shall not be held after the expiration of 3 months from the date of deposit of the written requisition, and all reasonable expenses incurred by the requisitionist(s) as a result of the failure of the Board shall be reimbursed to them by the Company.

DIVIDEND POLICY

The Company has adopted a Dividend Policy on payment of dividends. When proposing the payment of dividend, various elements would be taken into consideration including but not limited to the Company's strategic development objectives, operation plan, profitability, cash flow and financing. The policy sets out the factors in consideration, procedures, methods and intervals of the payment of dividends with an objective to provide the shareholders with continuing, stable and reasonable returns on investment while maintaining the Company's business operation and achieving its long-term development goal.

CONTACT DETAILS

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

Address: 1601 Zhangdong Road, Zhangjiang Hi-Tech Park, Shanghai 201203, The People's Republic of China (For the attention of the Board Secretary)
Fax: (86) (21) 50801305
Email: ir@microport.com

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

CONSTITUTIONAL DOCUMENTS

There have been no changes in the Company's constitutional documents during the year ended 31 December 2022.

CHANGES AFTER CLOSURE OF FINANCIAL YEAR

This report takes into account the significant changes that have occurred since the end of 2022 to the date of approval of this report.

By Order of the Board
Microport Scientific Corporation
Dr. Zhaohua Chang
Chairman

Shanghai, The PRC
30 March 2023

To the shareholders of MicroPort Scientific Corporation
(Incorporated in the Cayman Islands with limited liability)

OPINION

We have audited the consolidated financial statements of MicroPort Scientific Corporation ("the Company") and its subsidiaries ("the Group") set out on pages 78 to 200, which comprise the consolidated statement of financial position as at 31 December 2022, the consolidated statement of profit or loss, the consolidated statement of profit or loss and other comprehensive income, the consolidated statement of changes in equity and the consolidated cash flow statement 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 ("HKFRSs") issued by the Hong Kong Institute of Certified Public Accountants ("HKICPA") and have been properly prepared in compliance with the disclosure requirements of the Hong Kong Companies Ordinance.

BASIS FOR OPINION

We conducted our audit in accordance with Hong Kong Standards on Auditing ("HKSAs") issued by the HKICPA. Our responsibilities under those standards are further described in the Auditor's responsibilities for the audit of the consolidated financial statements section of our report. We are independent of the Group in accordance with the HKICPA's Code of Ethics for Professional Accountants ("the Code") together with any ethical requirements that are relevant to our audit of the consolidated financial statements in the Cayman Islands, and we have fulfilled our other ethical responsibilities in accordance with these requirements and 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.

KEY AUDIT MATTERS (CONTINUED)

Revenue recognition

Refer to note 3 to the consolidated financial statements and the accounting policies on pages 107 to 109.

The Key Audit Matter

The Group recognises revenue from the sale of medical devices at a point in time when control of goods is transferred to the customer.

The amount to which the Group expects to be entitled can vary due to sales rebates granted to customers explicitly identified in the sales contracts signed with customers.

Sales rebates granted to customers are primarily volume based. Revenue from sales subject to volume rebate arrangements is recognised at the net amount of consideration to which the Group is entitled, after adjusting for the estimated amount that the Group may be required to rebate to the customer in respect of these sales, unless it is highly probable that the customer will not satisfy the rebate entitlement criteria within the rebate period.

In addition, in certain of the Group's business, the Group participates in arrangements that include multiple performance obligations (i.e. post-sales services in respect of the cardiac rhythm management ("CRM") business). These arrangements require the allocation of the transaction price between the sale of medical devices performance obligation and other performance obligations.

How the matter was addressed in our audit

Our audit procedures to assess the recognition and measurement of revenue included the following:

- obtaining an understanding of and assessing and testing the design, implementation and operating effectiveness of management's key internal controls in relation to revenue recognition including the identification of performance obligations in contracts with customers, the variable consideration and management's review of the calculation of and adjustments for sales rebates;
- inspecting, on a sample basis, key customer contracts to identify terms and conditions relating to transfer of goods control, sales rebates, and identification of performance obligations and assessing the Group's revenue recognition policies with reference to the requirements of the prevailing accounting standards;
- selecting a sample of sales rebate transactions recorded during the year and comparing the parameters used in the calculation of the rebate (including volumes and rebate rates) with the relevant source documents (including sales invoices, sales contracts and cumulative sales data in the system records) to assess whether the methodology adopted in the calculation of the sales rebates was in accordance with the terms and conditions defined in the corresponding customer contract;

KEY AUDIT MATTERS (CONTINUED)

Revenue recognition (continued)

Refer to note 3 to the consolidated financial statements and the accounting policies on pages 107 to 109.

The Key Audit Matter

The total transaction price is allocated to each performance obligation in an amount based on the estimated relative standalone selling prices of the goods or services underlying each performance obligation. If the observable stand-alone selling prices are not available, the Group uses an expected cost plus a margin approach to estimate the stand-alone selling price. We identified the recognition of revenue as a key audit matter because (i) revenue is a key performance indicator of the Group and is, therefore, subject to possible manipulation through the timing of revenue recognition to meet targets or expectations, (ii) the variety of different terms of sale may affect the timing of the recognition of revenue; and (iii) significant management judgement can be required to estimate sales rebates for all products and estimate the standalone selling price.

How the matter was addressed in our audit

- comparing the actual sales rebates settled after the financial year end with the variable consideration adjustments estimated by the management in these respects during the year in order to assess the reliability of management's process for determining the consideration to which the Group is entitled and to assess if the adjustments for the related variable consideration had been made as a reduction of the transaction price in the appropriate financial period;
- understanding the methodology in determining the allocation of total transaction price to each performance obligation; and evaluating the key assumptions adopted in the estimation of stand-alone selling prices;
- comparing, on a sample basis, specific revenue transactions recorded before and after the financial year end date with relevant underlying documentation, which included goods dispatch notes, shipping documents and goods receipt notes, as applicable under the different sales contracts, to assess whether the related revenue had been recognised in the appropriate financial period on the basis of the terms of sale as set out in the respective sales contracts; and
- inspecting underlying documentation for journal entries relating to revenue which were considered to be material or met other specific risk-based criteria.

KEY AUDIT MATTERS (CONTINUED)

Assessing potential impairment of goodwill and intangible assets

Refer to notes 11 and 12 to the consolidated financial statements and the accounting policies on pages 98 to 99.

The Key Audit Matter

Goodwill arose from the acquisitions of business which has been primarily allocated to orthopedics devices business, CRM business, surgical devices business and intravascular imaging business, etc. Intangible assets principally comprise technology, product licenses, customer relationships and capitalised development costs, which have been allocated to various segments.

The carrying values of the Group's goodwill and intangible assets as at 31 December 2022 were US$262.8 million and US$223.7 million, respectively. During the year ended 31 December 2022, the Group recognised impairment losses on goodwill and intangible assets amounting to US$16.5 million and US$7.1 million, respectively.

Management performs annual impairment assessments of the Group's goodwill and intangible assets that are not yet available for use or have indications of impairment, by comparing the carrying values of these assets with their recoverable amounts being the higher of the fair value less costs of disposal and the value in use.

The preparation of discounted cash flow forecasts involves the exercise of significant management judgment, in particular in assessing future revenue growth, future gross margins, future capital expenditure and working capital movements and in determining the long-term growth rate and appropriate discount rates.

How the matter was addressed in our audit

Our audit procedures to assess the potential impairment of goodwill and intangible assets included the following:

- evaluating management's identification of CGUs and the allocation of goodwill and intangible assets to each CGU and assessing the methodology adopted by management in its impairment assessments with reference to the requirements of the prevailing accounting standards;
- evaluating the key assumptions adopted in the preparation of the discounted cash flow forecasts by comparing data in the discounted cash flow forecasts with the relevant data, including forecast revenue, forecast cost of sales and forecast operating expenses, in the financial budgets which was approved by the board of directors and with available industry statistics;
- comparing the data in discounted cash flow forecasts prepared in the prior year with the current year's performance to assess how accurate the prior year's discounted cash flow forecasts were and making enquiries of management as to the reasons for any significant variations identified;
- engaging KPMG valuation specialists to assist us in comparing the long-term growth rates and discount rates applied in the discounted cash flow forecasts with those of comparable companies and external market data if available;

KEY AUDIT MATTERS (CONTINUED)

Assessing potential impairment of goodwill and intangible assets (continued)

Refer to notes 11 and 12 to the consolidated financial statements and the accounting policies on pages 98 to 99.

The Key Audit Matter

We identified the assessment of potential impairment of goodwill and intangible assets as a key audit matter because determining the level of impairment, if any, involves a significant degree of management judgement, which can be inherently uncertain and could be subject to management bias.

How the matter was addressed in our audit

- performing a sensitivity analysis of key assumptions, including future revenue growth rates, future gross margins and the discount rates applied in the discounted cash flow forecasts and considering the resulting impact on the impairment charge for the year and whether there were any indicators of management bias in the selection of these key assumptions; and
- considering the disclosures in the consolidated financial statements in respect of management's impairment assessments of goodwill and intangible assets with reference to the requirements of the prevailing accounting standards.

INFORMATION OTHER THAN THE CONSOLIDATED FINANCIAL STATEMENTS AND AUDITOR'S REPORT THEREON

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

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

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

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

INDEPENDENT AUDITOR'S REPORT

RESPONSIBILITIES OF THE DIRECTORS 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 directors are assisted by the Audit Committee in discharging their responsibilities for overseeing the Group's financial reporting process.

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

Our objectives are to obtain reasonable assurance about whether the consolidated financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. This report is made solely to you, as a body, and for no other purpose. We do not assume responsibility towards or accept liability to any other person for the contents of this report.

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

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

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

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

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

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

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

- 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 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 partner on the audit resulting in this independent auditor's report is Au Yat Fo.

KPMG

Certified Public Accountants

8th Floor, Prince's Building
10 Chater Road
Central, Hong Kong
30 March 2023

CONSOLIDATED STATEMENT OF PROFIT OR LOSS

for the year ended 31 December 2022
(Expressed in United States dollars)

	Note	2022 US$'000	2021 US$'000
Revenue	*3*	**840,831**	778,639
Cost of sales		**(339,060)**	(286,866)
Gross profit		**501,771**	491,773
Other net income	*4*	**36,150**	76,475
Research and development costs		**(419,828)**	(297,778)
Distribution costs		**(328,232)**	(297,532)
Administrative expenses		**(247,532)**	(250,010)
Other operating costs	*5(c)*	**(49,279)**	(16,547)
Loss from operations		**(506,950)**	(293,619)
Finance costs	*5(a)*	**(78,401)**	(47,883)
Gain on disposal of subsidiaries		**7,107**	8,218
Gain on deemed disposal of interests in equity-accounted investees	*14*	**39,267**	9,215
Share of profits less losses of equity-accounted investees	*14*	**(42,541)**	(13,255)
Loss before taxation	*5*	**(581,518)**	(337,324)
Income tax	*6(a)*	**(6,597)**	(13,971)
Loss for the year		**(588,115)**	(351,295)
Attributable to:			
Equity shareholders of the Company		**(436,515)**	(276,484)
Non-controlling interests		**(151,600)**	(74,811)
Loss for the year		**(588,115)**	(351,295)
Loss per share	*9*		
Basic (in cents)		**(24.08)**	(15.29)
Diluted (in cents)		**(24.94)**	(16.54)

The notes on pages 86 to 200 form part of these financial statements. Details of dividends payable to equity shareholders of the Company are set out in note 29(b).

CONSOLIDATED STATEMENT OF PROFIT OR LOSS AND OTHER COMPREHENSIVE INCOME

for the year ended 31 December 2022
(Expressed in United States dollars)

	2022 US$'000	2021 US$'000
Loss for the year	**(588,115)**	(351,295)
Other comprehensive income for the year, net of tax		
Item that will not be reclassified to profit or loss:		
Remeasurement of net defined benefit liabilities	**(463)**	(325)
Items that may be reclassified subsequently to profit or loss:		
Exchange differences on translation of financial statements of foreign operations, net of nil tax	**(177,827)**	8,815
Share of other comprehensive income of equity-accounted investees	**1,512**	113
Other comprehensive income for the year	**(176,778)**	8,603
Total comprehensive income for the year	**(764,893)**	(342,692)
Attributable to:		
Equity shareholders of the Company	**(565,882)**	(285,097)
Non-controlling interests	**(199,011)**	(57,595)
Total comprehensive income for the year	**(764,893)**	(342,692)

The notes on pages 86 to 200 form part of these financial statements.

CONSOLIDATED STATEMENT OF FINANCIAL POSITION

(Expressed in United States dollars)

	Note	31 December 2022 US$'000	31 December 2021 US$'000
Non-current assets			
Investment properties	*10*	**6,579**	7,407
Property, plant and equipment	*10*	**993,014**	922,874
		999,593	930,281
Intangible assets	*11*	**223,683**	256,609
Goodwill	*12*	**262,829**	290,565
Equity-accounted investees	*14*	**423,873**	363,103
Financial assets measured at fair value through profit or loss	*15*	**18,072**	25,221
Derivative financial assets	*17*	**5,083**	4,963
Deferred tax assets	*25(b)*	**27,637**	20,368
Other non-current assets	*16*	**94,081**	102,652
		2,054,851	1,993,762
Current assets			
Derivative financial assets	*17*	**–**	1,406
Financial assets measured at fair value through profit or loss	*15*	**38,201**	–
Inventories	*18*	**352,428**	289,931
Trade and other receivables	*19*	**284,833**	308,126
Pledged deposits and time deposits	*20*	**60,765**	32,890
Cash and cash equivalents	*20*	**1,203,007**	1,754,414
		1,939,234	2,386,767
Current liabilities			
Trade and other payables	*21*	**380,554**	358,792
Contract liabilities	*22*	**22,598**	23,590
Interest-bearing borrowings	*23*	**185,387**	94,746
Lease liabilities	*24*	**51,944**	50,505
Income tax payable	*25(a)*	**17,470**	19,124
Derivative financial liabilities	*17*	**4,172**	–
		662,125	546,757
Net current assets		**1,277,109**	1,840,010
Total assets less current liabilities		**3,331,960**	3,833,772

CONSOLIDATED STATEMENT OF FINANCIAL POSITION

(Expressed in United States dollars)

	Note	31 December 2022 US$'000	31 December 2021 US$'000
Non-current liabilities			
Interest-bearing borrowings	*23*	**336,689**	269,637
Lease liabilities	*24*	**124,373**	168,437
Deferred income	*26*	**38,123**	35,098
Contract liabilities	*22*	**24,839**	26,243
Convertible bonds	*27*	**769,553**	660,369
Other payables	*21*	**220,997**	425,914
Deferred tax liabilities	*25(b)*	**24,718**	27,692
Derivative financial liabilities	*17*	**–**	2,890
		1,539,292	1,616,280
NET ASSETS		**1,792,668**	2,217,492
CAPITAL AND RESERVES			
Share capital	*29(c)*	**18**	18
Reserves		**1,135,012**	1,490,732
Total equity attributable to equity shareholders of the Company		**1,135,030**	1,490,750
Non-controlling interests		**657,638**	726,742
TOTAL EQUITY		**1,792,668**	2,217,492

Approved and authorised for issue by the board of directors on 30 March 2023.

Zhaohua Chang
Chairman

Jonathan H. Chou
Director

The notes on pages 86 to 200 form part of these financial statements.

CONSOLIDATED STATEMENT OF CHANGES IN EQUITY

for the year ended 31 December 2022
(Expressed in United States dollars)

		Attributable to equity shareholders of the Company								
	Note	Share capital US$'000	Share premium US$'000	Exchange reserve US$'000	Capital reserve US$'000	Statutory general reserve US$'000	Accumulated losses US$'000	Total US$'000	Non-controlling interests US$'000	Total equity US$'000
Balance at 1 January 2021		18	661,714	54,842	466,044	97,842	(152,497)	1,127,963	259,983	1,387,946
Changes in equity for 2021:										
Loss for the year		–	–	–	–	–	(276,484)	(276,484)	(74,811)	(351,295)
Other comprehensive income		–	–	(8,335)	(278)	–	–	(8,613)	17,216	8,603
Total comprehensive income		–	–	(8,335)	(278)	–	(276,484)	(285,097)	(57,595)	(342,692)
Net contributions from non-controlling shareholders of subsidiaries		–	–	–	257,706	–	–	257,706	378,168	635,874
Disposal of interests in subsidiaries without losing control		–	–	–	22,623	–	–	22,623	(33,977)	(11,354)
Reclassification and re-designation of preferred shares of a subsidiary		–	–	–	10,325	–	–	10,325	5,303	15,628
Preferred shares issued by subsidiaries		–	–	–	12,698	–	–	12,698	4,188	16,886
Acquisition of subsidiaries		–	–	–	–	–	–	–	47,997	47,997
Appropriation of statutory general reserve		–	–	–	–	21,434	(21,434)	–	–	–
Equity-settled share-based transactions		–	–	–	62,297	–	–	62,297	14,415	76,712
Shares issued under share option scheme	*29(c)(iii)*	–	9,571	–	(2,256)	–	–	7,315	1,160	8,475
Shares purchased under share award scheme	*28(b)*	–	–	–	(41,730)	–	–	(41,730)	(3,530)	(45,260)
Shares granted under share award scheme	*28(b)*	–	–	–	18,880	–	–	18,880	–	18,880
Lapse of share options		–	–	–	(56)	–	56	–	–	–
Conversion of preferred shares to ordinary shares of a subsidiary		–	–	–	199,491	–	–	199,491	113,935	313,426
Share of other changes in net assets of associates		–	–	–	60,364	–	–	60,364	–	60,364
Effect of reorganisation in subsidiaries		–	–	–	429	–	–	429	(429)	–
Convertible bonds issued by the Company		–	–	–	37,929	–	–	37,929	–	37,929
Convertible bonds issued by a subsidiary		–	–	–	484	–	–	484	209	693
Exchange of convertible bonds with preferred shares by a subsidiary		–	–	–	5,496	–	–	5,496	2,368	7,864
Dividends paid in respect of the previous year	*29(b)*	–	(6,423)	–	–	–	–	(6,423)	–	(6,423)
Dividends to holders of non-controlling interests		–	–	–	–	–	–	–	(5,453)	(5,453)
Disposal of a subsidiary		–	–	–	–	(201)	201	–	–	–
Balance at 31 December 2021		18	664,862	46,507	1,110,446	119,075	(450,158)	1,490,750	726,742	2,217,492

CONSOLIDATED STATEMENT OF CHANGES IN EQUITY

for the year ended 31 December 2022
(Expressed in United States dollars)

		Attributable to equity shareholders of the Company								
	Note	Share capital US$'000	Share premium US$'000	Exchange reserve US$'000	Capital reserve US$'000	Statutory general reserve US$'000	Accumulated losses US$'000	Total US$'000	Non-controlling interests US$'000	Total equity US$'000
Balance at 1 January 2022		18	664,862	46,507	1,110,446	119,075	(450,158)	1,490,750	726,742	2,217,492
Changes in equity for 2022:										
Loss for the year		–	–	–	–	–	(436,515)	(436,515)	(151,600)	(588,115)
Other comprehensive income		–	–	(130,539)	1,172	–	–	(129,367)	(47,411)	(176,778)
Total comprehensive income		–	–	(130,539)	1,172	–	(436,515)	(565,882)	(199,011)	(764,893)
Net contributions from non-controlling shareholders of subsidiaries	*30(e)*	–	–	–	49,668	–	–	49,668	60,370	110,038
Acquisition of non-controlling interests	*13*	–	–	–	(5,370)	–	–	(5,370)	(14,999)	(20,369)
Appropriation of statutory general reserve		–	–	–	–	13,278	13,278	–	–	–
Equity-settled share-based transactions		–	–	–	44,747	–	–	44,747	16,164	60,911
Shares issued under share option scheme of the Company	*29(c)(iii)*	–	5,838	–	(1,391)	–	–	4,447	–	4,447
Shares issued under share option scheme of a subsidiary		–	–	–	152	–	–	152	777	929
Shares purchased under share award scheme	*28(b)*	–	–	–	(14,330)	–	–	(14,330)	(8,873)	(23,203)
Shares granted under share award scheme	*28(b)*	–	–	–	11,714	–	–	11,714	178	11,892
Lapse of share options		–	–	–	(574)	–	574	–	–	–
Conversion of preferred shares to ordinary shares of a subsidiary	*21*	–	–	–	117,734	–	–	117,734	90,964	208,698
Dividends to holders of non-controlling interests		–	–	–	–	–	–	–	(12,085)	(12,085)
Others		–	–	–	1,400	–	–	1,400	(2,589)	(1,189)
Balance at 31 December 2022		18	670,700	(84,032)	1,315,368	132,353	(899,377)	1,135,030	657,638	1,792,668

The notes on pages 86 to 200 form part of these financial statements.

CONSOLIDATED CASH FLOWS STATEMENT

for the year ended 31 December 2022
(Expressed in United States dollars)

	Note	2022 US$'000	2021 US$'000
Operating activities			
Cash used in operations	*20(b)*	**(340,021)**	(199,845)
Income tax refund received		**14,251**	13,572
Income tax paid		**(17,533)**	(71,257)
Net cash used in operating activities		**(343,303)**	(257,530)
Investing activities			
Payments for the purchase of property, plant and equipment		**(235,392)**	(221,750)
Payments for acquisitions of subsidiaries during the year, net of cash acquired		**–**	(237,620)
Settlements of consideration in connection with previous year's acquisitions of subsidiaries		**(7,584)**	–
Cash decrease due to disposal of subsidiaries		**–**	(2,254)
Proceeds from sale of property, plant and equipment and intangible assets		**428**	4,897
Payments for intangible assets, including expenditure on development costs		**(21,882)**	(26,173)
Proceeds from government grants related to non-current assets		**355**	2,425
Increase in pledged deposits and time deposits		**(27,875)**	(26,008)
Uplift of structured deposits with banks		**376,334**	214,040
Placement of structured deposits with banks		**(376,334)**	(214,040)
Interest received		**2,974**	2,565
Payments for the investments in equity-accounted investees		**(81,409)**	(187,295)
Payments for the investments in financial assets measured at fair value through profit or loss		**(39,042)**	(15,914)
Advances to MP Holdings (defined in note 20(f))		**(50,000)**	–
Repayment made by MP Holdings		**50,000**	–
Loans to related parties	*33(b)*	**(12,310)**	(40,213)
Loans repaid by related parties	*33(b)*	**8,985**	91,597
Net cash used in investing activities		**(412,752)**	(655,743)

CONSOLIDATED CASH FLOWS STATEMENT

for the year ended 31 December 2022
(Expressed in United States dollars)

	Note	2022 US$'000	2021 US$'000
Financing activities			
Capital element of lease rentals paid	*20(d)*	**(44,170)**	(11,176)
Interest element of lease rentals paid	*20(d)*	**(9,492)**	(5,110)
Lease deposits paid		**(6,493)**	(54,070)
Proceeds from interest-bearing borrowings, net of transaction costs	*20(d)*	**375,244**	311,005
Repayments of interest-bearing borrowings	*20(d)*	**(186,724)**	(132,404)
Proceeds from issuance of convertible bonds, net of transaction costs	*27*	**88,790**	709,471
Proceeds from preferred shares issued by subsidiaries	*21*	**–**	134,260
Payments for acquisition of non-controlling interests		**(20,369)**	–
Proceeds from disposal of interests in subsidiaries without losing control		**–**	118,740
Net contributions from non-controlling interests		**110,038**	635,874
Proceeds from shares issued under the share option scheme		**5,376**	8,475
Interest paid for the convertible bonds	*20(d)*	**–**	(2,762)
Interest paid for interest-bearing borrowings	*20(d)*	**(14,164)**	(6,513)
Payment for repurchase of shares under share award scheme	*28(b)*	**(23,203)**	(45,260)
Dividends paid to holders of non-controlling interests		**(12,085)**	(5,453)
Dividends paid to equity shareholders of the Company	*29(b)*	**–**	(6,423)
Others		**10,248**	11,614
Net cash generated from financing activities		**272,996**	1,660,268
Net (decrease)/increase in cash and cash equivalents		**(483,059)**	746,995
Cash and cash equivalents at 1 January		**1,754,414**	1,002,077
Effect of foreign exchange rate changes		**(68,348)**	5,342
Cash and cash equivalents at 31 December		**1,203,007**	1,754,414

The notes on pages 86 to 200 form part of these financial statements.

1 SIGNIFICANT ACCOUNTING POLICIES

(a) Statement of compliance

These financial statements have been prepared in accordance with all applicable Hong Kong Financial Reporting Standards ("HKFRSs"), which collective term includes all applicable individual Hong Kong Financial Reporting Standards, Hong Kong Accounting Standards ("HKASs") and Interpretations issued by the Hong Kong Institute of Certified Public Accountants ("HKICPA"), accounting principles generally accepted in Hong Kong and the disclosure requirements of the Hong Kong Companies Ordinance. These financial statements also comply with the applicable disclosure provisions of the Rules Governing the Listing of Securities on The Stock Exchange of Hong Kong Limited (the "Stock Exchange"). Significant accounting policies adopted by the Group are disclosed below.

The HKICPA has issued certain amendments to HKFRSs that are first effective or available for early adoption for the current accounting period of the Group. Note 1(c) provides information on any changes in accounting policies resulting from initial application of these developments to the extent that they are relevant to the Group for the current accounting period reflected in these financial statements.

(b) Basis of preparation of the financial statements

The consolidated financial statements for the year ended 31 December 2022 comprise the Company and its subsidiaries (together referred to as the "Group") and the Group's interest in equity-accounted investees.

The measurement basis used in the preparation of the financial statements is the historical cost basis except that the following assets and liabilities are stated at their fair value as explained in the accounting policies set out below:

– investments in debt and equity securities (see note 1(g)); and

– derivative financial instruments (see note 1(h)).

The preparation of financial statements in conformity with HKFRSs requires management to make judgements, estimates and assumptions that affect the application of policies and reported amounts of assets, liabilities, income and expenses. The estimates and associated assumptions are based on historical experience and various other factors that are believed to be reasonable under the circumstances, the results of which form the basis of making the judgements about carrying values of assets and liabilities that are not readily apparent from other sources. 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.

Judgements made by management in the application of HKFRSs that have significant effect on the financial statements and major sources of estimation uncertainty are discussed in note 2.

1 SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

(c) Changes in accounting policies

HKICPA has issued the following amendments to HKFRSs that are first effective for the current accounting period of the Group:

- Amendments to HKAS 16, *Property, plant and equipment: proceeds before intended use*
- Amendments to HKAS 37, *Onerous contracts – cost of fulfilling a contract*

None of these developments have had a material effect on how the Group's results and financial position for the current or prior periods have been prepared or presented. The Group has not applied any new standard or interpretation that is not yet effective for the current accounting period.

(d) Subsidiaries and non-controlling interests

Subsidiaries are entities controlled by the Group. The Group controls an entity when it is exposed, or has rights, to variable returns from its involvement with the entity and has the ability to affect those returns through its power over the entity. When assessing whether the Group has power, only substantive rights (held by the Group and other parties) are considered.

An investment in a subsidiary is consolidated into the consolidated financial statements from the date that control commences until the date that control ceases. Intra-group balances, transactions and cash flows and any unrealised profits arising from intra-group transactions are eliminated in full in preparing the consolidated financial statements. Unrealised losses resulting from intra-group transactions are eliminated in the same way as unrealised gains but only to the extent that there is no evidence of impairment.

Non-controlling interests represent the equity in a subsidiary not attributable directly or indirectly to the Company, and in respect of which the Group has not agreed any additional terms with the holders of those interests which would result in the Group as a whole having a contractual obligation in respect of those interests that meets the definition of a financial liability. For each business combination, the Group can elect to measure any non-controlling interests either at fair value or at the non-controlling interests' proportionate share of the subsidiary's net identifiable assets.

Non-controlling interests are presented in the consolidated statement of financial position within equity, separately from equity attributable to the equity shareholders of the Company. Non-controlling interests in the results of the Group are presented on the face of the consolidated statement of profit or loss and the consolidated statement of profit or loss and other comprehensive income as an allocation of the total profit or loss and total comprehensive income for the year between non-controlling interests and the equity shareholders of the Company. Loans from holders of non-controlling interests and other contractual obligations towards these holders are presented as financial liabilities in the consolidated statement of financial position in accordance with notes 1(r), (s), (t) and (u) depending on the nature of the liability.

Changes in the Group's interests in a subsidiary that do not result in a loss of control are accounted for as equity transactions, whereby adjustments are made to the amounts of controlling and non-controlling interests within consolidated equity to reflect the change in relative interests, but no adjustments are made to goodwill and no gain or loss is recognised.

When the Group loses control of a subsidiary, it is accounted for as a disposal of the entire interest in that subsidiary, with a resulting gain or loss being recognised in profit or loss. Any interest retained in that former subsidiary at the date when control is lost is recognised at fair value and this amount is regarded as the fair value on initial recognition of a financial asset (see note 1(g)) or, when appropriate, the cost on initial recognition of an investment in an associate or joint venture (see note 1(e)).

In the Company's statement of financial position, an investment in a subsidiary is stated at cost less impairment losses (see note 1(m)(iii)).

1 SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

(e) Associates and joint ventures

An associate is an entity in which the Group or Company has significant influence, but not control or joint control, over its management, including participation in the financial and operating policy decisions.

A joint venture is an arrangement whereby the Group or Company and other parties contractually agree to share control of the arrangement, and have rights to the net assets of the arrangement.

An investment in an associate or a joint venture is accounted for in the consolidated financial statements under the equity method. Under the equity method, the investment is initially recorded at cost, adjusted for any excess of the Group's share of the acquisition-date fair values of the investee's identifiable net assets over the cost of the investment (if any). The cost of the investment includes purchase price, other costs directly attributable to the acquisition of the investment, and any direct investment into the associate or joint venture that forms part of the Group's equity investment. Thereafter, the investment is adjusted for the post acquisition change in the Group's share of the investee's net assets and any impairment loss relating to the investment (see note 1(m)(iii)). At each reporting date, the Group assesses whether there is any objective evidence that the investment is impaired. Any acquisition-date excess over cost, the Group's share of the post-acquisition, post-tax results of the investees and any impairment losses for the year are recognised in the consolidated statement of profit or loss, whereas the Group's share of the post-acquisition post-tax items of the investees' other comprehensive income is recognised in the consolidated statement of profit or loss and other comprehensive income.

When the Group's share of losses exceeds its interest in the associate or the joint venture, the Group's interest is reduced to nil and recognition of further losses is discontinued except to the extent that the Group has incurred legal or constructive obligations or made payments on behalf of the investee. For this purpose, the Group's interest is the carrying amount of the investment under the equity method together with any other long-term interests that in substance form part of the Group's net investment in the associate or the joint venture (after applying the expected credit losses ("ECL") model to such other long-term interests where applicable (see note 1(m)(i)).

Unrealised profits and losses resulting from transactions between the Group and its associates and joint venture are eliminated to the extent of the Group's interest in the investee, except where unrealised losses provide evidence of an impairment of the asset transferred, in which case they are recognised immediately in profit or loss.

If an investment in an associate becomes an investment in a joint venture or vice versa, the retained interest is not remeasured. Instead, the investment continues to be accounted for under the equity method.

In all other cases, when the Group ceases to have significant influence over an associate or joint control over a joint venture, it is accounted for as a disposal of the entire interest in that investee, with a resulting gain or loss being recognised in profit or loss. Any interest retained in that former investee at the date when significant influence or joint control is lost is recognised at fair value and this amount is regarded as the fair value on initial recognition of a financial asset (see note 1(g)).

In the Company's statement of financial position, investments in associates and joint venture are accounted for using the equity method.

1 SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

(f) Goodwill

Goodwill represents the excess of

(i) the aggregate of the fair value of the consideration transferred, the amount of any non-controlling interest in the acquiree and the fair value of the Group's previously held equity interest in the acquiree; over

(ii) the net fair value of the acquiree's identifiable assets and liabilities measured as at the acquisition date.

When (ii) is greater than (i), then this excess is recognised immediately in profit or loss as a gain on a bargain purchase.

Goodwill is stated at cost less accumulated impairment losses. Goodwill arising on a business combination is allocated to each cash-generating unit, or groups of cash generating units, that is expected to benefit from the synergies of the combination and is tested annually for impairment (see note 1(m)).

On disposal of a cash-generating unit during the year, any attributable amount of purchased goodwill is included in the calculation of the profit or loss on disposal.

(g) Other investments in debt and equity securities

The Group's policies for investments in debt and equity securities, other than investments in subsidiaries, associates and joint ventures, are set out below.

Investments in debt and equity securities are recognised/derecognised on the date the Group commits to purchase/sell the investment. The investments are initially stated at fair value plus directly attributable transaction costs, except for those investments measured at fair value through profit or loss ("FVPL") for which transaction costs are recognised directly in profit or loss. For an explanation of how the Group determines fair value of financial instruments, see note 31(e). These investments are subsequently accounted for as follows, depending on their classification.

(i) Investments other than equity investments

Non-equity investments held by the Group are classified into one of the following measurement categories:

- amortised cost, if the investment is held for the collection of contractual cash flows which represent solely payments of principal and interest. Interest income from the investment is calculated using the effective interest method (see note 1(z)(ii)(d)).

- fair value through other comprehensive income ("FVOCI") – recycling, if the contractual cash flows of the investment comprise solely payments of principal and interest and the investment is held within a business model whose objective is achieved by both the collection of contractual cash flows and sale. Changes in fair value are recognised in other comprehensive income, except for the recognition in profit or loss of expected credit losses, interest income (calculated using the effective interest method) and foreign exchange gains and losses. When the investment is derecognised, the amount accumulated in other comprehensive income is recycled from equity to profit or loss.

- FVPL, if the investment does not meet the criteria for being measured at amortised cost or FVOCI (recycling). Changes in the fair value of the investment (including interest) are recognised in profit or loss.

1 SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

(g) Other investments in debt and equity securities (continued)

(ii) Equity investments

An investment in equity securities is classified as FVPL unless the equity investment is not held for trading purposes and on initial recognition of the investment the Group makes an irrevocable election to designate the investment at FVOCI (non-recycling) such that subsequent changes in fair value are recognised in other comprehensive income. Such elections are made on an instrument-by-instrument basis, but may only be made if the investment meets the definition of equity from the issuer's perspective. Where such an election is made, the amount accumulated in other comprehensive income remains in the fair value reserve (non-recycling) until the investment is disposed of. At the time of disposal, the amount accumulated in the fair value reserve (non-recycling) is transferred to retained earnings. It is not recycled through profit or loss. Dividends from an investment in equity securities, irrespective of whether classified as at FVPL or FVOCI, are recognised in profit or loss as other income in accordance with the policy set out in note 1(z)(ii)(c)).

(h) Derivative financial instruments

Derivative financial instruments are recognised at fair value. At the end of each reporting period the fair value is remeasured. The gain or loss on remeasurement to fair value is recognised immediately in profit or loss.

(i) Investment property

Investment properties are land and/or buildings which are owned or held under a leasehold interest (see note 1(l)) to earn rental income and/or for capital appreciation. These include land held for a currently undetermined future use and property that is being constructed or developed for future use as investment property.

Investment properties are stated at cost less accumulated depreciation and impairment losses (see note 1(m)(iii)). Depreciation is calculated to write off the cost of investment property less its estimated residual value using the straight line method over its estimated useful life. Rental income from investment properties is accounted for as described in note 1(z)(ii)(a).

(j) Property, plant and equipment

Property, plant and equipment, including right-of-use assets arising from leases over leasehold properties, plant and equipment where the Group is not the registered owner of the property interest (see note 1(l)) are stated at cost less accumulated depreciation and impairment losses (see note 1(m)(iii)).

The cost of self-constructed items of property, plant and equipment includes the cost of materials, direct labour, the initial estimate, where relevant, of the costs of dismantling and removing the items and restoring the site on which they are located, and an appropriate proportion of production overheads and borrowing costs (see note 1(bb)).

Items may be 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. The proceeds from selling any such items and the related costs are recognised in profit or loss.

1 SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

(j) Property, plant and equipment (continued)

Gains or losses arising from the retirement or disposal of an item of property, plant and equipment are determined as the difference between the net disposal proceeds and the carrying amount of the item and are recognised in profit or loss on the date of retirement or disposal.

Depreciation is calculated to write off the cost of items of property, plant and equipment, less their estimated residual value, if any, using the straight line method over their estimated useful lives as follows:

- Freehold land is not depreciated;
- Buildings situated on leasehold land are depreciated over the shorter of the unexpired term of lease and their estimated useful lives, being no more than 50 years after the date of completion;
- Leasehold improvements are depreciated over the shorter of the unexpired term of lease and their estimated useful lives, being 5 to 10 years from the date of completion;
- Equipment and machinery 5 to 11 years
- Office equipment, furniture and fixtures 3 to 10 years
- Motor vehicles 4 to 10 years

Where parts of an item of property, plant and equipment have different useful lives, the cost of the item is allocated on a reasonable basis between the parts and each part is depreciated separately. Both the useful life of an asset and its residual value, if any, are reviewed annually.

(k) Intangible assets (other than goodwill)

Expenditure on research activities is recognised as an expense in the period in which it is incurred. Expenditure on development activities is capitalised if the product or process is technically and commercially feasible and the Group has sufficient resources and the intention to complete development. The expenditure capitalised includes the costs of materials, direct labour, and an appropriate proportion of overheads and borrowing costs, where applicable (see note 1(bb)). Capitalised development costs are stated at cost less accumulated amortisation and impairment losses (see note 1(m)). Other development expenditure is recognised as an expense in the period in which it is incurred.

Other intangible assets that are acquired by the Group are stated at cost less accumulated amortisation (where the estimated useful life is finite) and impairment losses (see note 1(m)). Expenditure on internally generated goodwill and brands is recognised as an expense in the period in which it is incurred.

1 SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

(k) Intangible assets (other than goodwill) (continued)

Amortisation of intangible assets with finite useful lives is charged to profit or loss on a straight-line basis over the assets' estimated useful lives. The following intangible assets with finite useful lives are amortised from the date they are available for use and their estimated useful lives are as follows:

–	Technologies	9 to 20 years
–	Products licences	12 to 17 years
–	Capitalised development costs	5 to 10 years
–	Customer contracts and related customer relationship	1.5 to 10 years
–	Trademark and others	35 months to 20 years

Both the period and method of amortisation are reviewed annually.

(l) Leased assets

At inception of a contract, the Group assesses whether the contract is, or contains, a lease. A contract is, or contains, a lease if the contract conveys the right to control the use of an identified asset for a period of time in exchange for consideration. Control is conveyed where the customer has both the right to direct the use of the identified asset and to obtain substantially all of the economic benefits from that use.

(i) As a lessee

Where the contract contains lease component(s) and non-lease component(s), the Group has elected not to separate non-lease components and accounts for each lease component and any associated non-lease components as a single lease component for all leases.

At the lease commencement date, the Group recognises a right-of-use asset and a lease liability, except for short-term leases that have a lease term of 12 months or less and leases of low-value assets which, for the Group are primarily laptops and office furniture. When the Group enters into a lease in respect of a low-value asset, the Group decides whether to capitalise the lease on a lease-by-lease basis. The lease payments associated with those leases which are not capitalised are recognised as an expense on a systematic basis over the lease term.

Where the lease is capitalised, the lease liability is initially recognised at the present value of the lease payments payable over the lease term, discounted using the interest rate implicit in the lease or, if that rate cannot be readily determined, using a relevant incremental borrowing rate. After initial recognition, the lease liability is measured at amortised cost and interest expense is calculated using the effective interest method. Variable lease payments that do not depend on an index or rate are not included in the measurement of the lease liability and hence are charged to profit or loss in the accounting period in which they are incurred.

1 SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

(l) Leased assets (continued)

(i) As a lessee (continued)

The right-of-use asset recognised when a lease is capitalised is initially measured at cost, which comprises the initial amount of the lease liability plus any lease payments made at or before the commencement date, and any initial direct costs incurred. Where applicable, the cost of the right-of-use assets also includes an estimate of costs to dismantle and remove the underlying asset or to restore the underlying asset or the site on which it is located, discounted to their present value, less any lease incentives received. The right-of-use asset is subsequently stated at cost less accumulated depreciation and impairment losses (see notes 1(j) and 1(m)(iii)).

The initial fair value of refundable rental deposits is accounted for separately from the right-of-use assets in accordance with the accounting policy applicable to investments in debt securities carried at amortised cost (see notes 1(g)(i), 1(z)(ii)(d) and 1(m)(i)). Any difference between the initial fair value and the nominal value of the deposits is accounted for as additional lease payments made and is included in the cost of right-of-use assets.

The lease liability is remeasured when there is a change in future lease payments arising from a change in an index or rate, or there is a change in the Group's estimate of the amount expected to be payable under a residual value guarantee, or there is a change arising from the reassessment of whether the Group will be reasonably certain to exercise a purchase, extension or termination option. When the lease liability is remeasured in this way, a corresponding adjustment is made to the carrying amount of the right-of-use asset, or is recorded in profit or loss if the carrying amount of the right-of-use asset has been reduced to zero.

The lease liability is also remeasured when there is a change in the scope of a lease or the consideration for a lease that is not originally provided for in the lease contract ("lease modification") that is not accounted for as a separate lease. In this case the lease liability is remeasured based on the revised lease payments and lease term using a revised discount rate at the effective date of the modification. The only exceptions are rent concessions that occurred as a direct consequence of the COVID-19 pandemic and met the conditions set out in paragraph 46B of HKFRS 16 Leases. In such cases, the Group has taken advantage of the practical expedient not to assess whether the rent concessions are lease modifications, and recognised the change in consideration as negative variable lease payments in profit or loss in the period in which the event or condition that triggers the rent concessions occurred.

In the consolidated statement of financial position, the current portion of long-term lease liabilities is determined as the present value of contractual payments that are due to be settled within twelve months after the reporting period.

(ii) As a lessor

When the Group acts as a lessor, it determines at lease inception whether each lease is a finance lease or an operating lease. A lease is classified as a finance lease if it transfers substantially all the risks and rewards incidental to the ownership of an underlying assets to the lessee. If this is not the case, the lease is classified as an operating lease.

When a contract contains lease and non-lease components, the Group allocates the consideration in the contract to each component on a relative stand-alone selling price basis. The rental income from operating leases is recognised in accordance with note 1(z)(ii)(a).

1 SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

(m) Credit losses and impairment of assets

(i) Credit losses from financial instruments and lease receivables

The Group recognises a loss allowance for ECLs on the following items:

- financial assets measured at amortised cost (including cash and cash equivalents, pledged deposits, time deposits, trade and other receivables and amounts due from equity-accounted investees, which are held for the collection of contractual cash flows which represent solely payments of principal and interest);
- contract assets as defined in HKFRS 15 (see note 1(o)); and
- lease receivables.

Other financial assets measured at fair value, including equity and debt securities measured at FVPL and derivative financial assets, are not subject to the ECL assessment.

Measurement of ECLs

ECLs are a probability-weighted estimate of credit losses. Credit losses are measured as the present value of all expected cash shortfalls (i.e. the difference between the cash flows due to the Group in accordance with the contract and the cash flows that the Group expects to receive).

The expected cash shortfalls are discounted using the following discount rates where the effect of discounting is material:

- fixed-rate financial assets and trade and other receivables: effective interest rate determined at initial recognition or an approximation thereof;
- variable-rate financial assets: current effective interest rate;
- lease receivables: discount rate used in the measurement of the lease receivable;

The maximum period considered when estimating ECLs is the maximum contractual period over which the Group is exposed to credit risk.

In measuring ECLs, the Group takes into account reasonable and supportable information that is available without undue cost or effort. This includes information about past events, current conditions and forecasts of future economic conditions.

1 SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

(m) Credit losses and impairment of assets (continued)

(i) Credit losses from financial instruments and lease receivables (continued)

Measurement of ECLs (continued)

ECLs are measured on either of the following bases:

- 12-month ECLs: these are losses that are expected to result from possible default events within the 12 months after the reporting date; and

- lifetime ECLs: these are losses that are expected to result from all possible default events over the expected lives of the items to which the ECL model applies.

Loss allowances for trade receivables and contract assets are always measured at an amount equal to lifetime ECLs. ECLs on these financial assets are estimated using a provision matrix based on the Group's historical credit loss experience, adjusted for factors that are specific to the debtors and an assessment of both the current and forecast general economic conditions at the reporting date.

For all other financial instruments, the Group recognises a loss allowance equal to 12-month ECLs unless there has been a significant increase in credit risk of the financial instrument since initial recognition, in which case the loss allowance is measured at an amount equal to lifetime ECLs.

Significant increases in credit risk

In assessing whether the credit risk of a financial instrument has increased significantly since initial recognition, the Group compares the risk of default occurring on the financial instrument assessed at the reporting date with that assessed at the date of initial recognition. In making this reassessment, the Group considers that a default event occurs when the borrower is unlikely to pay its credit obligations to the Group in full, without recourse by the Group to actions such as realising security (if any is held). 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 since initial recognition:

- failure to make payments of principal or interest on their contractually due dates;

- an actual or expected significant deterioration in a financial instrument's external or internal credit rating (if available);

- an actual or expected significant deterioration in the operating results of the debtor; and

- existing or forecast changes in the technological, market, economic or legal environment that have a significant adverse effect on the debtor's ability to meet its obligation to the Group.

1 SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

(m) Credit losses and impairment of assets (continued)

(i) Credit losses from financial instruments and lease receivables (continued)

Significant increases in credit risk(continued)

Depending on the nature of the financial instruments, the assessment of a significant increase in credit risk is performed on either an individual basis or a collective basis. When the assessment is performed on a collective basis, the financial instruments are grouped based on shared credit risk characteristics, such as past due status and credit risk ratings.

ECLs are remeasured at each reporting date to reflect changes in the financial instrument's credit risk since initial recognition. Any change in the ECL amount is recognised as an impairment gain or loss in profit or loss. The Group recognises an impairment gain or loss for all financial instruments with a corresponding adjustment to their carrying amount through a loss allowance account, except for investments in debt securities that are measured at FVOCI (recycling), for which the loss allowance is recognised in other comprehensive income and accumulated in the fair value reserve (recycling).

Basis of calculation of interest income

Interest income recognised in accordance with note 1(z)(ii)(d) 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 the amortised cost (i.e. the gross carrying amount less loss allowance) of the financial asset.

At each reporting date, the Group assesses whether a financial asset is credit-impaired. A financial asset is credit-impaired when one or more events that have a detrimental impact on the estimated future cash flows of the financial asset have occurred.

Evidence that a financial asset is credit-impaired includes the following observable events:

- significant financial difficulties of the debtor;
- a breach of contract, such as a default or past due event;
- it becoming probable that the borrower will enter into bankruptcy or other financial reorganisation;
- significant changes in the technological, market, economic or legal environment that have an adverse effect on the debtor; or
- the disappearance of an active market for a security because of financial difficulties of the issuer.

1 SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

(m) Credit losses and impairment of assets (continued)

(i) Credit losses from financial instruments and lease receivables (continued)

Write-off policy

The gross carrying amount of a financial asset or lease receivable is written off (either partially or in full) to the extent that there is no realistic prospect of recovery. This is generally the case when the Group determines that the debtor does not have assets or sources of income that could generate sufficient cash flows to repay the amounts subject to the write-off.

Subsequent recoveries of an asset that was previously written off are recognised as a reversal of impairment in profit or loss in the period in which the recovery occurs.

(ii) Credit losses from financial guarantees issued

Financial guarantees are contracts that require the issuer (i.e. the guarantor) to make specified payments to reimburse the beneficiary of the guarantee (the "holder") for a loss the holder incurs because a specified debtor fails to make payment when due in accordance with the terms of a debt instrument.

Financial guarantees issued are initially recognised at fair value, which is determined by reference to fees charged in an arm's length transaction for similar services, when such information is obtainable, or to interest rate differentials, by comparing the actual rates charged by lenders when the guarantee is made available with the estimated rates that lenders would have charged, had the guarantees not been available, where reliable estimates of such information can be made. Where consideration is received or receivable for the issuance of the guarantee, the consideration is recognised in accordance with the Group's policies applicable to that category of asset. Where no such consideration is received or receivable, an immediate expense is recognised in profit or loss.

Subsequent to initial recognition, the amount initially recognised as deferred income is amortised in profit or loss over the term of the guarantee as income from financial guarantees issued.

The Group monitors the risk that the specified debtor will default on the contract and recognises a provision when ECLs on the financial guarantees are determined to be higher than the carrying amount in respect of the guarantees (i.e. the amount initially recognised, less accumulated amortisation).

To determine ECLs, the Group considers changes in the risk of default of the specified debtor since the issuance of the guarantee. A 12-month ECL is measured unless the risk that the specified debtor will default has increased significantly since the guarantee is issued, in which case a lifetime ECL is measured. The same definition of default and the same assessment of significant increase in credit risk as described in note 1(m)(i) apply.

As the Group is required to make payments only in the event of a default by the specified debtor in accordance with the terms of the instrument that is guaranteed, an ECL is estimated based on the expected payments to reimburse the holder for a credit loss that it incurs less any amount that the Group expects to receive from the holder of the guarantee, the specified debtor or any other party. The amount is then discounted using the current risk-free rate adjusted for risks specific to the cash flows.

1 SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

(m) Credit losses and impairment of assets (continued)

(iii) Impairment of other non-current assets

Internal and external sources of information are reviewed at the end of each reporting period to identify indications that the following assets may be impaired or, except in the case of goodwill, an impairment loss previously recognised no longer exists or may have decreased:

- investment properties;
- property, plant and equipment, including right-of-use assets;
- intangible assets;
- goodwill;
- investments in equity-accounted investees; and
- investments in subsidiaries and equity-accounted investees in the Company's statement of financial position.

If any such indication exists, the asset's recoverable amount is estimated. In addition, for goodwill and intangible assets that are not yet available for use, the recoverable amount is estimated annually whether or not there is any indication of impairment.

- *Calculation of recoverable amount*

The recoverable amount of an asset is the greater of its 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. Where an asset does not generate cash inflows largely independent of those from other assets, the recoverable amount is determined for the smallest group of assets that generates cash inflows independently (i.e. a cash-generating unit). A portion of the carrying amount of a corporate asset (for example, head office building) is allocated to an individual cash-generating unit if the allocation can be done on a reasonable and consistent basis, or to the smallest group of cash-generating units if otherwise.

- *Recognition of impairment losses*

An impairment loss is recognised in profit or loss if the carrying amount of an asset, or the cash-generating unit to which it belongs, exceeds its recoverable amount. Impairment losses recognised in respect of cash-generating units are allocated first to reduce the carrying amount of any goodwill allocated to the cash-generating unit (or group of units) and then, to reduce the carrying amount of the other assets in the unit (or group of units) on a pro rata basis, except that the carrying value of an asset will not be reduced below its individual fair value less costs of disposal (if measurable) or value in use (if determinable).

1 SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

(m) Credit losses and impairment of assets (continued)

(iii) Impairment of other non-current assets (continued)

– *Reversals of impairment losses*

In respect of assets other than goodwill, an impairment loss is reversed if there has been a favourable change in the estimates used to determine the recoverable amount. An impairment loss in respect of goodwill is not reversed.

A reversal of an impairment loss is limited to the asset's carrying amount that would have been determined had no impairment loss been recognised in prior years. Reversals of impairment losses are credited to profit or loss in the year in which the reversals are recognised.

(iv) Interim financial reporting and impairment

Under the Rules Governing the Listing of Securities on the Stock Exchange of Hong Kong Limited, the Group is required to prepare an interim financial report in compliance with HKAS 34, Interim financial reporting, in respect of the first six months of the financial year. At the end of the interim period, the Group applies the same impairment testing, recognition, and reversal criteria as it would at the end of the financial year (see note 1(m)).

Impairment losses recognised in an interim period in respect of goodwill are not reversed in a subsequent period. This is the case even if no loss, or a smaller loss, would have been recognised had the impairment been assessed only at the end of the financial year to which the interim period relates.

(n) Inventories

Inventories are assets which are held for sale in the ordinary course of business, in the process of production for such sale or in the form of materials or supplies to be consumed in the production process or in the rendering of services.

Inventories are carried at the lower of cost and net realisable value.

Cost is calculated using the first-in, first-out formula and comprises all costs of purchase, costs of conversion and other costs incurred in bringing the inventories to their present location and condition.

Net realisable value is the estimated selling price in the ordinary course of business less the estimated costs of completion and the estimated costs necessary to make the sale.

When inventories are sold, the carrying amount of those inventories is recognised as an expense in the period in which the related revenue is recognised.

The amount of any write-down of inventories to net realisable value and all losses of inventories are recognised as an expense in the period the write-down or loss occurs. The amount of any reversal of any write-down of inventories is recognised as a reduction in the amount of inventories recognised as an expense in the period in which the reversal occurs.

A right to recover returned goods is recognised for the right to recover products from customers sold with a right of return. It is measured in accordance with the policy set out in note 1(z)(i)(a).

1 SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

(o) Contract assets and contract liabilities

A contract asset is recognised when the Group recognises revenue (see note 1(z)) before being unconditionally entitled to the consideration under the payment terms set out in the contract. Contract assets are assessed for ECLs in accordance with the policy set out in note 1(m)(i) and are reclassified to receivables when the right to the consideration has become unconditional (see note 1(p)).

A contract liability is recognised when the customer pays non-refundable consideration before the Group recognises the related revenue (see note 1(z)). A contract liability also includes variable considerations such as rebates which are to offset further purchases from the customers.

For a single contract with the customer, either a net contract asset or a net contract liability is presented. For multiple contracts, contract assets and contract liabilities of unrelated contracts are not presented on a net basis.

When the contract includes a significant financing component, the contract balance includes interest accrued under the effective interest method (see note 1(z)(ii)(d)).

(p) Trade and other receivables

A receivable is recognised when the Group has an unconditional right to receive consideration. A right to receive consideration is unconditional if only the passage of time is required before payment of that consideration is due. If revenue has been recognised before the Group has an unconditional right to receive consideration, the amount is presented as a contract asset (see note 1(o)).

Trade receivables that do not contain a significant financing component are initially measured at their transaction price. Trade receivables that contain a significant financing component and other receivables are initially measured at fair value plus transaction costs. All receivables are subsequently stated at amortised cost, using the effective interest method and including an allowance for credit losses (see note 1(m)(i)). Insurance reimbursement is recognised and measured in accordance with note 1(y)(i).

(q) Cash and cash equivalents

Cash and cash equivalents comprise cash at bank and on hand, demand deposits with banks and other financial institutions, and short-term, highly liquid investments that are readily convertible into known amounts of cash and which are subject to an insignificant risk of changes in value, having been within three months of maturity at acquisition. Bank overdrafts that are repayable on demand and form an integral part of the Group's cash management are also included as a component of cash and cash equivalents for the purpose of the consolidated cash flow statement. Cash and cash equivalents are assessed for ECLs in accordance with the policy set out in note 1(m)(i).

1 SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

(r) Trade and other payables (other than refund liabilities)

Trade and other payables are initially recognised at fair value. Subsequent to initial recognition, trade and other payables are stated at amortised cost unless the effect of discounting would be immaterial, in which case they are stated at cost.

Refund liabilities arising from rights of returns and volume rebates are recognised in accordance with the policy set out in note 1(z).

(s) Preferred shares

The preferred shares issued by the subsidiaries are classified, on the basis of their component parts, as financial liabilities or equity in accordance with the substance of the contractual arrangements and the definitions of a financial liability and an equity instrument.

Preferred shares issued by the subsidiaries are classified as equity if they are non-redeemable by the Group or redeemable only at the Group's option, and any dividends are discretionary. Dividends on preferred shares capital classified as equity are recognised as distributions within equity.

Preferred shares are classified as financial liabilities if they are redeemable on a specific date or at the option of the non-controlling shareholders, or upon occurrence/non-occurrence of contingent events which the Group is not able to control over, or if dividend payments are not discretionary. The liability is recognised and measured in accordance with the Group's policy for interest-bearing borrowings set out in note 1(t) and accordingly dividends thereon are recognised on an accrual basis in profit or loss as part of finance costs.

Conversion features of preferred shares are classified separately as equity if the option will be settled by exchange of a fixed amount of cash and other financial assets for a fixed number of the Group's own equity instruments. The equity component is the difference between the initial fair value of the preferred shares as a whole and the initial fair value of the liability component. Transaction costs that relate to the issue of a compound financial instrument are allocated to the liability and equity component in proportion to the allocation of proceeds.

(t) Interest-bearing borrowings

Interest-bearing borrowings are measured initially at fair value less transaction costs. Subsequent to initial recognition, interest-bearing borrowings are stated at amortised cost using the effective interest method. Interest expense is recognised in accordance with the Group's accounting policy for borrowing costs (see note 1(bb)).

1 SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

(u) Convertible bonds issued

(i) Convertible bonds issued that contain an equity component

Convertible bonds that can be converted into ordinary shares at the option of the holder, where a fixed number of shares are issued for a fixed amount of cash or other financial assets, are accounted for as compound financial instruments, i.e. they contain both a liability component and an equity component.

At initial recognition the liability component of the convertible bonds is measured at the fair value based on the future interest and principal payments, discounted at the prevailing market rate of interest for similar non-convertible instruments. The equity component is the difference between the initial fair value of the convertible bonds as a whole and the initial fair value of the liability component. Transaction costs that relate to the issue of a compound financial instrument are allocated to the liability and equity components in proportion to the allocation of proceeds.

The liability component is subsequently carried at amortised cost. Interest expense recognised in profit or loss on the liability component is calculated using the effective interest method. The equity component is not remeasured and is recognised in the capital reserve until the bonds are converted.

If the bonds are converted, the capital reserve, together with the carrying amount of the liability component at the time of conversion, is transferred to share capital and share premium as consideration for the shares issued.

When the Group extinguishes the bonds before maturity through an early redemption or repurchase in which the original conversion privileges are unchanged, the Group allocates consideration paid and any transaction costs for the repurchase or redemption to the liability and equity components of the bonds at the date of such transaction. The method used in allocating is consistent with that used in the original allocation when the bonds were issued. Once the allocation is made, any resulting gain or loss relating to the liability and equity components is recognised in profit or loss and in equity, respectively.

(ii) Other convertible bonds

Convertible bonds which do not contain an equity component and contain several embedded derivates, have been designated entirely as financial liabilities at FVPL. At initial recognition, the convertible bonds are measured at fair value. Transaction costs that relate to the issue of the convertible bonds are recognised immediately in profit or loss. Subsequent changes in the fair value of convertible bonds are recognised in profit or loss.

If the convertible bonds are converted, the fair value of the convertible bonds is transferred to share capital and share premium as consideration for the shares issued. If the convertible bonds are redeemed, any difference between the amount paid and the carrying amount of the convertible bonds is recognised in profit or loss.

1 SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

(v) Repurchase and reissue of share capital (treasury shares)

When share capital recognised as equity is repurchased, the amount of the consideration paid, which includes directly attributable costs, is deducted from equity attributable to the Company's equity holders, except for shares repurchased that are qualified as plan assets, which should be measured at fair value and not presented as a deduction from equity. Repurchased shares held at the end of reporting period are classified as treasury shares and are presented as a decrease in the capital reserve. When treasury shares are sold or reissued subsequently, the consideration received, net of any directly attributable transaction costs, is recognised as an increase in equity, and the resulting surplus or deficit on the transaction is presented in capital reserve.

(w) Employee benefits

(i) Short term employee benefits and contributions to defined contribution retirement plans

Salaries, annual bonuses, paid annual leave, contributions to defined contribution retirement plans and the cost of non-monetary benefits are accrued in the year in which the associated services are rendered by employees. Where payment or settlement is deferred and the effect would be material, these amounts are stated at their present values.

(ii) Defined benefit retirement plan obligations

The Group's net obligation in respect of defined benefit retirement plans is calculated separately for each plan by estimating the amount of future benefit that employees have earned in return for their service in the current and prior periods; that benefit is discounted to determine the present value and the fair value of any plan assets is deducted. The calculation is performed by a qualified actuary using the projected unit credit method. When the calculation results in a benefit to the Group, the recognised asset is limited to the present value of economic benefits available in the form of any future refunds from the plan or reductions in future contributions to the plan.

Service cost and net interest expense (income) on the net defined benefit liability (asset) are recognised in profit or loss and allocated by function as part of "cost of sales", "distribution costs" or "administrative expenses". Current service cost is measured as the increase in the present value of the defined benefit obligation resulting from employee service in the current period. Net interest expense (income) for the period is determined by applying the discount rate used to measure the defined benefit obligation at the beginning of the reporting period to the net defined benefit liability (asset). The discount rate is the yield at the end of the reporting period on high quality corporate bonds that have maturity dates approximating the terms of the Group's obligations.

When the benefits of a plan are changed, or when a plan is curtailed, current service cost for the portion of the changed benefit related to past service by employees, or the gain or loss on curtailment, is recognised as an expense in profit or loss at the earlier of when the plan amendment or curtailment occurs and when related restructuring costs or termination benefits are recognised.

Remeasurements arising from defined benefit retirement plans are recognised in other comprehensive income and reflected immediately in retained earnings. Remeasurements comprise actuarial gains and losses, the return on plan assets (excluding amounts included in net interest on the net defined benefit liability (asset)) and any change in the effect of the asset ceiling (excluding amounts included in net interest on the net defined benefit liability (asset)).

1 SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

(w) Employee benefits (continued)

(iii) Share-based payments

The fair value of equity-settled share-based payment awards granted to employees is recognised as an employee cost with a corresponding increase in a capital reserve within equity. The fair value is measured at grant date using certain valuation techniques, taking into account the terms and conditions upon which the equity-settled share-based payment awards were granted. Where the employees have to meet vesting conditions before becoming unconditionally entitled to the equity-settled share-based payment awards, the total estimated fair value of the equity-settled share-based payment awards is spread over the vesting period, taking into account the probability that the equity-settled share-based payment awards will vest.

During the vesting period, the number of equity-settled share-based payment awards that is expected to vest is reviewed. Any resulting adjustment to the cumulative fair value recognised in prior years is charged/credited to the profit or loss for the year of the review, unless the original employee expenses qualify for recognition as an asset, with a corresponding adjustment to the capital reserve. On vesting date, the amount recognised as an expense is adjusted to reflect the actual number of equity-settled share-based payment awards that vest (with a corresponding adjustment to the capital reserve) except where forfeiture is only due to not achieving vesting conditions that relate to the market price of the Company's shares. The equity amount is recognised in the capital reserve until either the equity-settled share-based payment awards is exercised (when it is included in the amount recognised in share capital for the share issued) or the equity-settled share-based payment awards expires (when it is released directly to retained profits).

Share-based payment transactions in which the Company grants share-based payment awards to subsidiaries' employees are accounted for as an increase in value of investment in subsidiaries in the Company's statement of financial position.

(iv) Other long-term employee benefits

The Group's net obligation in respect of long-term employee benefits is the amount of future benefit that employees have earned in return for their service in the current and prior periods. That benefit is discounted to determine its present value. Remeasurements are recognised in profit or loss in the period in which they arise.

(v) Termination benefits

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

1 SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

(x) Income tax

Income tax for the year comprises current tax and movements in deferred tax assets and liabilities. Current tax and movements in deferred tax assets and liabilities are recognised in profit or loss except to the extent that they relate to items recognised in other comprehensive income or directly in equity, in which case the relevant amounts of tax are recognised in other comprehensive income or directly in equity, respectively.

Current tax is the expected tax payable on the taxable income for the year, using tax rates enacted or substantively enacted at the end of the reporting period, and any adjustment to tax payable in respect of previous years.

Deferred tax assets and liabilities arise from deductible and taxable temporary differences respectively, being the differences between the carrying amounts of assets and liabilities for financial reporting purposes and their tax bases. Deferred tax assets also arise from unused tax losses and unused tax credits.

Apart from certain limited exceptions, all deferred tax liabilities, and all deferred tax assets, to the extent that it is probable that future taxable profits will be available against which the asset can be utilised, are recognised. Future taxable profits that may support the recognition of deferred tax assets arising from deductible temporary differences include those that will arise from the reversal of existing taxable temporary differences, provided those differences relate to the same taxation authority and the same taxable entity, and are expected to reverse either in the same period as the expected reversal of the deductible temporary difference or in periods into which a tax loss arising from the deferred tax asset can be carried back or forward. The same criteria are adopted when determining whether existing taxable temporary differences support the recognition of deferred tax assets arising from unused tax losses and credits, that is, those differences are taken into account if they relate to the same taxation authority and the same taxable entity, and are expected to reverse in a period, or periods, in which the tax loss or credit can be utilised.

The limited exceptions to recognition of deferred tax assets and liabilities are those temporary differences arising from goodwill not deductible for tax purposes, the initial recognition of assets or liabilities that affect neither accounting nor taxable profit (provided they are not part of a business combination), and temporary differences relating to investments in subsidiaries to the extent that, in the case of taxable differences, the Group controls the timing of the reversal and it is probable that the differences will not reverse in the foreseeable future, or in the case of deductible differences, unless it is probable that they will reverse in the future.

The amount of deferred tax recognised is measured based on the expected manner of realisation or settlement of the carrying amount of the assets and liabilities, using tax rates enacted or substantively enacted at the end of the reporting period. Deferred tax assets and liabilities are not discounted.

The carrying amount of a deferred tax asset is reviewed at the end of each reporting period and is reduced to the extent that it is no longer probable that sufficient taxable profits will be available to allow the related tax benefit to be utilised. Any such reduction is reversed to the extent that it becomes probable that sufficient taxable profits will be available.

Additional income taxes that arise from the distribution of dividends are recognised when the liability to pay the related dividends is recognised.

1 SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

(x) Income tax (continued)

Current tax balances and deferred tax balances, and movements therein, are presented separately from each other and are not offset. Current tax assets are offset against current tax liabilities, and deferred tax assets against deferred tax liabilities, if the Company or the Group has the legally enforceable right to set off current tax assets against current tax liabilities and the following additional conditions are met:

- in the case of current tax assets and liabilities, the Company or the Group intends either to settle on a net basis, or to realise the asset and settle the liability simultaneously; or
- in the case of deferred tax assets and liabilities, if they relate to income taxes levied by the same taxation authority on either:
  - the same taxable entity; or
  - different taxable entities, which, in each future period in which significant amounts of deferred tax liabilities or assets are expected to be settled or recovered, intend to realise the current tax assets and settle the current tax liabilities on a net basis or realise and settle simultaneously.

(y) Provisions, contingent liabilities and onerous contracts

(i) Provisions and contingent liabilities

Provisions are recognised when the Group has a legal or constructive obligation arising as a result of a past event, it is probable that an outflow of economic benefits will be required to settle the obligation and a reliable estimate can be made. Where the time value of money is material, provisions are stated at the present value of the expenditure expected to settle the obligation.

Where it is not probable that an outflow of economic benefits will be required, or the amount cannot be estimated reliably, the obligation is disclosed as a contingent liability, unless the probability of outflow of economic benefits is remote. Possible obligations, whose existence will only be confirmed by the occurrence or non-occurrence of one or more future events are also disclosed as contingent liabilities unless the probability of outflow of economic benefits is remote.

Where some or all of the expenditure required to settle a provision is expected to be reimbursed by another party, a separate asset is recognised for any expected reimbursement that would be virtually certain. The amount recognised for the reimbursement is limited to the carrying amount of the provision.

(ii) Onerous contracts

An onerous contract exists when the Group has a contract under which the unavoidable costs of meeting the obligations under the contract exceed the economic benefits expected to be received from the contract. Provisions for onerous contracts are measured at the present value of the lower of the expected cost of terminating the contract and the net cost of fulfilling the contract. The cost of fulfilling the contract includes both the incremental costs of fulfilling that contract and an allocation of other costs that relate directly to fulfilling that contract.

1 SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

(z) Revenue and other income

Income is classified by the Group as revenue when it arises from the sale of goods, the provision of services or the use by others of the Group's assets under leases.

Further details of the Group's revenue and other income recognition policies are as follows:

(i) Revenue from contracts with customers

Revenue is recognised when control over a product or service is transferred to the customer at the amount of promised consideration to which the Group is expected to be entitled, excluding those amounts collected on behalf of third parties such as value added tax or other sales taxes.

(a) Sale of medical devices

Revenue from product sales is recognised when the customer takes possession of and accepts the products, depending on the terms set forth in the customer contract. The Payment terms and conditions vary by customers and are based on the billing schedule established in the contracts or purchase orders with customers. The Group takes advantage of the practical expedient in paragraph 63 of HKFRS 15 and does not adjust the consideration for any effects of a significant financing component as the period of financing is 12 months or less.

Provisions for estimated discounts and rebates to customers, returns/exchanges and other adjustments are accounted for as variable consideration and recorded as a reduction in sales.

In certain of the Group's business, the Group participates in arrangements that include multiple performance obligations. If the products are a partial fulfilment of a contract covering other goods and/or services, then the amount of revenue recognised is an appropriate proportion of the total transaction price under the contract, allocated between all the goods and services promised under the contract on a relative stand-alone selling price basis except when a variable consideration is allocated to a specific performance obligation in the contract. Generally, the Group establishes standalone selling prices with reference to the observable prices of products or services sold separately in comparable circumstances to similar customers. If the observable stand-alone selling prices are not available, the Group uses an expected costs plus a margin approach to estimate the stand-alone selling price.

(b) Revenue from post-sales services

In certain of the Group's business, primarily within the cardiac rhythm management business (the "CRM business"), the Group also renders certain post-sales services to patients in accordance with industry practice, to ensure the safe and effective use of the sold devices implanted into the patient until the implanted device needs to be replaced. Upon the sales of those implanted devices, which requires post-sales service, the Group defers revenue allocated to those unfulfilled performance obligations (see note 1(z)(i)(a) for the details of the allocation of the transaction price between performance obligations) and recognises these services over the service period when they are rendered, which is estimated as 8 to 12 years based on the expected product lives of different implanted devices.

As the post-sales service contains a financing component, revenue from post-sales services recognised under that contract includes the interest expense accreted on the contract liability under the effective interest method.

1 SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

(z) Revenue and other income (continued)

(i) Revenue from contracts with customers (continued)

(c) Revenue from rendering of other services

Revenue from rendering of other services is recognised over time by measuring the progress of that performance obligation.

(ii) Revenue from other sources and other income

(a) Rental income from operating leases

Rental income receivable under operating leases is recognised in profit or loss in equal instalments over the periods covered by the lease term, except where an alternative basis is more representative of the pattern of benefits to be derived from the use of the leased asset. Lease incentives granted are recognised in profit or loss as an integral part of the aggregate net lease payments receivable. Variable lease payments that do not depend on an index or a rate are recognised as income in the accounting period in which they are earned.

(b) Finance lease income

Finance lease income is recognised on an accrual basis using the effective interest method by applying the rate that exactly discounts the estimated future cash receipts over the expected life of the lease receivables to the gross carrying amount of the lease receivables.

(c) Dividends

- Dividend income from unlisted investments is recognised when the shareholder's right to receive payment is established.

- Dividend income from listed investments is recognised when the share price of the investment goes ex-dividend.

(d) Interest income

Interest income is recognised as it accrues under the effective interest method using the rate that exactly discounted estimated future cash receipts through the expected life of the financial asset to the gross carrying amount of the financial asset.

1 SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

(z) Revenue and other income (continued)

(ii) Revenue from other sources and other income (continued)

(e) Government grants

Government grants are recognised in the statement of financial position initially when there is reasonable assurance that they will be received and that the Group will comply with the conditions attaching to them. Grants that compensate the Group for expenses incurred are recognised as income in profit or loss on a systematic basis in the same periods in which the expenses are incurred. Grants that compensate the Group for the cost of an asset are recognised as deferred income and subsequently recognised in profit or loss on a systematic basis over the useful life of the asset.

(aa) Translation of foreign currencies

Foreign currency transactions during the year are translated at the foreign exchange rates ruling at the transaction dates. Monetary assets and liabilities denominated in foreign currencies are translated at the foreign exchange rates ruling at the end of the reporting period. Exchange gains and losses are recognised in profit or loss.

Non-monetary assets and liabilities that are measured in terms of historical cost in a foreign currency are translated using the foreign exchange rates ruling at the transaction dates. The transaction date is the date on which the Company initially recognises such non-monetary assets or liabilities. Non-monetary assets and liabilities denominated in foreign currencies that are stated at fair value are translated using the foreign exchange rates ruling at the dates the fair value was measured.

The results of foreign operations are translated into United States dollars ("US$") at the exchange rates approximating the foreign exchange rates ruling at the dates of the transactions. Statement of financial position items, including goodwill arising on consolidation of foreign operations, are translated into US$ at the closing foreign exchange rates at the end of the reporting period. The resulting exchange differences are recognised in other comprehensive income and accumulated separately in equity in the exchange reserve.

On disposal of a foreign operation, the cumulative amount of the exchange differences relating to that foreign operation is reclassified from equity to profit or loss when the profit or loss on disposal is recognised.

(bb) Borrowing costs

Borrowing costs that are directly attributable to the acquisition, construction or production of an asset which necessarily takes a substantial period of time to get ready for its intended use or sale are capitalised as part of the cost of that asset. Other borrowing costs are expensed in the period in which they are incurred.

The capitalisation of borrowing costs as part of the cost of a qualifying asset commences when expenditure for the asset is being incurred, borrowing costs are being incurred and activities that are necessary to prepare the asset for its intended use or sale are in progress. Capitalisation of borrowing costs is suspended or ceases when substantially all the activities necessary to prepare the qualifying asset for its intended use or sale are interrupted or complete.

1 SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

(cc) Asset acquisition

Groups of assets acquired and liabilities assumed are assessed to determine if they are business or asset acquisitions. In determining whether a particular set of activities and assets is a business, the Group assesses whether the set of assets and activities acquired includes, at a minimum, an input and substantial process and whether the acquired assets has the ability to produce outputs.

The Group has an option to apply, on an acquisition-by-acquisition basis, a simplified assessment of whether an acquired set of activities and assets is an asset rather than business acquisition, when substantially all of the fair value of the gross assets acquired is concentrated in a single identifiable asset or group of similar identifiable assets.

When a group of assets acquired and liabilities assumed do not constitute a business, the overall acquisition cost is allocated to the individual identifiable assets and liabilities based on their relative fair values at the date of acquisition. An exception is when the sum of the individual fair values of the identifiable assets and liabilities differs from the overall acquisition cost. In such case, any identifiable assets and liabilities that are initially measured at an amount other than cost in accordance with the Group's policies are measured accordingly, and the residual acquisition cost is allocated to the remaining identifiable assets and liabilities based on their relative fair values at the date of acquisition.

(dd) Related parties

(a) A person, or a close member of that person's family, is related to the Group if that person:

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

(ii) has significant influence over the Group; or

(iii) is a member of the key management personnel of the Group or the Group's parent.

(b) An entity is related to the Group if any of the following conditions applies:

(i) 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).

(ii) One entity is an associate or joint venture of the other entity (or an associate or joint venture of a member of a Group of which the other entity is a member).

(iii) Both entities are joint ventures of the same third party.

(iv) One entity is a joint venture of a third entity and the other entity is an associate of the third entity.

(v) The entity is a post-employment benefit plan for the benefit of employees of either the Group or an entity related to the Group.

(vi) The entity is controlled or jointly controlled by a person identified in (a).

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

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

Close members of the family of a person are those family members who may be expected to influence, or be influenced by, that person in their dealings with the entity.

1 SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

(ee) Segment reporting

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

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 products and services, the nature of production processes, the type or class of customers, the methods used to distribute the products or provide the services, and the nature of the regulatory environment. Operating segments which are not individually material may be aggregated if they share a majority of these criteria.

2 ACCOUNTING JUDGEMENTS AND ESTIMATES

(a) Critical accounting judgements in applying the Group's accounting policies

In the process of applying the Group's accounting policies, management has made the following accounting judgement:

(i) Consolidation of the entity in which the Group holds less than a majority of voting rights

In accordance the Group's accounting policy set out in note 1(d), in determining whether the Group has the controls over the entities where the Group holds less than a majority of voting rights, management evaluates relevant facts and circumstances available, including the size of the Group's relative holding of voting rights, dispersion of the holdings of other vote holders, voting patterns at previous shareholders' meetings of the entities and the practical ability to direct the relevant activities. Judgement is reassessed on a continuous basis. If management concludes the Group does not have power over the entity, the Group shall derecognise the assets and liabilities of the respective entity from the consolidated statement of financial position.

(ii) Determining the lease term

As explained in policy note 1(l), the lease liability is initially recognised at the present value of the lease payments payable over the lease term. In determining the lease term at the commencement date for leases that include renewal options exercisable by the Group, the Group evaluates the likelihood of exercising the renewal options taking into account all relevant facts and circumstances that create an economic incentive for the Group to exercise the option, including favourable terms, leasehold improvements undertaken and the importance of that underlying asset to the Group's operation. The lease term is reassessed when there is a significant event or significant change in circumstance that is within the Group's control. Any increase or decrease in the lease term would affect the amount of lease liabilities and right-of-use assets recognised in future years.

(b) Sources of estimation uncertainty

Notes 5(b), 12, 28 and 31(e) contain information about the assumptions and their risk factors relating to defined benefit retirement plans, goodwill impairment, fair value of share options granted and financial instruments. Other key sources of estimation uncertainty are as follows:

2 ACCOUNTING JUDGEMENTS AND ESTIMATES (CONTINUED)

(b) Sources of estimation uncertainty (continued)

(i) Net realisable value of inventories

Net realisable value of inventories is the estimated selling price in the ordinary course of business, less estimated costs of completion and distribution expenses. These estimates are based on the current market condition and historical experience of selling products of similar nature. It could change significantly as a result of competitor actions in response to changes in market conditions. Management reassesses these estimations at the balance sheet dates to ensure inventory is shown at the lower of cost and net realisable value.

(ii) Income tax

Determining income tax provisions involves judgement on the future tax treatment of certain transactions. The management carefully evaluates tax implications of transactions and tax provisions are set up accordingly. The tax treatment of these transactions is reconsidered periodically to take into account changes in tax legislations. Deferred tax assets are recognised for deductible temporary differences. As those deferred tax assets can only be recognised to the extent that it is probable that future taxable profit will be available against which they can be utilised, management's judgement is required to assess the probability of future taxable profits. Management's assessment is constantly reviewed and additional deferred tax assets are recognised if it becomes probable that future taxable profits will allow the deferred tax asset to be recovered.

(iii) Impairment of non-current assets

Internal and external sources of information are reviewed by the Group at the end of each reporting period to assess whether there is any indication that an asset may be impaired. If any such indication exists, the recoverable amount of the asset or the cash-generating unit to which it belongs is estimated to determine impairment losses on the asset. Changes in facts and circumstances may result in revisions to the conclusion of whether an indication of impairment exists and revised estimates of recoverable amount, which would affect profit or loss in future years. Goodwill and intangible assets not yet available for use are tested for impairment at least annually even if there is no indication of impairment.

(iv) Revenue recognition

As explained in policy note 1(z), revenue from sales of medical devices is after the deduction of sales discounts. Such revenue recognition is dependent on estimating the sales rebates granted to customers which are primarily volume based. Based on the Group's experience, the Group has made estimates to the extent which it considered that it is highly probable that the customer will satisfy the rebate entitlement criteria within the rebate period.

For the CRM business, the total transaction price is allocated to each performance obligation in an amount based on the estimated relative stand-alone selling prices of the goods or services underlying each performance obligation. The Group allocated the transaction price of each performance obligation and recognised the post-sales services over the period, by considering the average costs and frequency of the provision of each post-sales service and the estimated product lives. These estimates are based on the historical information as well as prevailing market conditions. Management reassessed the estimation based on related available information at the balance sheet date. Changes in facts and circumstances may result in revisions to the conclusion, which would affect profit or loss in future years.

3 REVENUE AND SEGMENT REPORTING

(a) Revenue

(i) Disaggregation of revenue

Disaggregation of revenue from contracts with customers by major products or service lines is as follows:

	2022 US$'000	2021 US$'000
Revenue from contracts with customers within the scope of HKFRS 15		
– Sales of medical devices	**822,484**	761,699
– Others	**15,933**	14,609
	838,417	776,308
Revenue from other sources	**2,414**	2,331
	840,831	778,639

Disaggregation of revenue from contracts with customers by the timing of revenue recognition and by geographic markets is disclosed in notes 3(b)(i) and 3(b)(iii) respectively.

Revenue from each major customer which accounted for 10% or more of the Group's revenue is set out below:

	2022 US$'000	2021 US$'000
Customer A	**97,004**	99,656

(ii) Revenue expected to be recognised in the future arising from contracts with customers in existence at the reporting date

As at 31 December 2022, the aggregated amount of the transaction price allocated to the remaining performance obligation under the Group's existing contracts was US$44,652,000 (2021: US$51,734,000). This amount represents revenue expected to be recognised in the future from rendering post-sales services and extended warranty services. The Group will recognise the expected revenue in future when or as the service is rendered.

The Group has applied the practical expedient in paragraph 121 of HKFRS 15 such that the above information does not include information about revenue that the Group will be entitled to when it satisfies the remaining performance obligations under the contracts for sales of medical devices that had an original expected duration of one year or less.

3 REVENUE AND SEGMENT REPORTING (CONTINUED)

(b) Segment reporting

The Group manages its businesses by divisions, which are organised by a mixture of both lines of business (products and services) and geography. In a manner consistent with the way in which information is reported internally to the Group's most senior executive management for the purposes of resource allocation and performance assessment, the Group has identified a number of reportable segments. No operating segments have been aggregated to form the following reportable segments.

Cardiovascular devices business	sales, manufacture, research and development ("R&D") of cardiovascular devices, such as drug eluting stents.
Orthopedics devices business	sales, manufacture, R&D of orthopedics devices.
CRM business	sales, manufacture, R&D of cardiac rhythm management devices.
Endovascular and peripheral vascular devices business	sales, manufacture, R&D of endovascular and peripheral vascular devices.
Neurovascular devices business	sales, manufacture, R&D of neurovascular devices.
Heart valve business	sales, manufacture, R&D of heart valve devices.
Surgical robot business	sales, manufacture, R&D of surgical robot devices.
Surgical devices business	sales, manufacture, R&D of surgical devices.

(i) Segment results, assets and liabilities

For the purposes of assessing segment performance and allocating resources between segments, the Group's senior executive management monitors the results, assets and liabilities attributable to each reportable segment on the following bases:

Segment assets include all current and non-current assets with the exception of corporate assets. Segment liabilities include liabilities directly attributable to the activities of each individual segment.

Revenue and expenses are allocated to the reportable segments with reference to sales generated by those segments and the expenses incurred by those segments or which otherwise arise from the depreciation or amortisation of assets attributable to those segments. Segment profit/(loss) includes the Group's share of profit/(loss) arising from the activities of the Group's equity-accounted investees that directly held by the respective reportable segment. However, other than reporting inter-segment sales, assistance provided by one segment to another, including sharing of assets and technical know-how, is not measured.

The measure used for reporting segment profit/(loss) is "reportable segment net profit/(loss)". Items that are not specifically attributed to individual segments, such as unallocated exchange gain/(loss), unallocated corporate income and expenses, unallocated equity-settled share-based payment expenses and the PRC dividends withholding tax are excluded from segment net profit/(loss).

In addition to receiving segment information concerning reportable segment net profit/(loss), management is provided with segment information concerning revenue from external customers, depreciation and amortisation, impairment losses of non-current assets, ECLs on trade and other receivables and additions to non-current segment assets used by the segments in their operations.

3 REVENUE AND SEGMENT REPORTING (CONTINUED)

(b) Segment reporting (continued)

(i) Segment results, assets and liabilities (continued)

Disaggregation of revenue from contracts with customers by the timing of revenue recognition, as well as information regarding the Group's reportable segments as provided to the Group's most senior executive management for the purposes of resource allocation and assessment of segment performance for the years ended 31 December 2022 and 2021 is set out below.

	2022									
	Cardiovascular devices business US$'000	Orthopedics devices business US$'000	Cardiac rhythm management business US$'000	Endovascular and peripheral vascular devices business US$'000	Neurovascular devices business US$'000	Heart valve business US$'000	Surgical robot business US$'000	Surgical devices business US$'000	Others* US$'000	Total US$'000
Disaggregated by timing of revenue recognition										
Point in time	133,057	222,787	191,083	133,179	79,900	36,808	3,092	4,511	20,403	824,820
Over time	1,073	768	13,156	-	-	-	-	-	1,014	16,011
Revenue from external customers	134,130	223,555	204,239	133,179	79,900	36,808	3,092	4,511	21,417	840,831
Inter-segment revenue	12,521	1,780	940	89	302	209	-	-	356	16,197
Reportable segment revenue	146,651	225,335	205,179	133,268	80,202	37,017	3,092	4,511	21,773	857,028
Reportable segment net (loss)/profit	(7,412)	(88,550)	(101,121)	52,425	(4,318)	(66,331)	(168,748)	(30,356)	(77,802)	(492,213)
Interest income from bank deposits	905	74	278	1,669	1,426	5,344	3,734	11	1,151	14,592
Interest expense	2,488	5,980	21,983	308	15,213	768	1,646	737	2,789	51,912
Depreciation and amortisation for the year	22,272	26,919	14,971	6,659	8,508	15,012	16,034	7,261	14,748	132,384
Provision for impairment of:										
– Property, plant and equipment	-	-	-	-	-	-	-	-	32	32
– Intangible assets	-	-	-	-	-	7,050	-	-	-	7,050
– Goodwill	-	16,481	-	-	-	-	-	-	-	16,481
– Trade and other receivables	98	4,233	-	389	-	-	-	-	86	4,806
Reportable segment assets	565,823	489,305	471,111	287,148	260,852	433,178	276,960	213,392	560,184	3,557,953
Additions to non-current segment assets during the year	17,719	54,597	6,607	66,882	6,379	22,762	48,070	10,777	72,508	306,301
Reportable segment liabilities	239,368	335,395	438,940	35,813	47,417	35,304	73,491	67,526	152,192	1,425,446

3 REVENUE AND SEGMENT REPORTING (CONTINUED)

(b) Segment reporting (continued)

(i) Segment results, assets and liabilities (continued)

	2021									
	Cardiovascular devices business US$'000	Orthopedics devices business US$'000	Cardiac rhythm management business US$'000	Endovascular and peripheral vascular devices business US$'000	Neurovascular devices business US$'000	Heart valve business US$'000	Surgical robot business US$'000	Surgical devices business US$'000	Others* US$'000	Total US$'000
Disaggregated by timing of revenue recognition										
Point in time – sales of medical devices	135,020	215,343	209,472	106,028	59,013	31,324	329	4,727	443	761,699
Over time – post-sales services	–	–	10,949	–	–	–	–	–	–	10,949
Over time – rental income	861	271	–	–	40	–	–	–	1,159	2,331
Others	3,660	–	–	–	–	–	–	–	–	3,660
	139,541	215,614	220,421	106,028	59,053	31,324	329	4,727	1,602	778,639
Reportable segment net profit/(loss)	9,425	(26,223)	(84,889)	47,755	3,560	(28,502)	(97,720)	(11,481)	(56,136)	(244,211)
Interest income from bank deposits	2,730	45	–	2,137	535	3,756	3,424	14	392	13,033
Interest expense	877	3,247	15,451	275	7,011	2,999	821	330	1,062	32,073
Depreciation and amortisation for the year	15,629	25,410	18,094	3,685	5,000	4,820	4,973	2,163	2,711	82,485
Provision for/(reversal of) impairment of:										
– Property, plant and equipment	162	89	–	–	–	–	–	–	–	251
– Intangible assets	–	150	–	–	–	–	–	–	–	150
– Trade and other receivables	344	884	–	11	–	–	–	(79)	–	1,160
Reportable segment assets	611,181	490,510	435,891	275,451	210,226	524,108	436,895	210,071	446,013	3,640,346
Additions to non-current segment assets during the year	214,120	46,460	31,135	17,643	55,308	65,575	61,302	176,181	126,436	794,160
Reportable segment liabilities	195,723	240,742	329,785	38,489	237,683	40,233	59,314	93,448	83,849	1,319,266

* Revenues and results from segments below the quantitative thresholds are mainly attributable to fermentation-based active pharmaceutical ingredients business, medical imaging business and electrophysiology devices, etc. None of those segments individually met any of the quantitative thresholds for reportable segments.

3 REVENUE AND SEGMENT REPORTING (CONTINUED)

(b) Segment reporting (continued)

(ii) Reconciliation of reportable segment profit or loss, assets and liabilities

	2022 **US$'000**	2021 US$'000
Profit or loss		
Reportable segment net loss	**(492,213)**	(244,211)
Share awards scheme (Note)	**(6,223)**	(6,905)
Other equity-settled share-based payment expenses (Note)	**(35,991)**	(54,776)
Interest expenses on convertible bonds issued by the Company	**(16,254)**	(8,827)
Unallocated exchange loss	**(2,905)**	(2,435)
Gain on disposal of subsidiaries, net of tax	**7,107**	8,218
Unallocated expenses, net	**(41,636)**	(42,359)
Consolidated loss for the year	**(588,115)**	(351,295)
Assets		
Reportable segment assets	**3,557,953**	3,640,346
Elimination of inter-segment assets	**(118,929)**	(93,878)
Unallocated corporate assets:		
– Cash and cash equivalents	**243,035**	530,036
– Equity-accounted investees	**102,450**	77,791
– Property, plant and equipment	**160,556**	166,270
– Others	**49,020**	59,964
Consolidated total assets	**3,994,085**	4,380,529

3 REVENUE AND SEGMENT REPORTING (CONTINUED)

(b) Segment reporting (continued)

(ii) Reconciliation of reportable segment profit or loss, assets and liabilities

	2022 US$'000	2021 US$'000
Liabilities		
Reportable segment liabilities	**1,425,446**	1,319,266
Elimination of inter-segment liabilities	**(118,929)**	(93,878)
Derivative financial liabilities (note 17(i))	**871**	1,651
Convertible bonds	**676,623**	660,369
Interest-bearing borrowings	**135,865**	165,514
Lease liabilities	**21,109**	36,187
Income tax payable arising from partial disposal of equity interests in a subsidiary	**11,254**	11,231
Unallocated corporate liabilities	**49,178**	62,697
Consolidated total liabilities	**2,201,417**	2,163,037

Note: The amounts of share award scheme and other equity-settled shared-based payment expenses during the year ended 31 December 2022 include the impact of restricted shares and share options granted to the executive and senior management of the Group.

3 REVENUE AND SEGMENT REPORTING (CONTINUED)

(b) Segment reporting (continued)

(iii) Geographic information

The following table sets out information about the geographical location of (i) the Group's revenue from external customers and (ii) the Group's investment property, property, plant and equipment, intangible assets, goodwill and investments in equity-accounted investees ("specified non-current assets"). The geographical location of customers is based on the location at which the goods are delivered and services are rendered. The geographical location of the specified non-current assets is based on the physical location of the asset, in the case of property, plant and equipment, the location of the operation to which they are allocated, in case of goodwill and intangible assets, and the location of operations, in case of investments in equity-accounted investees.

	Revenues from external customers		**Specified non-current assets**	
	2022	2021	**2022**	2021
	US$'000	US$'000	**US$'000**	US$'000
The PRC (country of domicile)	**405,636**	356,977	**1,376,300**	1,320,483
North America	**96,455**	94,980	**185,972**	178,937
Europe	**246,848**	241,799	**295,549**	271,298
Asia (excluding the PRC)	**64,094**	64,357	**50,370**	66,235
South America	**12,065**	9,698	**1,516**	3,270
Others	**15,733**	10,828	**271**	335
	840,831	778,639	**1,909,978**	1,840,558

4 OTHER NET INCOME

	2022 US$'000	2021 US$'000
Government grants (i)	**18,789**	27,546
Interest income on financial assets measured at amortised cost	**19,107**	15,825
Net loss on disposal of property, plant and equipment	**(455)**	(412)
Net foreign exchange gain/(loss)	**4,495**	(5,716)
Net realised and unrealised (loss)/gain on financial instruments carried at FVPL	**(751)**	25,707
Gain in relation to a settlement agreement	**333**	10,735
Others	**(5,368)**	2,790
	36,150	76,475

(i) Majority of the government grants are subsidies received from government for the encouragement of R&D projects.

5 LOSS BEFORE TAXATION

Loss before taxation is arrived at after charging/(crediting):

(a) Finance costs

	2022 US$'000	2021 US$'000
Interest on the convertible bonds (note 27(b))	**16,254**	12,375
Interest on interest-bearing borrowings	**13,728**	6,433
Interest on preferred shares issued by subsidiaries (note 21(ii))	**34,958**	18,111
Interest on lease liabilities (note 10(b))	**9,575**	5,791
Total interest expense on financial liabilities not at fair value through profit or loss	**74,515**	42,710
Less: interest expense capitalised into properties under development*	**(603)**	–
Add: fee charges and others	**4,489**	5,173
	78,401	47,883

* Borrowing costs have been capitalised at a rate of 1.55% – 4.2% per annum in 2022.

5 LOSS BEFORE TAXATION (CONTINUED)

(b) Staff costs

	2022 US$'000	2021 US$'000
Contributions to defined contribution retirement plans	**34,674**	24,478
Expenses recognised in respect of defined benefit retirement plans	**749**	564
Equity-settled share-based payment expenses (note 28(g))	**72,803**	91,345
Cash-settled share-based payment expenses and other long-term employee benefits	**4,272**	3,268
Salaries, wages and other benefits	**452,627**	360,016
	565,125	480,232

(i) Defined contribution retirement plans

The PRC

As stipulated by the labour regulations of the PRC, the Group participates in various defined contribution retirement plans organised by municipal and provincial governments for its employees. The Group is required to make contributions to the retirement plans at a specified proportion of the eligible employees' salaries. The Group's contributions made to the plans are non-refundable and cannot be used to reduce the future or existing level of contribution of the Group should any forfeiture be resulted from the plans.

The United States (the "US")

The Group sponsors a defined contribution plan under Section 401(k) of the Internal Revenue Code, which covers US employees who are 21 years of age and over. Under this plan, the Group matches voluntary employee contributions at a rate of 100% for the first 3% of an employee's annual compensation and at a rate of 50% for the next 2% of an employee's annual compensation. Employees vest in the employer contributions after three years of service.

(ii) Defined benefit retirement plans

The Group makes contribution to several defined benefit retirement plans in Italy, France and Japan. In Italy and France, the Group maintains a severance defined benefit plan that obligates the employer to pay a severance payment in case of resignation, dismissal or retirement. In other jurisdictions, non-contributory defined benefit plans are designated to provide a guaranteed minimum retirement benefits to eligible employees.

The defined benefit plans expose the Group to various demographic and economic risks such as longevity risks, investment risks, currency and interest risks and inflation risks. When calculating the defined benefit liabilities, the Group estimated the key assumptions by reference to actuarial valuations. The Group recorded the present value of funded obligation of approximately US$8,088,000 as at 31 December 2022 (31 December 2021: US$10,477,000), with actuarial loss of US$532,000 being recorded in other comprehensive income for the year ended 31 December 2022 (31 December 2021: gain of US$256,000).

5 LOSS BEFORE TAXATION (CONTINUED)

(b) Staff costs (continued)

(iii) Long-term defined benefit plans

The Group adopted a long-term defined benefit plan, pursuant to which, eligible employees of the Group in the PRC will receive a lump-sum benefit calculated by predetermined formula upon the fulfilment of 30-year service period or retirement. The plan is funded by contributions from the Group and administered by an independent trustee, whose assets are held separately from those of the Group. The trustees are required by the trust deed to repurchase and hold the shares of the Company as investments.

The plan exposes the Group to interest rate risks, investment risks, equity price risks and other economic risks. The Group recorded the present value of funded obligation of approximately US$1,422,000 as at 31 December 2022 (31 December 2021: US$641,000), with an actuarial gain of US$69,000 being recorded in other comprehensive income for the year ended 31 December 2022 (31 December 2021: a loss of US$581,000).

(c) Other operating costs

	2022	2021
	US$'000	US$'000
Legal and profession fee	**5,262**	12,945
Impairment losses of non-current assets	**23,531**	239
Donations and others (i)	**20,486**	3,363
	49,279	16,547

(i) In 2015, the Italian Parliament enacted a legislation that imposed a "payback" measure on medical device companies that supply goods and services to the Italian National Healthcare System. Under the measure, companies are required to make payments to the Italian government if medical device expenditures in a given year exceed regional expenditure ceilings established for that year. Companies are required to make payments equal to a percentage of expenditures exceeding maximum regional caps.

In the third quarter of 2022, the Italian Ministry of Health provided guidelines to the Italian regions and provinces on seeking payback of expenditure overruns relating to the years through 2015 to 2018 and the Group received the invoices issued by the various Italian regions. As at 31 December 2022, the Group's reserve for this matter is US$15,131,000, of which, US$2,032,000 deducted from revenue for 2022 as a variable consideration, and the remaining US$13,099,000 in relation to the estimated amount for 2015 to 2021 was recorded in other operating costs. However, the actual liabilities could vary from the estimate.

5 LOSS BEFORE TAXATION (CONTINUED)

(d) Other items

	2022 US$'000	2021 US$'000
Amortisation of intangible assets*	**19,430**	15,729
Depreciation charge*		
– owned property, plant and equipment	**67,699**	50,662
– right-of-use assets	**54,863**	27,891
Less: Amounts capitalised as development costs	**(645)**	(803)
Total amortisation and depreciation	**141,347**	93,479
Impairment losses on:		
– trade and other receivables	**4,806**	1,160
– property, plant and equipment	**32**	251
– intangible assets	**7,050**	150
– goodwill	**16,481**	–
	28,369	1,561
R&D expenditures	**431,291**	323,685
Less: Amortisation of capitalised development costs	**(8,657)**	(6,450)
Costs capitalised into intangible assets	**(11,463)**	(25,907)
	411,171	291,328
Cost of inventories* (note 18(b))	**392,110**	321,610
Auditors' remuneration		
– audit services	**4,725**	3,266
– non-audit services	**948**	721
	5,673	3,987

* Cost of inventories includes US$118,997,000 (2021: US$103,102,000) relating to staff costs and depreciation and amortisation expenses, which amount is also included in the respective total amounts disclosed separately above or in note 5(b) for each of these types of expenses.

6 INCOME TAX IN THE CONSOLIDATED STATEMENT OF PROFIT OR LOSS

(a) Taxation in the consolidated statement of profit or loss represents:

	2022 US$'000	2021 US$'000
Current tax – PRC Corporate Income Tax ("CIT")		
Provision for the year	**13,562**	12,893
Under/(over)-provision in respect of prior years	**527**	(18)
	14,089	12,875
Current tax – other jurisdictions		
Provision for the year	**2,931**	4,594
(Over)/under-provision in respect of prior years	**(787)**	323
	2,144	4,917
Total current tax	**16,233**	17,792
Deferred tax		
Origination and reversal of temporary differences (note 25(b))	**(9,636)**	(3,821)
	6,597	13,971

Pursuant to the CIT Law of the PRC, all of the Company's PRC subsidiaries are liable to PRC CIT at a rate of 25% except for 13 entities entitled to a preferential income tax rate of 15% as they are certified as "High and New Technology Enterprise" ("HNTE"). According to Guoshuihan 2009 No. 203, if an entity is certified as an HNTE, it is entitled to a preferential income tax rate of 15% during the certified period.

Taxation for overseas subsidiaries is similarly calculated using the estimated annual effective rates of taxation that are expected to be applicable in the relevant jurisdictions.

6 INCOME TAX IN THE CONSOLIDATED STATEMENT OF PROFIT OR LOSS (CONTINUED)

(b) Reconciliation between income tax expense and accounting loss at applicable tax rates:

	2022 **US$'000**	2021 US$'000
Loss before taxation	**(581,518)**	(337,324)
Notional tax on loss before taxation, calculated at the rates applicable to profit in the countries concerned	**(113,216)**	(63,929)
Effect of the PRC preferential tax rate	**(3,905)**	(691)
Effect of other non-deductible expenses	**8,362**	5,917
Effect of additional deduction on research and development expenses	**(31,757)**	(21,026)
Effect of tax losses not recognised	**151,803**	101,855
Effect of non-taxable income	**(4,447)**	(6,428)
Withholding tax on profit distributions	**1,484**	818
(Over)/under-provision in respect of prior years	**(260)**	305
Others	**(1,467)**	(2,850)
Actual tax expenses	**6,597**	13,971

7 DIRECTORS' EMOLUMENTS

Directors' emoluments disclosed pursuant to section 383(1) of the Hong Kong Companies Ordinance and Part 2 of the Companies (Disclosure of Information about Benefits of Directors) Regulation are as follows:

	2022						
	Directors' fees US$'000	Salaries, allowances and benefits in kind US$'000	Discretionary bonuses US$'000	Retirement scheme contributions US$'000	Sub-Total US$'000	Equity-settled share-based payment (Note) US$'000	Total US$'000
Executive director							
Zhaohua Chang	–	–	226	–	226	13,735	13,961
Non-executive directors							
Norihiro Ashida	37	–	–	–	37	–	37
Hongliang Yu	–	–	–	–	–	–	–
Yasuhisa Kurogi	–	–	–	–	–	–	–
Independent non-executive directors							
Jonathan Chou	33	41	–	–	74	79	153
Guoen Liu	74	7	–	–	81	79	160
Chunyang Shao	74	8	–	–	82	79	161
	218	56	226	–	500	13,972	14,472

7 DIRECTORS' EMOLUMENTS (CONTINUED)

	2021						
	Directors' fees US$'000	Salaries, allowances and benefits in kind US$'000	Discretionary bonuses US$'000	Retirement scheme contributions US$'000	Sub-Total US$'000	Equity-settled share-based payment (Note) US$'000	Total US$'000
Executive director							
Zhaohua Chang	–	–	400	–	400	48,735	49,135
Non-executive directors							
Norihiro Ashida	–	–	–	–	–	–	–
Hongliang Yu	–	–	–	–	–	–	–
Yasuhisa Kurogi	–	–	–	–	–	–	–
Independent non-executive directors							
Jonathan Chou	20	39	–	–	59	168	227
Guoen Liu	65	9	–	–	74	168	242
Chunyang Shao	65	8	–	–	73	168	241
	150	56	400	–	606	49,239	49,845

Note: These represent the estimated value of share options granted to the directors under the Group's share option scheme and estimated value of the restricted shares granted under the Company's share award scheme. The value of these share options and restricted shares is measured according to the Group's accounting policies for share-based payment transactions as set out in note 1(w)(iii) and, in accordance with that policy, includes adjustments to reverse amounts accrued in previous years where grants of equity instruments are forfeited prior to vesting.

The details of these benefits in kind, including the principal terms and number of options granted, are disclosed under the paragraph "Share option schemes" in report of the director and note 28.

8 INDIVIDUALS WITH HIGHEST EMOLUMENTS

Of the five individuals with the highest emoluments, one (2021: one) is director whose emoluments are disclosed in note 7. The aggregate of the emoluments in respect of the other four (2021: four) individual are as follows:

	2022 US$'000	2021 US$'000
Salaries and other benefits	**495**	811
Retirement scheme contributions	**–**	10
Discretionary bonuses	**466**	835
Equity-settled share-based payment	**12,390**	8,253
	13,351	9,909

The emoluments of the four (2021: four) individuals with the highest emoluments are within the following bands:

	2022 Number of Individuals	2021 Number of Individuals
HK$8,000,001 to HK$9,000,000	**–**	1
HK$12,000,001 to HK$13,000,000	**–**	1
HK$13,000,001 to HK$14,000,000	**1**	–
HK$14,000,001 to HK$15,000,000	**1**	–
HK$17,000,001 to HK$18,000,000	**–**	1
HK$29,000,001 to HK$30,000,000	**1**	–
HK$38,000,001 to HK$39,000,000	**–**	1
HK$47,000,001 to HK$48,000,000	**1**	–

9 LOSS PER SHARE

(a) Basic loss per share

The calculation of basic loss per share is based on the loss attributable to ordinary equity shareholders of the Company of US$436,515,000 (2021: US$276,484,000) and the weighted average number of ordinary shares of 1,812,826,000 shares (2021: 1,808,295,000 shares) in issue during the year, calculated as follows:

(i) Weighted average number of ordinary shares

	2022	2021
	'000	'000
Issued ordinary shares at 1 January	**1,820,751**	1,809,540
Effect of issue of shares in lieu of cash dividends	**–**	188
Effect of share options exercised	**3,426**	7,256
Effect of treasury shares held	**(11,351)**	(8,689)
Weighted average number of ordinary shares at 31 December	**1,812,826**	1,808,295

9 LOSS PER SHARE (CONTINUED)

(b) Diluted loss per share

The calculation of diluted loss per share is based on the loss attributable to ordinary equity shareholders of the Company of US$453,474,000 (2021: loss of US$299,794,000) and the weighted average number of ordinary shares of 1,817,910,000 shares (2021: 1,812,922,000 shares) after adjusting the effects of dilutive potential issuable ordinary shares under a put option granted to Sino Rhythm Limited ("SRL") that may be settled in ordinary shares of the Company, calculated as follows.

(i) Loss attributable to ordinary equity shareholders of the Company (diluted)

	2022 US$'000	2021 US$'000
Loss attributable to ordinary equity shareholders	**(436,515)**	(276,484)
Effect of deemed exercise of put option granted to SRL in respect of share repurchase obligation (note 17(i))	**(16,959)**	(23,235)
Effect of deemed exercise of restricted share units granted to the employees of a subsidiary	**–**	(75)
Loss attributable to ordinary equity shareholders (diluted)	**(453,474)**	(299,794)

(ii) Weighted average number of ordinary shares (diluted)

	2022 '000	2021 '000
Weighted average number of ordinary shares at 31 December	**1,812,826**	1,808,295
Effect of deemed exercise of put option granted to SRL in respect of share repurchase obligation	**5,084**	4,627
Weighted average number of ordinary shares (diluted) at 31 December	**1,817,910**	1,812,922

The calculation of diluted loss per share amount for the year ended 31 December 2022 has not included the potential effects of the deemed issue of shares under the share option schemes adopted by the Company (see note 28(a)(i)) and the deemed conversion of the convertible bonds issued by the Company (see note 27(a)) into ordinary shares during the year and neither included the effects of potential ordinary shares in or issued by subsidiaries and equity-accounted investees of the Group, as they had anti-dilutive effects on the basic loss per share amount.

10 INVESTMENT PROPERTIES AND OTHER PROPERTY, PLANT AND EQUIPMENT

(a) Reconciliation of carrying amount

	Ownership interests in land and buildings held for own use	Leasehold improvements	Equipment and machinery	Office equipment, furniture and fixtures	Motor vehicles	Right-of-use assets	Construction in progress	Sub-total	Investment property	Total
	US$'000	US$'000	US$'000	US$'000	US$'000	US$'000	US$'000	US$'000	US$'000	US$'000
Cost:										
At 1 January 2021	251,532	24,098	264,796	71,153	3,152	88,512	27,742	730,985	6,785	737,770
Exchange adjustments	4,881	574	1,589	399	43	1,734	(3,324)	5,896	184	6,080
Acquisition of subsidiaries	83,946	70	2,351	84	–	21,404	41	107,896	–	107,896
Transfer	(1,293)	28,594	32,935	6,932	119	394	(70,008)	(2,327)	2,327	–
Additions	45,621	3,045	20,656	1,248	–	205,909	153,668	430,147	–	430,147
Disposals	(3)	(4,421)	(17,766)	(1,229)	(234)	(3,604)	(3,935)	(31,192)	–	(31,192)
At 31 December 2021 and 1 January 2022	**384,684**	**51,960**	**304,561**	**78,587**	**3,080**	**314,349**	**104,184**	**1,241,405**	**9,296**	**1,250,701**
Exchange adjustments	**(32,446)**	**(923)**	**(25,489)**	**(3,024)**	**(264)**	**(23,689)**	**(6,973)**	**(92,808)**	**(793)**	**(93,601)**
Transfer	**3,747**	**48,781**	**54,374**	**13,654**	**393**	**–**	**(120,949)**	**–**	**–**	**–**
Additions	**260**	**662**	**26,041**	**1,531**	**169**	**41,953**	**194,901**	**265,517**	**236**	**265,753**
Disposals	**(260)**	**(295)**	**(4,248)**	**(1,536)**	**(38)**	**(7,464)**	**(140)**	**(13,981)**	**–**	**(13,981)**
At 31 December 2022	**355,985**	**100,185**	**355,239**	**89,212**	**3,340**	**325,149**	**171,023**	**1,400,133**	**8,739**	**1,408,872**

10 INVESTMENT PROPERTIES AND OTHER PROPERTY, PLANT AND EQUIPMENT (CONTINUED)

(a) Reconciliation of carrying amount (continued)

	Ownership interests in land and buildings held for own use	Leasehold improvements	Equipment and machinery	Office equipment, furniture and fixtures	Motor vehicles	Right-of-use assets	Construction in progress	Sub-total	Investment property	Total
	US$'000	US$'000	US$'000	US$'000	US$'000	US$'000	US$'000	US$'000	US$'000	US$'000
Accumulated depreciation, amortisation and impairment:										
At 1 January 2021	36,964	13,371	125,255	45,009	2,241	26,942	–	249,782	1,501	251,283
Exchange adjustments	756	266	(1,418)	144	44	248	–	40	41	81
Charge for the year	6,321	7,111	25,796	11,048	290	27,891	–	78,457	347	78,804
Written back on disposals	(1)	(204)	(6,175)	(918)	(216)	(2,234)	–	(9,748)	–	(9,748)
At 31 December 2021 and 1 January 2022	44,040	20,544	143,458	55,283	2,359	52,847	–	318,531	1,889	320,420
Exchange adjustments	**(4,874)**	**(645)**	**(9,968)**	**(3,276)**	**(202)**	**(3,545)**	**–**	**(22,510)**	**(173)**	**(22,683)**
Charge for the year	**10,982**	**11,854**	**37,906**	**6,187**	**358**	**54,863**	**–**	**122,150**	**444**	**122,594**
Written back on disposals	**(134)**	**(269)**	**(3,833)**	**(1,390)**	**(36)**	**(5,390)**	**–**	**(11,052)**	**–**	**(11,052)**
At 31 December 2022	**50,014**	**31,484**	**167,563**	**56,804**	**2,479**	**98,775**	**–**	**407,119**	**2,160**	**409,279**
Net book value:										
At 31 December 2022	**305,971**	**68,701**	**187,676**	**32,408**	**861**	**226,374**	**171,023**	**993,014**	**6,579**	**999,593**
At 31 December 2021	**340,644**	**31,416**	**161,103**	**23,304**	**721**	**261,502**	**104,184**	**922,874**	**7,407**	**930,281**

10 INVESTMENT PROPERTIES AND OTHER PROPERTY, PLANT AND EQUIPMENT (CONTINUED)

(b) Right-of-use assets

The analysis of the net book value of right-of-use assets by class of underlying asset is as follows:

	Note	**31 December 2022 US$'000**	31 December 2021 US$'000
Land use rights, carried at depreciated cost	(i)	**51,309**	36,401
Properties leased for own use and others, carried at depreciated cost	(ii)	**175,065**	225,101
		226,374	261,502

The analysis of expense items in relation to leases recognised in profit or loss is as follows:

	2022 US'$000	2021 US'$000
Depreciation charge of right-of-use assets by class of underlying asset:		
Land use rights	**2,110**	420
Properties leased for own use and others	**52,753**	27,471
	54,863	27,891
Interest on lease liabilities (note 5(a))	**9,575**	5,791
Expense relating to short-term leases and leases of low-value assets	**3,401**	1,238

During the year, the Group entered into a number of lease agreements for use of property and machinery, and therefore recognised the additions to right-of-use assets of US$21,808,000 (2021: US$205,909,000). In addition, the Group acquired a land use right in PRC and accordingly recognised the additions to right-of-use assets of US$20,145,000 (2021: nil).

Details of total cash outflow for leases and the maturity analysis of lease liabilities are set out in notes 20(e) and 31(b), respectively.

(i) Land use rights

The Group has obtained land use rights in the PRC where certain manufacturing facilities are located. The land use rights are typically granted for 30 to 50 years, on the expiry of which the land reverts back to the PRC state. The payment for leasing the land is normally made in full at the start of the land use rights period.

10 INVESTMENT PROPERTIES AND OTHER PROPERTY, PLANT AND EQUIPMENT (CONTINUED)

(b) Right-of-use assets (continued)

(ii) Properties leased for own use

The Group has obtained the right to use other properties as its manufacturing facilities, warehouses and office buildings through tenancy agreements. The leases typically run for an initial period of 1 to 10 years. None of the leases includes variable lease payments.

(c) Investment property

The Group leases out investment property located in the PRC under operating leases. The leases typically run for an initial period of 1 to 5 years, with an option to renew the lease after that date at which time all terms are renegotiated. None of the lease includes variable lease payments.

As at 31 December 2022, the fair value of investment property is approximately US$11,144,000, which is determined by management with reference to the market price of comparable properties.

Undiscounted lease payments under non-cancellable operating leases in place at 31 December 2022 is US$2,194,000 (2021: US$2,140,000) will be receivable by the Group within 5 years.

11 INTANGIBLE ASSETS

	Technologies US$'000	Products licences US$'000	Capitalised development costs US$'000	Customer contracts and related customer relationship US$'000	Trademark and others US$'000	Total US$'000
Cost						
At 1 January 2021	23,252	13,773	127,227	22,535	9,903	196,690
Exchange adjustments	(1,309)	937	3,182	(1,331)	2,392	3,871
Additions	–	172	25,907	69	828	26,976
Additions through acquisitions	94,424	4,492	–	4,710	–	103,626
Disposal	–	(1,100)	(349)	(68)	(1,300)	(2,817)
At 31 December 2021 and 1 January 2022	**116,367**	**18,274**	**155,967**	**25,915**	**11,823**	**328,346**
Exchange adjustments	**(7,648)**	**2,110**	**(14,111)**	**(701)**	**(3,564)**	**(23,914)**
Additions	**372**	**1,292**	**11,463**	**187**	**5,109**	**18,423**
Other changes	**(1,590)**	**–**	**–**	**(2,619)**	**–**	**(4,209)**
Disposal	**–**	**(539)**	**–**	**–**	**(2)**	**(541)**
At 31 December 2022	**107,501**	**21,137**	**153,319**	**22,782**	**13,366**	**318,105**
Accumulated amortisation and impairment:						
At 1 January 2021	12,344	10,892	19,420	12,918	2,719	58,293
Exchange adjustments	(302)	40	576	(313)	(36)	(35)
Charge for the year	3,862	2,191	8,277	1,080	469	15,879
Written back on disposals	–	(1,100)	–	–	(1,300)	(2,400)
At 31 December 2021 and 1 January 2022	**15,904**	**12,023**	**28,273**	**13,685**	**1,852**	**71,737**
Exchange adjustments	**(434)**	**(594)**	**(2,553)**	**(406)**	**269**	**(3,718)**
Amortisation charge for the year	**6,117**	**1,610**	**10,177**	**1,226**	**300**	**19,430**
Impairment charge for the year	**–**	**–**	**7,050**	**–**	**–**	**7,050**
Written back on disposals	**–**	**(77)**	**–**	**–**	**–**	**(77)**
At 31 December 2022	**21,587**	**12,962**	**42,947**	**14,505**	**2,421**	**94,422**
Net book value:						
At 31 December 2022	**85,914**	**8,175**	**110,372**	**8,277**	**10,945**	**223,683**
At 31 December 2021	100,463	6,251	127,694	12,230	9,971	256,609

11 INTANGIBLE ASSETS (CONTINUED)

Capitalised development costs primarily related to product candidates of cardiovascular devices, endovascular and peripheral vascular devices and neurovascular devices business segments, of which, US$53,269,000 (2021: US$53,479,000) are not yet available for use as at 31 December 2022.

Amortisation of intangible assets has been charged to the consolidated statement of profit or loss as follows:

	2022 US$'000	2021 US$'000
Cost of sales	**3,411**	3,215
Research and development costs	**12,149**	6,822
Distribution costs	**1,580**	1,401
Administrative expenses	**2,290**	4,291
	19,430	15,729

12 GOODWILL

	US$'000
Cost:	
At 1 January 2021	184,476
Additions through acquisitions	130,081
Exchange adjustments	3,533
At 31 December 2021 and 1 January 2022	318,090
Other changes	1,591
Exchange adjustments	(15,172)
At 31 December 2022	304,509
Accumulated impairment losses:	
At 1 January 2021	24,993
Exchange adjustments	2,532
At 31 December 2021 and 1 January 2022	27,525
Charged for the year	16,481
Exchange adjustments	(2,326)
At 31 December 2022	41,680
Carrying amount:	
At 31 December 2022	262,829
At 31 December 2021	290,565

12 GOODWILL (CONTINUED)

Impairment tests for cash-generating units containing goodwill

Goodwill is allocated to the Group's cash-generation units ("CGU") identified according to place of operations and operating segment as follow:

	2022 US$'000	2021 US$'000
OrthoRecon business	**37,977**	54,458
CRM business	**103,327**	107,862
Surgical devices business	**97,468**	103,556
Intravascular imaging business	**19,555**	20,339
Multiple units without significant goodwill	**4,502**	4,350
	262,829	290,565

The recoverable amounts of the CGUs are higher of the fair value less costs of disposals and the value in use.

During the year ended 31 December 2022, due to significant manufacturing challenges caused by global supply chain interruptions, the results of the Group's OrthoRecon business was worse than the expectation. The carrying value of such CGU exceeded its recoverable amount by US$16,481,000 as at 31 December 2022. Accordingly, an impairment loss of US$16,481,000 was recognised in profit or loss and reduced the carrying amount of goodwill. Any adverse change in the assumptions used in the calculation of recoverable amount of the OrthoRecon business would result in further impairment losses.

The key assumptions for the value-in-use calculation are as follows, which are based on either the past experience or external sources of information:

	2022		2021	
	Steady growth rate used in the extrapolation after budget period	**Pre-tax discount rate**	Steady growth rate used in the extrapolation after budget period	Pre-tax discount rate
OrthoRecon business	**3%**	**17%**	3%	13%
CRM business	**2% – 3%**	**13%**	2%	13%
Surgical devices business	**2%**	**22%**	2%	23%
Intravascular imaging business	**2%**	**20%**	1%	18%

(Expressed in United States dollars unless otherwise indicated)

12 GOODWILL (CONTINUED)

Impairment tests for cash-generating units containing goodwill (continued)

The recoverable amount of the CGU of CRM business, surgical devices business and intravascular imaging business is estimated to exceed the carrying amount of the CGU at 31 December 2022 by US$176,890,000, US$29,161,000 and US$41,176,000, respectively.

The recoverable amount of each CGU would equal its carrying amount if key assumptions were changed to the following rates:

	2022		2021	
	Steady growth rate used in the extrapolation after budget period	**Pre-tax discount rate**	Steady growth rate used in the extrapolation after budget period	Pre-tax discount rate
OrthoRecon business	**N/A**	**N/A**	0.5%	14.9%
CRM business	**0%**	**14.0% – 26.8%**	1.3%	14.0%
Surgical devices business	**0%**	**24.0%**	0%	32.1%
Intravascular imaging business	**0%**	**24.8%**	0%	34.6%

(Expressed in United States dollars unless otherwise indicated)

13 INVESTMENTS IN SUBSIDIARIES

The following list contains only the particulars of subsidiaries which principally affected the results, assets or liabilities of the Group. The class of shares held is ordinary unless otherwise stated:

			Proportion of ownership interest		
Name of company	Place of incorporation and business	Issued/ registered capital	As at 31 December 2022	As at 31 December 2021	Principal activity
Shanghai MicroPort Medical (Group) Co., Ltd. ("Shanghai MicroPort") (上海微創醫療器械(集團)有限公司) (i)	The PRC	US$350,000,000	100%	100%	Manufacture, distribution, research and development of medical devices
MicroPort Sinica Co., Ltd. (微創投資控股有限公司) (i)	The PRC	RMB4,714,028,763/ RMB5,000,000,000	100%	100%	Investment holding, management service and research and development of medical devices
Suzhou MicroPort Orthopedics Scientific (Group) Co., Ltd. ("Suzhou MP Orthopedics") (蘇州微創骨科學(集團)有限公司) (iii)	The PRC	US$375,735,736	85.17%	85.17%	Manufacture, distribution, research and development of orthopedics devices
Suzhou MicroPort OrthoRecon Co., Ltd. (蘇州微創關節醫療科技有限公司) (ii)	The PRC	RMB20,000,000	85.17%	85.17%	Manufacture, distribution, research and development of orthopedics devices
Shanghai MicroPort Orthopedics Co., Ltd. (上海微創骨科醫療科技有限公司) (ii)	The PRC	RMB2,715,000,000	85.17%	85.17%	Manufacture, distribution, research and development of orthopedics devices
MicroPort Orthopedic Instruments Suzhou Co., Ltd. (蘇州微創骨科醫療工具有限公司) (ii)	The PRC	RMB20,000,000	85.17%	85.17%	Manufacture, distribution, research and development of orthopedics devices
Shanghai MicroPort Endovascular MedTech Co., Ltd. ("MP Endo") (上海微創心脈醫療科技(集團)股份有限公司) (iii)&(iv)	The PRC	RMB71,978,147	46.34%	46.34%	Manufacture, distribution, research and development of endovascular devices
MicroPort NeuroTech Limited ("MP NeuroTech") (note 30(b))	Cayman Islands	US$11,653/US$50,000	53.35%	67.38%	Investment holding
MicroPort NeuroTech (Shanghai) Co., Ltd. ("MP Neuro") (微創神通醫療科技(上海)有限公司) (note 30(b))(i)	The PRC	RMB163,531,250	53.35%	67.38%	Manufacture, distribution, research and development of medical devices
MicroPort CardioFlow Medtech Corporation ("MP CardioFlow") (iv)&(vi)	Cayman Islands	US$12,047/US$50,000	47.26%	44.88%	Investment holding

(Expressed in United States dollars unless otherwise indicated)

13 INVESTMENTS IN SUBSIDIARIES (CONTINUED)

Name of company	Place of incorporation and business	Issued/ registered capital	Proportion of ownership interest As at 31 December 2022	Proportion of ownership interest As at 31 December 2021	Principal activity
Shanghai MicroPort CardioFlow Medtech Co., Ltd. (上海微創心通醫療科技有限公司) (i)&(iv)	The PRC	RMB1,170,000,000/ RMB1,470,000,000	47.26%	44.88%	Manufacture, distribution, research and development of heart valve devices
Shanghai MicroPort MedBot (Group) Co., Ltd. ("MP MedBot") (上海微創醫療機器人(集團)股份有限公司) (iii)&(iv)	The PRC	RMB958,593,831	50.52%	50.47%	Manufacture, research and development of surgical robot devices
Fujian Kerui Pharmaceutical Co., Ltd. ("Kerui Pharma") (福建科瑞藥業有限公司)(ii)&(v)	The PRC	RMB25,000,000	52%	45%	Manufacture, distribution, research and development of active pharmaceutical ingredients
Shenzhen MicroPort Surgical Medical (Group) Co., Ltd. ("Shenzhen Surgical") (深圳微創外科醫療(集團)有限公司) (ii)&(vii)	The PRC	RMB213,066,134/ RMB217,135,134	59.56%	62.58%	Manufacture, distribution, research and development of surgical devices
MicroImaging (Shenzhen) Medical Equipment Co., Ltd ("Shenzhen MicroImaging") (深圳微創蹤影醫療裝備有限公司) (note 30(c)) (i)	The PRC	RMB306,734,375/ RMB312,500,000	70.09%	88.48%	Manufacture, distribution, research and development of intravascular imaging devices
Suzhou MicroPort Argus Medtech Co., Ltd. ("Suzhou Argus") (蘇州微創阿格斯醫療科技有限公司) (ii)&(viii)	The PRC	RMB13,153,929/ RMB13,587,242	35.75%	51%	Manufacture, distribution, research and development of intravascular imaging devices
MicroPort Urocare (Jiaxing) Co., Ltd. (微創優通醫療科技(嘉興)有限公司) (iii)	The PRC	RMB90,068,333/ RMB91,590,909	74.14%	74.14%	Manufacture, distribution, research and development of medical devices
MicroPort Vision Power MedTech (Shanghai) Co., Ltd. ("Vision Power") (微創視神醫療科技(上海)有限公司) (ii)	The PRC	RMB109,032,988/ RMB115,078,500	83.46%	89.07%	Research and development of ophthalmology related medical devices
MicroPort Medical (Jiaxing) Co., Ltd. (嘉興微創醫療科技有限公司) (i)	The PRC	RMB350,000,000/ RMB390,000,000	100%	100%	Research and development of medical devices
Hemovent GmbH ("Hemovent")	Germany	EUR126,592	100%	100%	Manufacture, research and development of surgical devices
MicroPort Scientific S.R.L	Italy	EUR2,000,000	85.17%	85.17%	Distribution of medical devices

(Expressed in United States dollars unless otherwise indicated)

13 INVESTMENTS IN SUBSIDIARIES (CONTINUED)

Name of company	Place of incorporation and business	Issued/ registered capital	Proportion of ownership interest As at 31 December 2022	Proportion of ownership interest As at 31 December 2021	Principal activity
MicroPort Orthopedics Japan K.K.	Japan	JPY100,000,000	85.17%	85.17%	Distribution of medical devices
MicroPort Scientific Ltd.	United Kingdom	GBP1	85.17%	85.17%	Distribution of medical devices
Sorin CRM SAS	France	EUR172,225,702	76.88%	76.88%	Manufacture of cardiac rhythm management devices
Sorin Group DR, S.R.L	Dominican Republic	US$26,502,400	76.88%	76.88%	Manufacture of cardiac rhythm management devices
MicroPort CRM S.R.L	Italy	EUR3,932,700	76.88%	76.88%	Manufacture, distribution, research and development of cardiac rhythm management devices
MicroPort Cardiac Rhythm B.V.	Netherlands	EUR133	76.88%	76.88%	Investment holding
MicroPort Cardiac Rhythm Management Limited ("CRM Cayman")	Cayman Islands	US$50,000	76.88%	76.88%	Investment holding
MicroPort CRM B.V.	Netherlands	EUR1	76.88%	76.88%	Distribution of medical devices

Notes:

(i) These subsidiaries are wholly foreign-owned enterprises.

(ii) These subsidiaries are domestic enterprises.

(iii) These subsidiaries are sino-foreign equity joint venture enterprises. These entities are accounted for as the Group's subsidiaries as they are controlled by the Group.

(iv) Management believe the Group retains control over MP Endo and MP CardioFlow even though it holds less than half of the voting rights of MP Endo and MP CardioFlow. In making this judgement, the Group has taken into account that the Group continues to be the single major shareholder of MP Endo and MP CardioFlow and holds relatively larger voting rights than other dispersed public shareholders in aggregate.

(v) In December 2022, the Group purchased 7% equity interest in Kerui Pharma from its non-controlling shareholder of Kerui Pharma at a consideration of US$2,480,000. Accordingly, as at 31 December 2022, the Group's effective interest in Kerui Pharma increased to 52%.

(vi) In April and May 2022, the Group purchased a total of 34,205,000 ordinary shares of MP CardioFlow through the Stock Exchange at an aggregated consideration of US$12,501,000. In addition, in accordance with the Group's bonus distribution plan (see note 28(e), the Group purchased certain shares of MP CardioFlow and MP MedBot at a cash consideration totalling US$5,388,000 and granted part of these shares to employees of the Group. As a result of the above transaction, the Group's effective interest in MP CardioFlow and MP MedBot as at 31 December 2022 has increased to 47.26% and 50.52%, respectively.

(vii) As disclosed in note 30(a), in April 2022, certain investors subscribed for newly issued share capital of Shenzhen Surgical at a consideration of US$20,730,000. In addition, the Group also made contributions to Shenzhen Surgical at a cash consideration of US$10,159,000. As a result, the Group's interest in Shenzhen Surgical decreased to 59.56% as at 31 December 2022.

(viii) As at 31 December 2022, Shenzhen MicroImaging directly held 51% equity interest in Suzhou Argus and the Group held 70.09% equity interest in Shenzhen MicroImaging.

13 INVESTMENTS IN SUBSIDIARIES (CONTINUED)

The following table lists out the information relating to Group's subsidiaries that have material non-controlling interests ("NCI") as at 31 December 2022. The summarised financial information presented below represents the amounts before any inter-company elimination.

	2022					
	MP Endo US$'000	MP MedBot US$'000	MP CardioFlow US$'000	MP NeuroTech US$'000	Other individually immaterial subsidiaries US$'000	Total US$'000
NCI percentage	53.66%	49.53%	52.84%	46.65%		
Current assets	185,846	157,772	325,925	184,459		
Non-current assets	101,239	119,361	104,742	76,432		
Current liabilities	(26,826)	(46,710)	(25,447)	(35,006)		
Non-current liabilities	(9,428)	(28,276)	(10,096)	(12,570)		
Net assets	250,831	202,147	395,124	213,315		
Carrying amount of NCI	136,190	99,151	208,784	100,496	113,017	657,638
Revenue	133,179	3,197	37,149	80,164		
Profit/(loss) for the year	52,450	(169,636)	(67,419)	(4,389)		
Total comprehensive income	32,712	(196,514)	(76,941)	(10,963)		
Profit/(loss) allocated to NCI	27,626	(84,855)	(35,803)	(286)	(58,282)	(151,600)
Dividend paid to NCI	(12,085)	–	–	–	–	(12,085)
Cash flows from operating activities	48,792	(132,964)	(28,926)	31,622		
Cash flows from investing activities	(65,753)	(39,636)	(24,691)	(45,045)		
Cash flows from financing activities	(23,682)	(4,136)	(20,189)	48,190		

13 INVESTMENTS IN SUBSIDIARIES (CONTINUED)

	2021				
	MP Endo US$'000	MP MedBot US$'000	MP CardioFlow US$'000	Other individually immaterial subsidiaries US$'000	Total US$'000
NCI percentage	53.66%	49.53%	55.12%		
Current assets	230,029	327,512	407,766		
Non-current assets	45,716	109,383	118,976		
Current liabilities	(26,123)	(35,774)	(25,078)		
Non-current liabilities	(10,888)	(25,679)	(15,869)		
Net assets	238,734	375,442	485,795		
Carrying amount of NCI	130,128	185,739	267,770	143,105	726,742
Revenue	106,188	333	31,146		
Profit/(loss) for the year	48,762	(106,527)	(28,502)		
Total comprehensive income	53,732	(99,310)	(24,499)		
Profit/(loss) allocated to NCI	25,997	(50,566)	(14,952)	(35,290)	(74,811)
Dividend paid to NCI	(5,290)	–	–	–	(5,290)
Cash flows from operating activities	46,014	(83,880)	(25,049)		
Cash flows from investing activities	(11,010)	(61,509)	(67,388)		
Cash flows from financing activities	(6,181)	215,939	345,321		

14 EQUITY-ACCOUNTED INVESTEES

	2022 US$'000	2021 US$'000
Investments in equity-accounted investees	**419,240**	362,299
Amounts due from and other convertible debt securities issued by equity-accounted investees	**4,633**	804
	423,873	363,103

The following list contains only the particulars of material equity-accounted investees:

Name of equity-accounted investees	Form of business structures	Place of incorporation and business	Particulars of issued and paid up capital	Proportion of ownership interest: Group's effective interests	Proportion of ownership interest: Held by the Company	Proportion of ownership interest: Held by a subsidiary	Principal Activity
Shanghai MicroPort EP MedTech Co., Ltd. ("EP MedTech") (i)	Incorporated	The PRC	RMB471 million	32.7%	–	32.7%	Manufacture, distribution, R&D of electrophysiology devices
Shanghai Huarui Bank Co., Ltd. ("SHRB") (ii)	Incorporated	The PRC	RMB3 billion	13.8%	–	13.8%	Commercial bank providing wholesale and retail banking products and service

Notes:

(i) In August 2022, EP Medtech was listed on the Sci-Tech Innovation Board of the Shanghai Stock Exchange (the "EP Listing") and issued 70,600,000 ordinary shares at the price of RMB16.51 per share. The Group's effective interests in EP Medtech was diluted to 32.7% and retained its significant influence over EP Medtech. The dilution of the interests in EP Medtech was treated as a deem disposal of partial interest in EP Medtech and a dilution gain of US$35,397,000 was recognised in profit or loss of the Group. As at 31 December 2022, the fair value of the shares of EP Medtech held by the Group is approximately US$585 million, which is referenced to its quoted market price.

(ii) SHRB is an unlisted corporate entity whose quoted market price is not available.

(iii) Apart from the above-mentioned dilution gain arising from the EP Listing, during the year ended 31 December 2022, several equity-accounted investees of the Group also completed new rounds of financing resulting a dilution gain of US$3,870,000.

14 EQUITY-ACCOUNTED INVESTEES (CONTINUED)

Summarised financial information of the material equity-accounted investees, adjusted for any differences in accounting policies, and reconciled to the carrying amounts in the consolidated financial statements, are disclosed below:

	EP Medtech	
	2022 US$'000	2021 US$'000
Gross amount		
Current assets	**230,215**	79,745
Non-current assets	**34,542**	34,784
Current liabilities	**(11,173)**	(7,326)
Non-current liabilities	**(5,873)**	(5,098)
Equity	**247,711**	102,105
Revenue	**38,522**	29,474
Loss for the year	**(1,330)**	(8,987)
Total comprehensive income	**(1,330)**	(8,987)
Reconciled to the Group's interest in equity-accounted investees		
Gross amounts of net assets of equity-accounted investees	**247,711**	102,105
Group's effective interest	**32.7%**	42.2%
Group's share of net assets of equity-accounted investees	**81,001**	43,088
Goodwill	**33,409**	45,575
Dilution effect of share-based payments arrangement of an equity-accounted investee	**(2,208)**	(691)
Carrying amount in the consolidated financial statements	**112,202**	87,972

14 EQUITY-ACCOUNTED INVESTEES (CONTINUED)

	SHRB	
	2022 US$'000	From the acquisition date to 31 December 2021 US$'000
Gross amount		
Total assets	**6,091,538**	7,206,540
Total liabilities	**5,504,628**	6,523,013
Equity	**586,910**	683,527
Net operating income (Note)	**144,871**	248,286
(Loss)/profit for the year/period	**(50,536)**	24,794
Other comprehensive income	**10,954**	816
Total comprehensive income	**(39,582)**	25,610
Reconciled to the Group's interest in equity-accounted investees		
Gross amounts of net assets of equity-accounted investees	**586,014**	683,527
Group's effective interest	**13.8%**	13.8%
Group's share of net assets of equity-accounted investees	**80,870**	94,327
Goodwill	**1,330**	1,453
Group's carrying amount in the consolidated financial statements	**82,200**	95,780

Note: Net operating income represents the sum of net interest income, net fee and commission income and other net income of the equity-accounted investee for each reporting period.

Aggregate information of equity-accounted investees that are not individually material:

	2022 US$'000	2021 US$'000
Aggregate carrying amount of individually immaterial investment in equity-accounted investees	**224,838**	179,351
Aggregate amounts of the Group's share of those equity-accounted investees		
Loss for the year	**(35,176)**	(12,885)
Other comprehensive income	**292**	(302)
Total comprehensive income	**(35,486)**	(13,187)

All of the Group's investments in equity-accounted investees are accounted for using the equity method in the consolidated financial statements.

15 FINANCIAL ASSETS MEASURED AT FVPL

	2022 US$'000	2021 US$'000
Non-current assets		
Unlisted equity securities outside Hong Kong	**16,279**	21,919
Unlisted debt securities outside Hong Kong	**1,793**	3,302
	18,072	25,221
Current assets		
Wealth management products (Note)	**38,201**	–

Note: As at 31 December 2022, the Group's current portion of financial assets measured at FVPL represented wealth management products purchased from certain segregated portfolio companies incorporated in the Cayman Islands with a principal amount of US$37,950,000 at an expected return rate of 1.6% per annum. These wealth management products are subject to a lock-up period of one month and can be redeemed by the Group at any time upon expiration of the lock-up period.

16 OTHER NON-CURRENT ASSETS

	2022 US$'000	2021 US$'000
Lease and security deposits (Note)	**46,940**	47,075
Income tax recoverable (note 25(a))	**13,127**	13,500
Lease receivables	**5,539**	–
Value-added tax recoverable	**3,280**	20,575
Prepayment for non-current assets	**16,937**	18,159
Others	**8,258**	3,343
	94,081	102,652

Note: Lease and security deposits are typically paid for leased properties, which are refundable after the expiry of the leases. The Group entered into a 5-year lease agreement (the "Lease Agreement") with Shanghai Huiqingcheng Investment Management Co., Ltd. ("Huiqingcheng Investment") in respect of certain leasehold properties for use of manufacturing facilities, warehouses and office buildings. As at 31 December 2022, the carrying amount of lease and security deposits paid to Huiqingcheng Investment is US$40,827,000 (31 December 2021: US$45,549,000).

17 DERIVATIVE FINANCIAL INSTRUMENTS

	2022 US$'000	2021 US$'000
Derivative financial assets		
– Call options to acquire additional interests in a subsidiary from NCI (iii)	**5,083**	4,963
– Warrants issued by an equity-accounted investee	**–**	1,406
	5,083	6,369
Derivative financial liabilities		
– Put options written to SRL (i)	**871**	1,651
– Put options written to Witney Global Limited ("Witney Put Option") (ii)	**3,262**	1,239
– Foreign currency forward contract	**39**	–
	4,172	2,890
Less: amount included under "current liabilities"	**(4,172)**	–
	–	2,890

Notes:

(i) Pursuant to the latest shareholders' agreement among CRM Cayman and its existing shareholders, in the event that an initial public offering ("IPO") or a trade sale of the CRM business has not occurred on or prior to 30 April 2023, SRL has the right to require the Company to purchase any or all of series A preferred shares of CRM Cayman held by SRL at a price equal to the original investment being US$45,894,000 plus an annual internal return of 8%.

Upon receipt of SRL's notice of exercising the SRL Put Option, the Company shall have the right to decide whether to pay its consideration in cash or by issuing to SRL new shares of the Company, or with a combination of cash and shares of the Company. The SRL Put Option is considered to be a derivative financial liability which was measured at fair value on initial recognition.

As at 31 December 2022, as the fair value of the underlying equity of CRM business is higher than the redemption amount, fair value of the SRL Put Option approximates to US$871,000 by using the Black-Scholes option pricing model (see note 31(e)).

(ii) In January 2019, the Group granted a put option to Witney Global Limited ("Witney"), who is a co-investor of certain investees in which the Group also invested. Pursuant to the terms of the Witney Put Option, in the event of these investees' failure to submit a feasibility study protocol or clinical trial protocol to the relevant authorities in overseas markets or a qualified exit not occurring before the fifth anniversary of the investments made by Witney, Witney has the right to require the Group to purchase any of all of the interests in above investees held by Witney at a price equal to the original investment totalling US$4,900,000 plus interests at 3.65% per annum by cash.

(iii) In October 2021, the Group entered into an equity transfer and capital increase agreement in connection with the acquisition of Suzhou Argus, pursuant to which, the Group was granted a call option (the "Argus Call Option") to acquire entire or part of equity interests in Suzhou Argus held by its NCI at an exercise price based on the predetermined formula associated with certain milestone achievements and other factors. The Argus Call Option can be exercised on or before 30 June 2025 and upon the exercise of the Argus Call Option, the Group shall pay its consideration in cash or with the unanimous approval from the Group and person designated by NCI of Suzhou Argus, in combination with shares of a designated subsidiary of the Group. The Argus Call Option is classified as a derivative financial asset which was measured at fair value.

18 INVENTORIES

(a) Inventories in the consolidated statement of financial position comprise:

	2022 US$'000	2021 US$'000
Raw materials	**120,953**	90,282
Work in progress	**72,770**	54,784
Finished goods	**158,705**	144,865
	352,428	289,931

(b) The analysis of the amount of inventories recognised as an expense and included in profit or loss is as follows:

	2022 US$'000	2021 US$'000
Carrying amount of inventories sold	**332,080**	269,940
Write down of inventories	**6,782**	6,492
Reversal of write down of inventories	**(271)**	(407)
Cost of inventories directly recognised as research and development costs and distribution costs	**53,519**	45,585
	392,110	321,610

19 TRADE AND OTHER RECEIVABLES

	31 December 2022 US$'000	31 December 2021 US$'000
Trade receivables due from:		
– third party customers	**183,387**	192,958
– related parties	**3,175**	4,060
	186,562	197,018
Less: Loss allowance (note 31(a))	**(15,689)**	(11,222)
Trade receivables, net of loss allowance	**170,873**	185,796
Other debtors	**12,532**	41,780
Amounts due from investors in connection of the restructuring of the neurovascular devices business	**–**	10,457
Income tax recoverable	**3,347**	4,575
Deposits and prepayments	**98,081**	65,518
	284,833	308,126

All of the above trade and other receivables are expected to be recovered or recognised as expense within one year.

Ageing analysis

As of the end of the reporting period, the ageing analysis of trade debtors (which are included in trade and other receivables), based on the invoice date and net of loss allowance, is as follows:

	2022 US$'000	2021 US$'000
Within 1 month	**74,650**	121,960
1 to 3 months	**69,211**	31,253
3 to 12 months	**23,508**	30,878
More than 12 months	**3,504**	1,705
	170,873	185,796

Further details of the Group's credit policy and credit risk arising from trade debtors and lease receivables are set out in note 31(a).

20 PLEDGED DEPOSITS AND TIME DEPOSIT, CASH AND CASH EQUIVALENTS AND OTHER CASH FLOW INFORMATION

(a) Pledged deposits and time deposits:

	2022 US$'000	2021 US$'000
Deposits with original maturities over three months	**57,384**	31,635
Pledged deposits	**3,381**	1,255
	60,765	32,890

(b) Cash and cash equivalents

As at 31 December 2022, the balance of the deposits in the designated bank accounts of MP Endo is US$40,511,000 (2021: US$67,326,000) which is not available for general usage and could only be used for purposes specified in the IPO prospectus of MP Endo.

As at 31 December 2022, cash and cash equivalents situated in Chinese Mainland amounted to US$549,667,000 (2021: US$887,346,000), which are not freely remissible to the Company as the remittance of funds out of Chinese Mainland is subject to relevant rules and regulations of foreign currency exchange control.

20 PLEDGED DEPOSITS AND TIME DEPOSIT, CASH AND CASH EQUIVALENTS AND OTHER CASH FLOW INFORMATION (CONTINUED)

(c) Reconciliation of loss before taxation to cash generated from operations:

	Note	2022 US$'000	2021 US$'000
Loss before taxation		**(581,518)**	(337,324)
Adjustments for:			
Amortisation and depreciation	*5(d)*	**141,347**	93,479
Impairment loss on intangible assets	*5(d)*	**7,050**	150
Impairment loss on property, plant and equipment	*5(d)*	**32**	251
Impairment loss on goodwill	*5(d)*	**16,481**	–
Finance costs	*5(a)*	**73,912**	42,710
Interest income		**(993)**	(1,087)
Gain on disposal of subsidiaries		**(7,107)**	(8,218)
Changes in fair value of financial instruments carried at FVPL	*4*	**751**	(25,707)
Net loss on disposal of property, plant and equipment	*4*	**455**	412
Gain on disposal of interests in equity-accounted investees		**(39,267)**	(9,215)
Share of profits less losses of equity-accounted investees		**42,541**	13,255
Equity-settled share-based payment expenses	*5(b)*	**72,803**	91,345
Others		**2,816**	7,518
Changes in working capital:			
Increase in inventories		**(79,330)**	(51,781)
Decrease/(increase) in trade and other receivables		**23,646**	(86,156)
Decrease/(increase) in trade and other payables		**(18,363)**	117,404
Decrease in contract liabilities		**(1,241)**	(41,892)
Increase/(decrease) in deferred income		**5,964**	(4,989)
Cash used in operations		**(340,021)**	(199,845)

20 PLEDGED DEPOSITS AND TIME DEPOSIT, CASH AND CASH EQUIVALENTS AND OTHER CASH FLOW INFORMATION (CONTINUED)

(d) Reconciliation of liabilities arising from financing activities

The table below details changes in the Group's liabilities from financing activities, including both cash and non-cash changes. Liabilities arising from financing activities are liabilities for which cash flows were, or future cash flows will be, classified in the Group's consolidated cash flow statement as cash flows from financing activities.

	Interest-bearing borrowings (note 23) US$'000	Convertible notes (note 27) US$'000	Preferred shares issued by subsidiaries (note 21) US$'000	Lease liabilities (note 24) US$'000	Total US$'000
At 1 January 2022	**364,383**	**660,369**	**365,903**	**218,942**	**1,609,597**
Changes from financing cash flows:					
Proceeds from interest-bearing borrowings, net of transaction costs	**375,244**	**–**	**–**	**–**	**375,244**
Proceeds from issuance of convertible bonds by a subsidiary, net of transaction costs	**–**	**88,790**	**–**	**–**	**88,790**
Repayments of interest-bearing borrowings	**(186,724)**	**–**	**–**	**–**	**(186,724)**
Interest paid for interest-bearing borrowings	**(14,164)**	**–**	**–**	**–**	**(14,164)**
Capital element of lease rentals paid	**–**	**–**	**–**	**(44,170)**	**(44,170)**
Interest element of lease rentals paid	**–**	**–**	**–**	**(9,492)**	**(9,492)**
Total changes from financing cash flows	**174,356**	**88,790**	**–**	**(53,662)**	**209,484**
Exchange adjustments	**(29,788)**	**–**	**–**	**(16,978)**	**(46,766)**
Changes in fair value	**–**	**2,930**	**–**	**–**	**2,930**
Other changes:					
Interest charge (note 5(a))	**13,125**	**16,254**	**34,958**	**9,575**	**73,912**
Transaction cost	**–**	**1,210**	**–**	**–**	**1,210**
Increase in lease liabilities from entering into new leases during the year	**–**	**–**	**–**	**18,440**	**18,440**
Conversion of the preferred shares into ordinary shares	**–**	**–**	**(208,698)**	**–**	**(208,698)**
Total other changes	**13,125**	**17,464**	**(173,740)**	**28,015**	**(115,136)**
At 31 December 2022	**522,076**	**769,553**	**192,163**	**176,317**	**1,660,109**

20 PLEDGED DEPOSITS AND TIME DEPOSIT, CASH AND CASH EQUIVALENTS AND OTHER CASH FLOW INFORMATION (CONTINUED)

(d) Reconciliation of liabilities arising from financing activities (continued)

	Interest-bearing borrowings (note 23) US$'000	Convertible notes (note 27) US$'000	Preferred shares issued by subsidiaries (note 21) US$'000	Lease liabilities (note 24) US$'000	Interest rate swaps held to hedge borrowings (liabilities) US$'000	Total US$'000
At 1 January 2021	192,879	48,583	264,937	54,848	410	561,657
Changes from financing cash flows:						
Proceeds from interest-bearing borrowings, net of transaction costs	311,005	–	–	–	–	311,005
Proceeds from issuance of convertible bonds of the Company, net of transaction costs	–	689,471	–	–	–	689,471
Proceeds from issuance of convertible bonds by a subsidiary	–	20,000	–	–	–	20,000
Repayments of interest-bearing borrowings	(132,404)	–	–	–	–	(132,404)
Interest paid for interest-bearing borrowings	(6,513)	(2,762)	–	–	–	(9,275)
Proceeds from issuance of preferred shares	–	–	134,260	–	–	134,260
Proceeds from disposal of interests in a subsidiary without losing control	–	–	118,740	–	–	118,740
Capital element of lease rentals paid	–	–	–	(11,176)	–	(11,176)
Interest element of lease rentals paid	–	–	–	(5,110)	–	(5,110)
Total changes from financing cash flows	172,088	706,709	253,000	(16,286)	–	1,115,511

20 PLEDGED DEPOSITS AND TIME DEPOSIT, CASH AND CASH EQUIVALENTS AND OTHER CASH FLOW INFORMATION (CONTINUED)

(d) Reconciliation of liabilities arising from financing activities (continued)

	Interest-bearing borrowings (note 23) US$'000	Convertible notes (note 27) US$'000	Preferred shares issued by subsidiaries (note 21) US$'000	Lease liabilities (note 24) US$'000	Interest rate swaps held to hedge borrowings (liabilities) US$'000	Total US$'000
Exchange adjustments	2,179	–	–	(36)	(37)	2,106
Changes in fair value	–	–	–	(373)	(373)	–
Other changes:						
Interest charge (note 5(a))	6,433	12,375	18,111	5,791	–	42,710
Disposal of subsidiaries	(9,196)	–	–	–	–	(9,196)
Exercise of Series D Adjustment	–	–	9,445	–	–	9,445
Increase in lease liabilities from entering into new leases during the year	–	–	–	174,625	–	174,625
Initial recognition of equity components of financial instruments	–	(38,622)	(32,514)	–	–	(71,136)
Exchange of the convertible bonds and the preferred shares issued by a subsidiary	–	(68,676)	60,812	–	–	(7,864)
Conversion of the preferred shares into ordinary shares	–	–	(207,888)	–	–	(207,888)
Total other changes	(2,763)	(94,923)	(152,034)	180,416	–	(69,304)
At 31 December 2021	364,383	660,369	365,903	218,942	–	1,609,597

20 PLEDGED DEPOSITS AND TIME DEPOSIT, CASH AND CASH EQUIVALENTS AND OTHER CASH FLOW INFORMATION (CONTINUED)

(e) Total cash outflow for leases

Amounts included in the cash flow statement for leases comprise the following:

	2022 US$'000	2021 US$'000
Within operating cash flows	**3,401**	1,212
Within investing cash flows	**20,684**	–
Within financing cash flows	**53,662**	16,286
	77,747	17,498
These amounts relate to the following:		
Lease rentals paid	**57,063**	17,498
Purchase of leasehold property	**20,684**	–
	77,747	17,498

(f) Advances to MicroPort Holdings Co., Ltd. ("MP Holdings")

In July and October 2022, the Company provided advances of US$25,000,000 and US$25,000,000, respectively to MP Holdings, whose beneficial owners primarily consist of management of the Company. MP Holdings repaid the advances of US$25,000,000 and US$25,000,000 in September and December 2022, respectively. As MP Holdings is not under the control or joint control of the director or other key management personnel of the Group, the directors of the Group believe MP Holdings is not a related party of the Group in accordance with the accounting policies set out in note 1(dd).

21 TRADE AND OTHER PAYABLES

	31 December 2022 US$'000	31 December 2021 US$'000
Current		
Trade payables due to:		
– third party suppliers	**134,251**	120,251
– a related party	**9,010**	10,803
Total trade payables (i)	**143,261**	131,054
Consideration payables in connection with the acquisition of subsidiaries (iii)	**23,499**	16,081
Other payables and accrued charges	**213,794**	211,657
	380,554	358,792
Non-current		
Share repurchase obligations (ii)	**192,163**	365,903
Consideration in connection with the acquisition of a subsidiary (iii)	**8,823**	32,179
Net defined benefit obligation (note 5(b)(ii)&(iii))	**9,510**	11,118
Other payables	**10,501**	16,714
	220,997	425,914

All current trade and other payables are expected to be settled within one year or are repayable on demand.

Notes:

(i) As of the end of the reporting period, the ageing analysis of the trade payables based on invoice date is as follows:

	2022 US$'000	2021 US$'000
Within 1 month	**111,694**	110,136
Over 1 month but within 3 months	**16,794**	8,662
Over 3 months but within 6 months	**3,169**	6,985
Over 6 months but within 1 year	**4,806**	1,241
Over 1 year	**6,798**	4,030
	143,261	131,054

21 TRADE AND OTHER PAYABLES (CONTINUED)

Notes: (continued)

(ii) Share repurchase obligations

As at 31 December 2021, CRM Cayman and MP NeuroTech issued preferred shares to certain investors in connection with their separate financings. These preferred shares include liquidation preference right, redemption right and conversion right, etc., granted to the investors.

As these preferred shares can be converted into ordinary shares of respective subsidiary where the number of shares to be issued is fixed, the conversion right is recognised as equity component. The redemption obligations embedded in these preferred shares, which are settled by cash, give rise to financial liabilities, which are measured at the highest of those amounts that could be payable, and on a present value basis. If the redemption obligations are undertaken by the issuer itself, the subsequent changes of liabilities under amortised costs are recognised in profit or loss directly.

Upon the completion of the NeuroTech Listing (as defined in note 30(b)), in July 2022, the preferred shares issued by MP NeuroTech were automatically converted into the ordinary shares of MP NeuroTech. Accordingly, these preferred shares were reclassified from liabilities to equity.

Movements of the share repurchase obligations arising from these preferred shares are as follows:

	Preferred shares issued by CRM Cayman US$'000	Preferred shares issued by MP NeuroTech US$'000	Total US$'000
As at 1 January 2022	171,730	194,173	365,903
Conversion of the preferred shares into ordinary shares of a subsidiary	–	(208,698)	(208,698)
Charge to finance costs (note 5(a))	20,433	14,525	34,958
As at 31 December 2022	192,163	–	192,163

(iii) Consideration in business combinations

The consideration payable in connection with the acquisition of subsidiaries primarily includes the contingent consideration payable to the former shareholders of Hemovent, subject to certain milestones and conditions within 5 years from October 2021. The contingent consideration is measured at fair value with subsequent changes charged into profit or loss. As at 31 December 2022, the fair value of the outstanding contingent consideration in relation to the acquisition of Hemovent is US$$28,732,000 (2021: US$39,633,000). Valuation techniques and significant assumptions for determining the fair value of the contingent consideration was set out in note 31(e).

22 CONTRACT LIABILITIES

	31 December 2022 US$'000	31 December 2021 US$'000
Current		
Unfulfilled performance obligations	**9,291**	11,682
Advanced receipts from customers for sales of medical devices	**9,529**	4,815
Others	**3,778**	7,093
	22,598	23,590
Non-current		
Unfulfilled performance obligations	**24,583**	26,227
Others	**256**	16
	24,839	26,243

Movements in contract liabilities

	2022 US$'000	2021 US$'000
Balance at 1 January	**49,833**	91,863
Exchange adjustments	**(1,942)**	(2,158)
Decrease in contract liabilities as a result of recognising revenue during the year that was included in the contract liabilities as at 1 January	**(23,951)**	(58,736)
Net movement in sales discounts	**14,425**	(671)
Increase in contract liabilities as a result of receiving advance payments during the year	**2,792**	15,383
Increase in contract liabilities as a result of accruing interest expense on advances	**6,280**	4,152
Balance at 31 December	**47,437**	49,833

23 INTEREST-BEARING BORROWINGS

As of the end of the reporting period, the interest-bearing borrowings were repayable as follows:

	2022 US$'000	2021 US$'000
Within 1 year or on demand	**185,387**	94,746
After 1 year but within 2 years	**68,460**	33,545
After 2 years but within 5 years	**187,697**	155,714
After 5 years	**80,532**	80,378
	336,689	269,637
	522,076	364,383

As of the end of the reporting period, the interest-bearing borrowings were secured as follows:

	2022 US$'000	2021 US$'000
Bank loans		
– secured	**236,427**	131,176
– unsecured	**285,649**	233,207
	522,076	364,383

At 31 December 2022, the bank facilities drawn down by the Group of US$92,665,000 (2021: US$71,283,000) were secured by land use rights and buildings held for own use with net book value of US$10,220,000 and US$138,443,000, respectively (2021: US$9,173,000 and US$91,984,000, respectively).

23 INTEREST-BEARING BORROWINGS (CONTINUED)

At 31 December 2022, the bank loans totalling US$143,762,000 (31 December 2021: US$59,893,000) were secured by the Group's equity interest in several subsidiaries including Suzhou Argus, Vision Power, Hemovent and Shanghai MicroPort Huanbo Medtech Co., Ltd., etc.

Part of the Group's banking facilities are subject to the fulfilment of covenants relating to certain of the Group's financial ratios, as are commonly found in lending arrangements with financial institutions. If the Group were to breach the covenants the drawn down facilities would become payable on demand. The Group regularly monitors its compliance with these covenants. Further details of the Group's management of liquidity risk are set out in note 31(b). As at 31 December 2022 and 2021, none of the covenants relating to drawn down facilities had been breached.

24 LEASE LIABILITIES

The following table shows the remaining contractual maturities of the Group's lease liabilities:

	2022	2021
	US$'000	US$'000
Within 1 year or on demand	**51,944**	50,505
After 1 year but within 2 years	**47,802**	48,584
After 2 years but within 5 years	**75,260**	115,024
After 5 years	**1,311**	4,829
	124,373	168,437
	176,317	218,942

25 INCOME TAX IN THE CONSOLIDATED STATEMENT OF FINANCIAL POSITION

(a) Current taxation in the consolidated statement of financial position represents:

	2022 US$'000	2021 US$'000
Represented by:		
Current income tax recoverable	**(3,347)**	(4,575)
Non-current income tax recoverable	**(13,127)**	(13,500)
Income tax payable	**17,470**	19,124
	996	1,049

Income tax recoverable primarily represents to a tax credit of US$16,474,000 (2021: US$17,500,000) from French government, which is an incentive tax programme to support the research and development projects of a subsidiary in France ("France CIR"). The French CIR is deductible from the following 3 years' income tax or is receivable from the France government after 3 years if there is no sufficient profits available to deduct such research and development costs. As at 31 December 2022, the France CIR are classified as current and non-current receivables amounting US$3,347,000 and US$13,127,000 (2021: US$4,000,000 and US$13,500,000), respectively.

25 INCOME TAX IN THE CONSOLIDATED STATEMENT OF FINANCIAL POSITION (CONTINUED)

(b) Deferred tax (assets)/liabilities recognised:

The components of deferred tax (assets)/liabilities recognised in the consolidated statement of financial position and the movements during the year are as follows:

	Accrued expense US$'000	Withholding tax on retained profits of PRC subsidiaries US$'000	Fair value adjustments in respect of net assets acquired in business combinations US$'000	Unused tax losses and others US$'000	Total US$'000
Deferred tax arising from:					
At 1 January 2021	(16,119)	2,754	2,565	(580)	(11,380)
Exchange adjustments	140	17	(282)	(493)	(618)
Acquisition of subsidiaries	–	–	23,143	–	23,143
Charged/(credited) to profit or loss (note 6(a))	2,305	818	(524)	(6,420)	(3,821)
At 31 December 2021 and 1 January 2022	(13,674)	3,589	24,902	(7,493)	7,324
Exchange adjustments	663	–	(2,044)	774	(607)
Charged/(credited) to profit or loss (note 6(a))	(2,634)	–	(1,194)	(5,808)	(9,636)
At 31 December 2022	(15,645)	3,589	21,664	(12,527)	(2,919)

Reconciliation to the consolidated statement of financial position:

	2022 US$'000	2021 US$'000
Net deferred tax assets recognised in the consolidated statement of financial position	**(27,637)**	(20,368)
Net deferred tax liabilities recognised in the consolidated statement of financial position	**24,718**	27,692
	(2,919)	7,324

25 INCOME TAX IN THE CONSOLIDATED STATEMENT OF FINANCIAL POSITION (CONTINUED)

(c) Deferred tax assets not recognised

In accordance with the accounting policy set out in note 1(x), the Group has not recognised deferred tax assets in respect of cumulative tax losses attributable to certain subsidiaries of US$1,314,365,000 at 31 December 2022 (2021: US$709,386,000), as the directors consider that it is not probable that future taxable profits against which the losses can be utilised will be available in the relevant tax jurisdictions and entities.

The tax losses incurred by PRC subsidiaries of US$878,477,000 will expire in the period from 2023 to 2032. The tax losses of US$435,888,000 are incurred by subsidiaries in other jurisdictions primarily in US and France, of which tax losses could be carried forward indefinitely.

(d) Deferred tax liabilities not recognised

At 31 December 2022, temporary differences relating to the undistributed profits of PRC subsidiaries amounted to US$201,375,000 (2021: US$167,381,000). Deferred tax liabilities of US$20,138,000 (2021: US$16,738,000) have not been recognised in respect of the tax that would be payable on the distribution of these retained profits as the Group controls the dividend policy of these subsidiaries and it has been determined that it is probable that these profits will not be distributed in the foreseeable future.

26 DEFERRED INCOME

	Government subsidies for research and development projects US$'000
At 1 January 2021	37,844
Additions	5,126
Government grant recognised as other income	(6,115)
Transfer out	(1,575)
Decrease due to disposal of a subsidiary	(1,024)
Exchange adjustments	842
At 31 December 2021 and 1 January 2022	35,098
Additions	9,583
Government grant recognised as other income	(3,264)
Exchange adjustments	(3,294)
At 31 December 2022	38,123

27 CONVERTIBLE BONDS

	2022 US$'000	2021 US$'000
Convertible bonds issued by a subsidiary (a)	**92,930**	–
Convertible bonds issued by the Company (b)	**676,623**	660,369
	769,553	660,369

The movement of the liability component of convertible bonds is set out in note 20(d).

(a) Convertible bonds issued by a subsidiary

In October 2022, CRM Cayman issued convertible bonds with the principal amount of US$90 million (the "CRM Convertible Bonds") to several external investors.

The CRM Convertible Bonds bear the interest rate of LIBOR in US$ plus 5% per annum before 30 June 2023 and Secured Overnight Financing Rate ("SOFR") plus 5.26% per annum on or after 30 June 2023, paid in lieu of cash quarterly. The CRM Convertible Bonds also bear the paid-in-kind interest ("PIK Interest") initially at compound rate of 9% per annum, which shall, as long as no qualified IPO of the shares of CRM Cayman has occurred within 24 months from the issue date, increase by 0.5% per annum quarterly after 24 months. The accumulated unpaid PIK interests shall be annually added to the outstanding principal amount of the CRM Convertible Bonds in order to calculate PIK interests next year.

The maturity date of the CRM Convertible Bonds is three years from the Issue Date, and each bondholder may, in its sole discretion, exercise a one-time option to extend the maturity date for two years for the CRM Convertible Bonds held. Upon the maturity, CRM Cayman shall repay the principal and accumulated cash and PIK interests of outstanding CRM Convertible Bonds. The bondholders also have the right to require CRM Cayman to early redeem the outstanding CRM Convertible Bonds upon the occurrence of any of the events specified in the subscription agreement at the price of the principal amounts and unpaid cash and PIK interests. CRM Cayman has a call option to redeem the outstanding CRM Convertible Bonds at the price of the principal amounts plus interest at compound rate of 15% inclusive of previous interest paid at any time after the completion of a qualify IPO and achievement of certain market value conditions set out in the subscription agreement.

The bondholders have the option to elect to convert part of or the entire outstanding bond, including all accrued but unpaid cash interest and PIK Interests, into CRM Preferred Shares if the conversion to be consummated prior to the completion of IPO of CRM Cayman on the Main Board of the Stock Exchange (the "CRM Listing"), or into fully paid ordinary shares of the CRM Cayman if upon or after the CRM Listing, at the initial conversion price based on the enterprise value of CRM Cayman at US$1.25 billion before issuance of the CRM Convertible Bonds per share (subject to adjustments).

CRM Convertible bonds are designated as financial liabilities at FVPL in accordance with the accounting policies set out in note 1(u). Valuation techniques and significant assumptions for determining the fair values of CRM Convertible Bonds as at 31 December 2022 are set out in note 31(e).

27 CONVERTIBLE BONDS (CONTINUED)

(b) Convertible bonds issued by the Company

In June 2021, the Company issued convertible bonds with a principal amount of US$700 million (the "2021 Convertible Bonds"). The 2021 Convertible Bonds do not bear any interest, which listed on the Stock Exchange. As at 31 December 2022, the quoted market value of the 2021 Convertible Bonds is approximately US$471.6 million.

Pursuant to the terms of the 2021 Convertible Bonds, the bondholders could convert part of or the entire outstanding bond balances at the option of the bondholders into fully paid ordinary shares of the Company at an initial conversion price of HK$92.8163 per share, subject to the adjustment under certain terms and conditions at the fixed exchange rate of HK$7.7594 to US$1 before the maturity date.

The maturity date of the 2021 Convertible Bonds is 11 June 2026 and the Company shall redeem the 2021 Convertible bonds at the price equals to 105.11% of the principal amount on the maturity date. In addition, the bondholders also have a right to require the Company to redeem entire or partial of the 2021 Convertible Bonds on 11 June 2024 at the price equals to the 102.01% of the principal amount.

The 2021 Convertible Bonds are accounted for as compound financial instruments which contain both a liability component and an equity component. The liability component is initially measured as the present value of the future cash flows, discounted at the market rate of interest applicable at the time of initial recognition to similar liabilities that do not have a conversion option. Any excess of proceeds over the amount initially recognised as the liability component is recognised as the equity component. The liability component is subsequently carried at amortised cost. The interest expenses recognised in profit or loss on the liability component is calculated using the effective interest method. The equity component is recognised in the capital reserve until the 2021 Convertible Bonds are either converted or redeemed.

No conversion of the 2021 Convertible Bonds had occurred up to 31 December 2022.

28 SHARE-BASED PAYMENT TRANSACTIONS

(a) Share option plans (equity-settled)

(i) Share option plans adopted by the Company

On 3 September 2010 and 18 June 2020, the Company adopted the share option plans (referred as the "2010 Option Plan" and "2020 Option Plan", respectively), pursuant to which, the board of directors may authorise, at their discretion, the issuance of share options to the executives, employees, external consultants or business associates of the Group. Each option gives the holder the right to subscribe for one ordinary share of the Company.

The terms, conditions and fair values at the grant date of the grants are as follows:

	Number of options	Fair value US$'000	Weighted average fair value per share option US$	Weighted average exercise price US$
Options granted to executives and directors on:				
2 January 2013	500,000	86	0.17	0.55
28 August 2013	250,000	55	0.22	0.64
9 December 2013	400,000	91	0.23	0.72
21 January 2014	650,000	184	0.28	0.69
28 August 2014	500,000	118	0.24	0.61
20 January 2015	29,400,000	4,459	0.15	0.41
30 June 2015	300,000	53	0.18	0.41
7 December 2015	2,000,000	306	0.15	0.39
30 March 2016	40,970,000	6,737	0.16	0.45
27 June 2016	700,000	122	0.17	0.50
23 January 2017	23,340,000	7,308	0.31	0.73
30 March 2017	3,277,472	950	0.29	0.75
25 August 2017	2,000,000	559	0.28	0.96
29 March 2018	2,451,474	1,100	0.45	1.10
24 December 2018	30,739,346	8,425	0.27	0.99
23 January 2019	4,570,994	292	0.06	1.00
1 April 2019	4,061,604	1,283	0.32	0.96
30 August 2019	500,000	131	0.26	0.90
31 March 2020	1,417,997	1,354	0.96	2.26
31 March 2021	795,383	1,676	2.11	5.61
14 May 2021	17,118,723	49,405	2.89	7.39
31 August 2021	6,500,000	20,945	3.22	6.17
2 November 2021	1,740,000	4,095	2.35	4.72
21 January 2022	696,003	936	1.35	3.57
1 April 2022	743,757	658	1.13	2.31
16 May 2022	15,763,657	10,991	0.70	1.82
	191,386,410	122,319		

28 SHARE-BASED PAYMENT TRANSACTIONS (CONTINUED)

(a) Share option plans (equity-settled) (continued)

(i) Share option plans adopted by the Company (continued)

	Number of options	Fair value US$'000	Weighted average fair value per share option US$	Weighted average exercise price US$
Options granted to employees on:				
31 March 2020	345,225	251	0.73	2.26
28 August 2020	750,000	1,018	1.36	4.48
28 December 2020	1,150,000	1,922	1.67	5.44
31 March 2021	654,003	1,287	1.97	5.61
21 January 2022	3,420,334	4,645	1.35	3.57
1 April 2022	10,233,893	10,979	1.41	2.31
16 May 2022	3,356,598	2,340	0.70	1.82
23 June 2022	300,000	375	1.25	2.54
	20,210,053	22,817		
Options granted to consultants and business associates on:				
1 September 2016	750,000	199	0.27	0.64
8 October 2018	500,000	280	0.56	1.29
	1,250,000	479		

The above share options are vested in instalments over an explicit vesting period of one month to seven years. Each instalment is accounted for as a separate share-based compensation arrangement. The contractual life of options is ten years.

(Expressed in United States dollars unless otherwise indicated)

28 SHARE-BASED PAYMENT TRANSACTIONS (CONTINUED)

(a) Share option plans (equity-settled) (continued)

(i) Share option plans adopted by the Company (continued)

The number and weighted average exercise prices of share options are as follows:

	2022		2021	
	Weighted average exercise price US$	**Number of options**	Weighted average exercise price US$	Number of options
Outstanding at the beginning of the year	**2.00**	**130,646,179**	0.81	117,168,421
Granted during the year	**2.20**	**34,595,533**	6.91	26,808,109
Exercised during the year	**0.67**	**(6,852,884)**	0.69	(10,702,263)
Forfeited during the year	**2.61**	**(2,701,228)**	0.23	(2,628,088)
Outstanding at the end of the year	**2.10**	**155,687,600**	2.00	130,646,179
Exercisable at the end of the year	**1.88**	**122,701,466**	1.62	70,735,026

All the share options granted are exercisable by the grantees upon vesting and will expire in a period from January 2023 through June 2032. As at 31 December 2022, the weighted average remaining contractual life for the share options granted under the 2010 and 2020 Share Option plans was 5.13 years (2021: 4.91 years).

The fair value of services received in return for share options is measured by reference to the fair value of share options granted. The estimate of the fair value of the share options granted is measured based on a binomial tree model. The contractual life of the share option is used as an input into this model. Expectations of early exercise are incorporated into the binomial tree model.

Fair value of share options and assumptions	**2022**	2021
Fair value at measurement dates	**HK$3.91 to HK$15.55**	HK$15.35 to HK$25.13
Share price	**HK$17.7 to HK$28.05**	HK$34.65 to HK$57.45
Exercise price	**HK$14.26 to HK$28.05**	HK$36.79 to HK$57.59
Expected volatility (expressed as a weighted average volatility used in the modelling under binomial tree model)	**49.34% to 51.07%**	47.33% to 48.90%
Option life	**10 years**	10 years
Suboptimal exercise factor	**1.3 to 1.5**	1.2 to 1.5
Expected dividend yield	**0.10%**	0.10%
Average risk-free interest rate	**1.80% to 3.10%**	1.19% to 1.68%

(Expressed in United States dollars unless otherwise indicated)

28 SHARE-BASED PAYMENT TRANSACTIONS (CONTINUED)

(a) Share option plans (equity-settled) (continued)

(i) Share option plans adopted by the Company (continued)

The expected volatility is determined by the historical volatility of the Company. Changes in the subjective input assumptions could materially affect the fair value estimate. Expected dividend yield is based on historical dividends.

In respect of share options granted during 2022 and 2021, the service condition has been taken into account in the grant date fair value measurement of the services received. There was no market condition associated with these share options.

The total expenses recognised in the consolidated statement of profit or loss for the above transactions were US$27,805,000 for the year ended 31 December 2022 (2021: US$47,771,000).

(ii) Share option plan adopted by MP CardioFlow

In March 2020, MP CardioFlow adopted its share option scheme (the "CardioFlow SOS"). CardioFlow SOS provides the eligible persons with the options to acquire proprietary interests in MP CardioFlow. Each option gives the holder the right to subscribe for one ordinary share of MP CardioFlow.

During the year ended 31 December 2022, 20,319,000 share options (2021: 11,100,000) were granted under the CardioFlow SOS at a weighted-average exercise price of HK$3.52 (2021: HK$11.68) per share of MP CardioFlow and 5,821,000 share options (2021: 6,554,000 share options) were exercised at a weighted-average exercise price of HK$1.24 (2021: HK$1.13) per share.

The above share options are vested in instalments over an explicit vesting period of five years. Each instalment is accounted for as a separate share-based compensation arrangement. The contractual life of options is ten years.

The fair value of services received in return for share options is measured by reference to the fair value of share options granted. The share price was determined by the closing price of the shares of MP CardioFlow at the grant date for the year ended 31 December 2022, while back-solve method was used to determine the equity fair value of the ordinary shares of MP CardioFlow during the year ended 31 December 2021 and the estimated fair value of the share options granted is measured based on a binomial tree model. The contractual life of the share option is used as an input into this model. Expectations of early exercise are incorporated into the binomial tree model.

Fair value of share options and assumptions	**2022**	2021
Fair value at measurement dates	**HK$0.61 to HK$1.51**	HK$1.79 to HK$5.40
Share price	**HK$2.63 to HK$3.62**	HK$6.41 to HK$13.72
Exercise price	**HK$2.63 to HK$3.75**	HK$6.41 to HK$13.72
Expected volatility	**42.51% to 42.55%**	42.21% to 42.99%
Option life	**10 years**	10 years
Expected dividend yield	**0.00%**	0.00%
Risk-free interest rate	**1.95% to 3.22%**	1.40% to 1.56%

The total expenses recognised in the consolidated statement of profit or loss for the above transaction were US$1,803,000 for the year ended 31 December 2022 (2021: US$3,885,000).

28 SHARE-BASED PAYMENT TRANSACTIONS (CONTINUED)

(a) Share option plans (equity-settled) (continued)

(iii) Restricted share units plan adopted by MP Endo

In October 2021, MP Endo adopted a restricted share units plan (the "Endo RSU Plan'). Endo RSU Plan provides the eligible persons with the restricts share units of MP Endo ("Endo RSU"). Each Endo RSU gives the holder the right to subscribe for one ordinary share of MP Endo at the designated exercise price.

On 28 October 2021, 671,713 Endo RSUs were granted at an exercise price of RMB184.55 per share of MP Endo. There is no new grant for the year ended 31 December 2022.

The above Endo RSUs are vested in instalments over an explicit vesting period of five to six years. Each instalment is accounted for as a separate share-based compensation arrangement. The contractual life of options is seven years.

The fair value of services received in return for Endo RSUs is measured by reference to the fair value of the Endo RSUs granted in 2021. The estimate of the fair value of the Endo RSUs granted is measured based on a binomial tree model. The contractual life of the Endo RSUs is used as an input into this model. Expectations of early exercise are incorporated into the binomial tree model.

The total expenses recognised in the consolidated statement of profit or loss for the above transaction were US$2,156,000 for the year ended 31 December 2022 (2021: US$422,000).

(iv) Equity option plan adopted by Suzhou MP Orthopedics

In April 2021, Suzhou MP Orthopedics adopted an equity option scheme (the "Orthopedics EOS"), which provides the eligible employees with the options to proprietary equity interests in equity interests in Suzhou MP Orthopedics. Each option gives the holder the right to subscribe for US$1 registered capital of Suzhou MP Orthopedics ("Orthopedics Registered Capital Unit").

During the year ended 31 December 2022, 4,541,403 options were granted under Orthopedics EOS at an exercise price at US$1.58 per Orthopedics Registered Capital Unit. As at 31 December 2022, the total outstanding options were 10,481,301 units under Orthopedics EOS at an exercise price at US$1.58 per Orthopedics Registered Capital Unit.

These equity options will vest in instalments and are exercisable only upon the completion of an IPO of Suzhou MP Orthopedics. If Suzhou MP Orthopedics fails to complete an IPO prior to the date as specified in the offer letters of certain option holders (the "Option Holders with Guarantee"), the options granted to the Option Holders with Guarantee will be forfeited and the Option Holders with Guarantee could receive cash payments approximately totalling US$5,737,000. The contractual life of options is ten years.

28 SHARE-BASED PAYMENT TRANSACTIONS (CONTINUED)

(b) Share award scheme (equity-settled)

(i) Share award scheme adopted by the Company

Pursuant to a share award scheme (as amended) adopted by the Company in 2020, the Company may purchase its own shares and grant such shares to certain employees of the Group at nil consideration.

For the year ended 31 December 2022, the Company granted 1,662,672 shares (2021: 4,899,803) to the Group's executives and employees with a fair value of US$11,555,000 (2021: US$18,880,000) and purchased 2,755,400 shares (2021: 6,265,800 shares) at cash consideration of US$6,390,000 (2021: US$38,852,000).

The consideration paid for the purchase of the Company's shares is reflected as a decrease in the capital reserve of the Company. The fair value of the employee services received in exchange for the grant of shares is recognised as staff costs in profit or loss with a corresponding increase in capital reserve, which is measured based on the grant date share price of the Company.

(ii) Share award scheme adopted by MP CardioFlow

Pursuant to a share award scheme adopted by MP CardioFlow in 2022, MP CardioFlow may purchase its own shares and grant such shares to certain eligible persons.

For the year ended 31 December 2022, MP CardioFlow purchased 44,098,000 own shares at cash consideration of US$16,813,000 and 1,030,424 shares of MP CardioFlow were granted.

(c) Employee share purchase plans ("ESPP") (equity-settled)

Since 2014, the Group adopted several ESPPs, pursuant to which, the partnership firms, whose limited partners consisted of employees of the Group, invested in the Group's subsidiaries and equity-accounted investees (together, the "Target Companies") by way of subscribing newly issued equity interests of the Target Companies, or acquiring equity interests from the Group. All participants of above ESPPs have purchased equity interests in respective partnership firms at amounts specified in the respective partnership agreements.

All ESPPs contain a service condition. Employees participating in the plan have to transfer out their equity interests if their employments with the Group were terminated within the vesting period, to a person or a party nominated by the general partners of the partnership firms at a price no higher than the amounts specified in the respective partnership agreements. The fair value of the ESPP at the grant date, being the difference between the considerations and the fair value of the equity interests subscribed shall be spread over the vesting period and recognised as staff costs in the profit or loss.

28 SHARE-BASED PAYMENT TRANSACTIONS (CONTINUED)

(c) Employee share purchase plans ("ESPP") (equity-settled) (continued)

The fair value of the equity interests subscribed was measured by reference to either (i) the price at which third party investors made contributions to these Targeted Companies or (ii) the valuation reports prepared by the external valuers and reviewed and approved by the management.

During the year ended 31 December 2022, the total expenses recognised in the consolidated statement of profit or loss for the above transaction were US$20,563,000 for the year ended 31 December 2022 (2021: US$14,406,000), which related to the ESPPs of MP MedBot and MP Endo.

(d) Long-term incentive awards (equity-settled)

In 2020, CRM Cayman adopted a long-term incentive plan (the "CRM LTI Plan"), pursuant to which, the Group granted performance-based restricted share units (the "CRM RSUs") to the eligible participants of the Group who has contributed or will contribute to the development of CRM business. Each RSU will be settled by one ordinary share of either CRM Cayman or the Company, as the case may be.

The fair value of services received in return for CRM RSUs is measured by reference to the fair value of the underlying ordinary shares of CRM Cayman and the Company in 2020. Back-solve method was used to determine the equity fair value of the ordinary shares of CRM Cayman. The fair value of the underlying ordinary shares of the Company is measured based on the share price of the Company as of the grant date.

The total expenses recognised in the consolidated statement of profit or loss for the above transaction were US$6,321,000 for the year ended 31 December 2022. (2021: US$8,234,000).

28 SHARE-BASED PAYMENT TRANSACTIONS (CONTINUED)

(e) Bonus distribution plan (equity-settled)

On 30 March 2022, the board of the Company approved a bonus distribution plan, pursuant to which, the Company may purchase the shares of the designated subsidiaries and grant such shares to the executive and the employee of the Group at nil consideration.

During the year ended 31 December 2022, 8,631,000 shares of MP CardioFlow and 624,500 shares of MP MedBot were purchased with aggregated consideration of US$5,388,000 in cash. 6,503,842 shares of MP CardioFlow and 154,546 shares of MP MedBot were granted during the year with a fair value of US$2,927,000.

(f) Long-term incentive awards (cash-settled)

In 2014, the Board approved a long-term incentive (the "LTI") scheme. The Group may grant the LTI awards to certain overseas employees of the Group under the LTI scheme, pursuant to which the eligible employees will be entitled to receive payments in cash at the time that such awards vest. The LTI awards will vest 25% on each of the first four anniversaries of the grant date. The settlement shall be made in cash as promptly as practicable but in no event after the thirtieth day following the applicable vesting date. The settlement amount will be determined based on the share price of the Company's ordinary shares at the dates specified in the LTI awards agreement and the unit of awards that shall have vested on such dates.

As at 31 December 2022, all LTI awards granted were exercised and there is no outstanding LTI awards (2021: 0.4 million).

(g) Equity-settled share-based payment expenses recognised in the consolidated statement of profit or loss during the current and prior years:

	2022	2021
	US$'000	US$'000
Research and development costs	**21,459**	13,662
Distribution costs	**9,713**	6,769
Administrative expenses	**40,765**	70,260
Cost of sales	**866**	654
	72,803	91,345

The compensation expenses resulting from those equity-settled schemes were reflected as equity-settled share-based payment expenses in the consolidated statement of profit or loss with a corresponding increase primarily in the equity of the Group.

29 CAPITAL, RESERVES AND DIVIDENDS

(a) Movements in components of equity

The reconciliation between the opening and closing balances of each component of the Group's consolidated equity is set out in the consolidated statement of changes in equity. Details of the changes in the Company's individual components of equity between the beginning and the end of the year are set out below:

	Note	**Share capital** US$'000	**Share premium** US$'000	**Capital reserve** US$'000	**Accumulated losses** US$'000	**Total** US$'000
Balance at 1 January 2021		18	661,714	38,985	(50,083)	650,634
Changes in equity for 2021:						
Loss and total comprehensive income		–	–	(581)	(13,852)	(14,433)
Equity-settled share-based transactions		–	–	44,293	–	44,293
Issuance of convertible bonds	*27(a)*	–	–	37,929	–	37,929
Shares issued under share option scheme	*29(c)(iii)*	–	9,571	(2,116)	–	7,455
Shares purchased under share award scheme	*28(b)(i)*	–	–	(38,852)	–	(38,852)
Shares granted under share award scheme	*28(b)(i)*	–	–	18,880	–	18,880
Dividends paid in respect of the previous year	*29(b)*	–	(6,423)	–	–	(6,423)
Balance at 31 December 2021 and 1 January 2022		**18**	**664,862**	**98,538**	**(63,935)**	**699,483**
Changes in equity for 2022:						
Profit and total comprehensive income		**–**	**–**	**69**	**6,036**	**6,105**
Equity-settled share-based transactions		**–**	**–**	**28,883**	**–**	**28,883**
Shares issued under share option scheme	*29(c)(iii)*	**–**	**5,838**	**(1,391)**	**–**	**4,447**
Shares purchased under share award scheme	*28(b)(i)*	**–**	**–**	**(6,390)**	**–**	**(6,390)**
Shares granted under share award scheme	*28(b)(i)*	**–**	**–**	**11,555**	**–**	**11,555**
Balance at 31 December 2022		**18**	**670,700**	**131,264**	**(57,899)**	**744,083**

29 CAPITAL, RESERVES AND DIVIDENDS (CONTINUED)

(b) Dividends

The directors of the Company did not propose any payment of final dividend in respect of the previous year during the year ended 31 December 2022 (2021: HK$4.3 cents per share).

The directors of the Company did not propose any payment of final dividend for the year ended 31 December 2022.

(c) Share capital

(i) Ordinary shares

	2022 Number of shares '000	2022 Amount US$'000	2021 Number of shares '000	2021 Amount US$'000
Authorised:				
Ordinary shares of US$0.00001 each	**5,000,000**	**50**	5,000,000	50
Ordinary shares, issued and fully paid:				
At 1 January	**1,820,751**	**18**	1,809,540	18
Shares issued under share option plans (note 28(a)(i))	**6,867**	**–**	10,702	–
Shares issued in lieu of cash dividends (note 29(b))	**–**	**–**	509	–
At 31 December	**1,827,618**	**18**	1,820,751	18

The holders of ordinary shares are entitled to receive dividends as declared from time to time and are entitled to one vote per share at meetings of the Company. All ordinary shares rank equally with regard to the Company's residual assets.

29 CAPITAL, RESERVES AND DIVIDENDS (CONTINUED)

(c) Share capital (continued)

(ii) Purchase of own shares

During the year ended 31 December 2022, the Company purchased its own ordinary shares through the designated trustees under the share award scheme (note 28(b)) as follows:

Month/year	No. of shares repurchased	Highest price paid per share US$	Lowest price paid per share US$	Aggregate considerations paid US$'000
April 2022	2,755,400	2.33	2.31	6,390

Repurchased shares held at the end of the reporting period under the share award scheme are classified as treasury shares and are presented as a decrease in the capital reserve.

As 31 December 2022, the trustee under a long-term benefit plan held 172,000 ordinary shares of the Company (31 December 2021: 172,000 ordinary shares). These shares are treated as plan assets and carried at fair value with reference to the share price of ordinary shares of the Company, which are presented as a deduction of non-current defined benefit obligation.

(iii) Shares issued under the share option plans

During the year ended 31 December 2022, 6,866,884 (2021: 10,702,263) share options were exercised to subscribe for 6,866,884 (2021: 10,702,263) ordinary shares in the Company at a total consideration of US$4,447,000 (2021: US$7,455,000), of which nil (2021: nil) and US$4,447,000 (2021: US$7,455,000) was credited to share capital and share premium, respectively. In addition, an amount of US$1,391,000 (2021: US$2,116,000) was transferred from the capital reserve to the share premium account in accordance with policies set out in note 1(w)(iii).

29 CAPITAL, RESERVES AND DIVIDENDS (CONTINUED)

(d) Nature and purpose of reserves

(i) Share premium

The application of the share premium account is governed by the Companies Law of the Cayman Islands.

(ii) Exchange reserve

The exchange reserve comprises all foreign exchange differences arising from the translation of the financial statements of certain subsidiaries within the Group. The reserve is dealt with in accordance with the accounting policies set out in note 1(aa).

(iii) Capital reserve

The capital reserve primarily comprises the following:

- the fair value of the actual or estimated number of unexercised share options granted to executives, employees and external consultants of the Group and other equity-settled share-based payment transactions (note 28) in accordance with the accounting policy adopted for share-based payments in note 1(w)(iii);
- the consideration paid for the purchase of the Company's shares net of the fair value of shares granted to the Group's executives under the share award scheme (note 28(b)(i));
- the amount allocated to the unexercised equity component of convertible bonds (note 1(u)(i)) and preferred shares (note 1(s)) and the amount allocated to the equity component of the convertible bonds upon its extinguishment before maturity.
- gain/loss on acquisition or dilution of interests in subsidiaries where the Group's interest in a subsidiary is increased/decreased without losing control (note 1(d)) and net of direct tax effect; and
- remeasurement gain/loss arising from defined benefit plans.

(iv) Statutory general reserve

In accordance with the relevant PRC accounting rules and regulations, the PRC subsidiaries of the Company are required to make appropriation of its retained profits to statutory general reserve at the rate of 10% of its net profit each year, until the reserve balance reaches 50% of its paid up capital. The transfer to this reserve must be made before distribution of dividend to equity owners. The statutory reserve fund can be utilised to offset prior year's losses or converted into paid up capital.

29 CAPITAL, RESERVES AND DIVIDENDS (CONTINUED)

(e) Capital management

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

The Group defines "capital" as including all components of equity, lease liabilities, convertible bonds, non-current interest-bearing borrowings (including the current portion) and other non-current liabilities, less unaccrued proposed dividends based on the number of ordinary shares as at 31 December 2022. On this basis, the amount of capital employed at 31 December 2022 was US$3,414,721,000 (2021: US$3,887,100,000).

The Group actively and regularly reviews and manages its capital structure to maintain a balance between the higher shareholders returns that might be possible with higher levels of borrowings and the advantages and security afforded by a sound capital position, and makes adjustments to the capital structure in light of changes in economic conditions.

The Group is subject to covenants imposed by the lenders of the interest-bearing borrowings based on the Group's financial ratios relating to capital requirements. The Group complied with the imposed loan covenants as at 31 December 2022 and 2021. Except for the above, neither the Company nor any its subsidiaries are subject to externally imposed capital requirements.

30 DILUTION OF INTERESTS IN SUBSIDIARIES WITHOUT LOSING CONTROL

(a) Shenzhen Surgical

In April 2022, Shenzhen Surgical entered into a capital increase agreement with several investors (the "Surgical Series A Investors"), pursuant to which the Surgical Series A Investors subscribed for 7.15% of enlarged registered capital of Shenzhen Surgical at an aggregate cash consideration of RMB139 million (equivalents to US$20,730,000).

As mentioned in note 13, the Group also contributed US$10,159,000 to Shenzhen Surgical in August 2022. The Group's equity interest in Shenzhen Surgical was diluted from 62.58% as at 31 December 2021 to 59.56% as at 31 December 2022.

(b) MP NeuroTech

In July 2022, MP NeuroTech completed the IPO on the Main Board of the Stock Exchange (the "NeuroTech Listing") and issued 13,700,000 ordinary shares at the price of HK$24.64 per share. The sum of the net proceeds received from the NeuroTech Listing is US$40,078,000. As a result, the Group's equity interest in MP NeuroTech was diluted to 53.35%.

30 DILUTION OF INTERESTS IN SUBSIDIARIES WITHOUT LOSING CONTROL (CONTINUED)

(c) Shenzhen MicroImaging

In September 2022, Shenzhen MicroImaging entered into a capital increase agreement with several investors (the "MicroImaging Investors"), pursuant to which, the MicroImaging Investors subscribed for 19.31% of enlarged registered capital of Shenzhen MicroImaging at an aggregate cash consideration of RMB194 million (equivalents to US$26,411,000).

The Group's equity interest in Shenzhen MicroImaging was diluted from 86.00% as at 31 December 2021 to 70.09% upon the completion of the transaction.

(d) Other subsidiaries

During the year ended 31 December 2022, several ESPPs and investors made contributions to certain subsidiaries of the Group in aggregate amount of US$22,819,000 in cash. The Group retained its control over these subsidiaries.

(e) Accounting impacts of dilution of interests in subsidiaries without losing control

The dilutions of the equity interest in the foresaid subsidiaries from note 30(a) to (d) were treated as transactions within the shareholders in their capacity as equity holders. Hence, the amount of US$49,668,000, being the different between (i) the cash consideration of US$110,038,000 and (ii) the carrying amount of net assets in the proportion of the deemed disposed equity interests in the foresaid subsidiaries as at the date of disposal was credited to capital reserve of the Group.

31 FINANCIAL RISK MANAGEMENT AND FAIR VALUES OF FINANCIAL INSTRUMENTS

Exposure to credit, liquidity, interest rate and currency risks arises in the normal course of the Group's business. The Group is also exposed to equity price risk arising from movements in its own equity share price.

The Group's exposure to these risks and the financial risk management policies and practices used by the Group to manage these risks are described below.

(a) Credit risk

Credit risk refers to the risk that a counterparty will default on its contractual obligations resulting in a financial loss to the Group. The Group's credit risk is primarily attributable to trade receivables. The Group's exposure to credit risk arising from cash and cash equivalents and pledged and time deposits is limited because the counterparties are banks and financial institutions which the Group considers to represent low credit risk. The Group's exposure to credit risk arising from refundable rental deposits is considered to be low, taking into account the remaining lease term and the period covered by the rental deposits.

Except for the guarantee issued by the Group as set out in note 21, the Group does not provide any other guarantees which would expose the Group to credit risk. The maximum exposure to credit risk in respect of the guarantee at the end of the reporting period is disclosed in note 31(b).

Trade receivables

The Group has established a credit risk management policy under which individual credit evaluations are performed on all customers requiring credit period. 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 customers as well as pertaining to the economic environment in which the customer operates. Trade receivables are due within 30 to 360 days from the date of billing. Debtors with balances that are overdue are requested to settle all outstanding balances before any further credit is granted. The Group does not obtain collateral from customers.

The Group has no significant concentration of credit risk in countries in which the customers operate. Significant concentrations of credit risk primarily arise when the Group has significant exposure to individual customers. At the end of the reporting period, 13% (2021: 15%) and 28% (2021: 28%) of the total trade receivables was due from the Group's largest customer and the five largest customers respectively.

The Group measures loss allowances for trade receivables at an amount equal to lifetime ECLs, which is calculated using a provision matrix. The Group segments its trade receivables based on business lines, due to different loss pattern experienced in the different businesses.

31 FINANCIAL RISK MANAGEMENT AND FAIR VALUES OF FINANCIAL INSTRUMENTS (CONTINUED)

(a) Credit risk (continued)

Trade receivables (continued)

The following table provides information about the Group's exposure to credit risk and ECLs for trade receivables:

	2022		
	Expected loss rate %	**Gross carrying amount US$'000**	**Loss allowance US$'000**
Current and less than 1 year past due	**3.8%**	**173,443**	**6,573**
1- 3 years past due	**57.0%**	**6,405**	**3,654**
More than 3 years past due	**81.4%**	**6,714**	**5,462**
		186,562	**15,689**

	2021		
	Expected loss rate %	Gross carrying amount US$'000	Loss allowance US$'000
Current and less than 1 year past due	1.9%	183,091	3,395
1- 3 years past due	46.1%	5,530	2,549
More than 3 years past due	62.9%	8,397	5,278
		197,018	11,222

Expected loss rates are based on actual loss experience over the past 3 years. These rates are adjusted to reflect differences between economic conditions during the period over which the historic data has been collected, current conditions and the Group's view of economic conditions over the expected lives of the receivables.

31 FINANCIAL RISK MANAGEMENT AND FAIR VALUES OF FINANCIAL INSTRUMENTS (CONTINUED)

(a) Credit risk (continued)

Trade receivables (continued)

Movement in the loss allowance account in respect of trade receivables during the year is as follows:

	2022 US$'000	2021 US$'000
Balance at 1 January	**11,222**	9,699
Amounts written off during the year	**(478)**	(77)
Provision for impairment during the year	**4,806**	1,160
Exchange adjustments	**139**	440
Balance at 31 December	**15,689**	11,222

The management has assessed that during the year ended 31 December 2022, lease receivables, other receivables and amounts due from associates have not had a significant increase in credit risk since initial recognition. Thus, a 12-month expected credit loss approach that results from possible default event within 12 months of each reporting date is adopted by management. The management of the Company expect the occurrence of losses from non-performance by the counterparties was remote and loss allowance provision was immaterial.

(b) Liquidity risk

The Group's policy is to regularly monitor its liquidity requirements and its compliance with lending covenants, to ensure that it maintains sufficient reserves of cash and adequate committed lines of funding from major financial institutions to meet its liquidity requirements in the short and longer term.

31 FINANCIAL RISK MANAGEMENT AND FAIR VALUES OF FINANCIAL INSTRUMENTS (CONTINUED)

(b) Liquidity risk (continued)

The following tables show the remaining contractual maturities at the end of the reporting period of the Group's non-derivative financial liabilities, which are based on contractual undiscounted cash flows (including interest payments computed using contractual rates or, if floating, based on rates current at the end of the reporting period) and the earliest date the Group can be required to pay:

	2022 Contractual undiscounted cash outflow					
	Within 1 year or on demand US$'000	More than 1 year but less than 2 years US$'000	More than 2 years but less than 5 years US$'000	More than 5 years US$'000	Total US$'000	Carrying amount at 31 December US$'000
Interest-bearing borrowings	**200,718**	**78,939**	**205,618**	**92,415**	**577,690**	**522,076**
Convertible bonds	**8,100**	**730,235**	**126,907**	**–**	**865,242**	**769,553**
Lease liabilities	**57,637**	**50,270**	**80,840**	**1,810**	**190,557**	**176,317**
Trade and other payables	**396,028**	**8,900**	**255,827**	**–**	**660,755**	**592,041**
	662,483	**868,344**	**669,192**	**94,225**	**2,294,244**	**2,059,987**
Financial guarantee issued:						
Maximum amount guaranteed	**–**	**–**	**3,733**	**–**	**3,733**	**–**

	2021 Contractual undiscounted cash outflow					
	Within 1 year or on demand US$'000	More than 1 year but less than 2 years US$'000	More than 2 years but less than 5 years US$'000	More than 5 years US$'000	Total US$'000	Carrying amount at 31 December US$'000
Interest-bearing borrowings	96,120	33,670	155,937	82,515	368,242	364,383
Convertible bonds issued by the Company	–	–	721,406	–	721,406	660,369
Lease liabilities	53,795	53,818	129,527	5,784	242,924	218,942
Trade and other payables	474,136	34,532	548,561	–	1,057,229	771,706
	624,051	122,020	1,555,431	88,299	2,389,801	2,015,400
Financial guarantee issued:						
Maximum amount guaranteed#	–	13,000	–	–	13,000	13,000

During the year ended 31 December 2022, such financial guarantee has been released.

31 FINANCIAL RISK MANAGEMENT AND FAIR VALUES OF FINANCIAL INSTRUMENTS (CONTINUED)

(c) Interest rate risk

Interest rate risk is the risk that the fair value or future cash flows of a financial instrument will fluctuate because of changes in market interest rates. The Group's interest rate risk arises primarily from cash at banks, deposits with banks, interest-bearing borrowings and convertible bonds. Borrowings issued at variable rates and cash at banks expose the Group to cash flow interest rate risk. Deposits with banks and borrowings issued at fixed rates expose the Group to fair value interest rate risk. The Group's interest rate risk profile as monitored by management is set out in (i) below.

(i) Interest rate risk profile

The following table, as reported to the management of the Group, details the interest rate risk profile of the Group's total borrowings, cash at banks and deposits with banks at the end of the reporting period:

	2022		2021	
	Effective interest rate	**Amount US$'000**	Effective interest rate	Amount US$'000
Net fixed rate instruments:				
Deposits with banks	**0% – 4.92%**	**282,431**	0.60% – 3.20%	309,474
Loans to equity-accounted investees	**2.00% - 7.00%**	**4,070**	4.75%	839
Interest-bearing borrowings	**1.70% – 6.00%**	**(219,551)**	1.70% – 5.39%	(181,016)
Convertible preferred shares issued by subsidiaries	**11.70% – 12.14%**	**(192,163)**	11.70% – 14.38%	(365,903)
Lease liabilities	**2.50% – 22.00%**	**(176,317)**	4.00% – 22.00%	(218,942)
Convertible bonds issued by the Company	**2.46%**	**(676,623)**	2.46%	(660,369)
		(978,153)		(1,115,917)
Net variable rate instruments:				
Deposits with banks	**0% – 2.10%**	**981,341**	0% – 2.55%	1,477,830
Interest-bearing borrowings	**1.55% – 6.00%**	**(302,525)**	3.65% – 5.64%	(183,367)
		678,816		1,294,463
		(299,337)		178,546

31 FINANCIAL RISK MANAGEMENT AND FAIR VALUES OF FINANCIAL INSTRUMENTS (CONTINUED)

(c) Interest rate risk (continued)

(ii) Sensitivity analysis

At 31 December 2022, it is estimated that a general increase/decrease of 100 basis points in interest rates, with all other variables held constant, would have decreased/increased the Group's loss for the year by approximately US$9,124,000 (2021: decreased/increased loss by US$11,262,000) and decreased/increased accumulated losses by approximately US$6,474,000 (2021: decreased/increased accumulated losses by US$8,438,000), respectively.

The sensitivity analysis above indicates the instantaneous change in the Group's loss after tax (and accumulated losses) that would arise assuming that the change in interest rates had occurred at the end of the reporting period and had been applied to re-measure those financial instruments held by the Group which expose the Group to fair value interest rate risk at the end of the reporting period. In respect of the exposure to cash flow interest rate risk arising from floating rate non-derivative instruments held by the Group at the end of the reporting period, the impact on the Group's loss after tax (and accumulated losses) is estimated as an annualised impact on interest expense or income of such a change in interest rates. The analysis has been performed on the same basis as 2021.

(d) Currency risk

The Group is exposed to currency risk primarily from (i) sales and purchases which give rise to receivables, payables that are denominated in a foreign currency, i.e. a currency other than the functional currency of the operations to which the transactions relate. The currencies giving rise to this risk are primarily Euros and US$ and (ii) intra-group borrowings that are denominated in RMB, between the PRC subsidiaries, whose functional currency is RMB and overseas subsidiaries, whose functional currency is Hong Kong dollars or US$.

31 FINANCIAL RISK MANAGEMENT AND FAIR VALUES OF FINANCIAL INSTRUMENTS (CONTINUED)

(d) Currency risk (continued)

(i) Exposure to currency risk

The following table details the Group's exposure at the end of the reporting period to currency risk arising from recognised assets or liabilities denominated in a currency other than the functional currency of the entity to which they relate. For presentation purposes, the amounts of the exposure are shown in US$, translated using the spot rate at the year end date. Differences resulting from the translation of the financial statements of the entities into the Group's presentation currency are excluded.

	Exposure to foreign currencies (expressed in US$)					
	2022			2021		
	EUR	**US$**	**RMB**	EUR	US$	RMB
	US$'000	**US$'000**	**US$'000**	US$'000	US$'000	US$'000
Trade and other receivables	**3,040**	**16,770**	**25,026**	1,926	9,462	13,558
Cash and cash equivalents	**692**	**118,421**	**140,319**	2,051	9,855	32,668
Interest-bearing borrowings	**(45,019)**	**–**	**–**	(59,791)	–	–
Trade and other payables	**(2,251)**	**(7,690)**	**(14,617)**	(2,127)	(8,352)	(11,540)
Amounts due to group companies	**2,493**	**8,916**	**(3,497)**	(5,753)	(5,217)	–
Amounts due from related parties	**(4,638)**	**997**	**–**	–	2,607	–
Derivative financial liabilities	**–**	**(3,262)**	**–**	–	(1,239)	–
Net exposure arising from recognised assets and liabilities	**(45,683)**	**134,152**	**147,231**	**(63,694)**	**7,116**	**34,686**

31 FINANCIAL RISK MANAGEMENT AND FAIR VALUES OF FINANCIAL INSTRUMENTS (CONTINUED)

(d) Currency risk (continued)

(ii) Sensitivity analysis

The following table indicates the instantaneous change in the Group's loss after tax (and accumulated losses) that would arise if foreign exchange rates to which the Group has significant exposure at the end of the reporting period had changed at that date, assuming all other risk variables remained constant.

	2022		2021	
	Increase/ (decrease) in foreign exchange rates	**Effect on loss after tax and accumulated losses US$'000**	Increase/ (decrease) in foreign exchange rates	Effect on loss after tax and accumulated losses US$'000
RMB (against US$)	**3%**	**4,417**	**3%**	**947**
	(3)%	**(4,417)**	**(3)%**	**(947)**
EUR (against US$)	**3%**	**(1,371)**	**3%**	**(1,911)**
	(3)%	**1,371**	**(3)%**	**1,911**

Results of the analysis as presented in the above table represent an aggregation of the instantaneous effects on each of the Group entities' loss after tax and equity measured in the respective functional currencies, translated into US$ at the exchange rate ruling at the end of the reporting period for presentation purposes.

The sensitivity analysis assumes that the change in foreign exchange rates had been applied to re-measure those financial instruments held by the Group which expose the Group to foreign currency risk at the end of the reporting period, including inter-company payables and receivables within the Group which are denominated in a currency other than the functional currencies of the lender or the borrower. The analysis excludes differences that would result from the translation of the financial statements of the entities into the Group's presentation currency. The analysis has been performed on the same basis for 2021.

31 FINANCIAL RISK MANAGEMENT AND FAIR VALUES OF FINANCIAL INSTRUMENTS (CONTINUED)

(e) Fair value measurement

(i) Financial assets and liabilities measured at fair value

Fair value hierarchy

The following table presents the fair value of the Group's financial instruments measured at the end of the reporting period on a recurring basis, categorised into the three-level fair value hierarchy as defined in HKFRS 13, Fair value measurement. The level into which a fair value measurement is classified is determined with reference to the observability and significance of the inputs used in the valuation technique as follows:

– Level 1 valuations: Fair value measured using only Level 1 inputs i.e. unadjusted quoted prices in active markets for identical assets or liabilities at the measurement date

– Level 2 valuations: Fair value measured using Level 2 inputs i.e. observable inputs which fail to meet Level 1, and not using significant unobservable inputs. Unobservable inputs are inputs for which market data are not available

– Level 3 valuations: Fair value measured using significant unobservable inputs

The Group has a team with assistance of external valuers, performing valuations for the financial instruments, including unlisted equity securities and put options which are categorised into Level 3 of the fair value hierarchy. The team reports directly to the chief financial officer. A valuation report with analysis of changes in fair value measurement is prepared by the team at each interim and annual reporting date, and is reviewed and approved by the Group's management.

31 FINANCIAL RISK MANAGEMENT AND FAIR VALUES OF FINANCIAL INSTRUMENTS (CONTINUED)

(e) Fair value measurement (continued)

(i) Financial assets and liabilities measured at fair value (continued)

Fair value hierarchy (continued)

		Fair value measurements as at 31 December 2022 categorised into		
	Fair value at 31 December 2022 US$'000	Level 1 US$'000	Level 2 US$'000	Level 3 US$'000
Recurring fair value measurement				
Financial assets:				
Unlisted debt and equity securities (note 15)	**18,072**	**–**	**–**	**18,072**
Convertible bond issued by an equity-accounted investee	**4,000**	**–**	**4,000**	**–**
Call options held (note 17(iii))	**5,083**	**–**	**–**	**5,083**
Wealth management products	**38,201**	**–**	**–**	**38,201**
Financial liabilities:				
Contingent liabilities in business combination	**(28,732)**	**–**	**–**	**(28,732)**
Put option written to				
– SRL Put Option (note 17(i))	**(871)**	**–**	**–**	**(871)**
– Witney Put Option (note 17(ii))	**(3,262)**	**–**	**–**	**(3,262)**
Convertible bonds issued by a subsidiary(note 27(a))	**(92,930)**	**–**	**–**	**(92,930)**
Foreign currency forward contract	**(39)**	**–**	**(39)**	**–**

31 FINANCIAL RISK MANAGEMENT AND FAIR VALUES OF FINANCIAL INSTRUMENTS (CONTINUED)

(e) Fair value measurement (continued)

(i) Financial assets and liabilities measured at fair value (continued)

Fair value hierarchy (continued)

		Fair value measurements as at 31 December 2021 categorised into		
	Fair value at 31 December 2021 US$'000	Level 1 US$'000	Level 2 US$'000	Level 3 US$'000
Recurring fair value measurement				
Financial assets:				
Unlisted debt and equity securities (note 15)	25,221	–	10,702	14,519
Call options held (note 17(iii))	4,963	–	–	4,963
Warrants issued by an equity-accounted investee	1,406	–	–	1,406
Financial liabilities:				
Contingent liabilities in business combination	(39,633)	–	–	(39,633)
Put option written to				
– SRL Put Option (note 17(i))	(1,651)	–	–	(1,651)
– Witney Put Option (note 17(ii)	(1,239)	–	–	(1,239)

During the year ended 31 December 2022, there were no transfers between Level 1 and Level 2, unlisted equity securities amounting to US$10,702,000 were transferred from Level 2 into Level 3, for that in determining the fair value of investments in unlisted equity instruments with no recent transaction prices available, valuation techniques were used, and significant unobservable inputs were involved in such techniques (2021: nil).

The Group's policy is to recognise transfers between levels of fair value hierarchy as at the end of the reporting period in which they occur.

(Expressed in United States dollars unless otherwise indicated)

31 FINANCIAL RISK MANAGEMENT AND FAIR VALUES OF FINANCIAL INSTRUMENTS (CONTINUED)

(e) Fair value measurement (continued)

(i) Financial assets and liabilities measured at fair value (continued)

Information about Level 3 fair value measurements

	Valuation techniques	Significant unobservable inputs	Range
Unlisted equity securities	Equity allocation model (Note a)	Expected volatility, taking into account the historical volatility of the comparable companies	From 52% to 63%
		Expected probability of event	From 10% to 60%
Convertible Instruments	Default risk method (Note b)	Event Probability	70%
		Probability of Default of underlying equity	42%
Call options held	Binomial tree model (Note c)	Expected volatility, taking into account the historical volatility of the comparable companies	44%
Contingent liabilities	Probability-weighted discounted cash flow method (Note d)	Expected probability of achievement of milestones and conditions	87%
		Discount rate	From 0% to 2.57%
SRL Put Option	Black-Scholes option pricing model (Note e)	Expected volatility, taking into account the historical volatility of the comparable companies	41%
		Expected probability of event	35%
Witney Put Option	Black-Scholes option pricing model (Note f)	Expected probability of event	90%
Wealth management products	Net asset value (Note g)	Expected rate of return	2%
Convertible bonds	Binomial tree model (Note h)	Expected volatility, taking into account the historical volatility of the comparable companies	33%
		Discount rate	27.70%

31 FINANCIAL RISK MANAGEMENT AND FAIR VALUES OF FINANCIAL INSTRUMENTS (CONTINUED)

(e) Fair value measurement (continued)

(i) Financial assets and liabilities measured at fair value (continued)

Information about Level 3 fair value measurements (continued)

Note a As at 31 December 2022, it is estimated that with all other variables held constant, an increase/decrease in the expected probability of event by 10% would have increased/decreased the Group's loss by US$432,000/US$432,000 and an increase/decrease in the expected volatility by 5% would have decreased/increased the Group's loss by US$15,000/US$8,000.

Note b As at 31 December 2022, it is estimated that with all other variables held constant, an increase/decrease in the Probability of Default of underlying equity by 10% would have increased/decreased the Group's loss by US$169,572/US$169,572 and an increase/decrease in the Probability of Default of underlying equity by 5% would have increased/decreased the Group's loss by US$290,000/US$290,000.

Note c As at 31 December 2022, it is estimated that with all other variables held constant, an increase/decrease in the expected volatility by 5% would have decreased/increased the Group's loss by US$597,000/US$747,000.

Note d As at 31 December 2022, it is estimated that with all other variables held constant, a decrease in the expected probability of achievement of milestones and conditions by 10% would have decreased the Group's loss by US$2,873,000 and an increase in the discount rate by 1% would have decreased the Group's loss by US$342,000.

Note e As at 31 December 2022, it is estimated that with all other variables held constant, an increase/decrease in the expected probability of event by 10% would have increased/decreased the Group's loss by US$249,000/US$249,000 and an increase/decrease in the expected volatility by 5% would have increased/decreased the Group's loss by US$319,000/US$284,000.

Note f As at 31 December 2022, it is estimated that with all other variables held constant, an increase/decrease in the expected probability of event by 10% would have increased/decreased the Group's loss by US$362,000/US$362,000.

Note g As at 31 December 2022, it is estimated that with all other variables held constant, an increase/decrease of 100 basis points in the expected rate of return would have decrease/increase the Group's loss by US$157,000/US$157,000.

Note h As at 31 December 2022, it is estimated that with all other variables held constant, an increase/decrease in the expected volatility by 5% would have increase/decrease the Group's loss by US$1,848,000/US$3,124,000 and an increase/decrease in the discount rate by 5% would have decrease/increase the Group's loss by US$5,654,000/US$6,485,000.

31 FINANCIAL RISK MANAGEMENT AND FAIR VALUES OF FINANCIAL INSTRUMENTS (CONTINUED)

(e) Fair value measurement (continued)

(i) Financial assets and liabilities measured at fair value (continued)

The movements during the year in the balance of these Level 3 fair value measurements are as follows:

	Financial assets US$'000	**Financial liabilities** US$'000
At 1 January 2022	20,888	(42,523)
Additions	39,042	(90,000)
Changes in fair value recognised in profit or loss during the year	(5,742)	3,049
Transfers out of Level 2	10,702	–
Exercise of the warrants	(1,406)	–
Settlements	–	3,679
Exchange adjustments	(2,128)	–
At 31 December 2022	61,356	(125,795)

(ii) Fair value of financial assets and liabilities carried at other than fair value

Except for the convertible bonds issued by the Company as disclosed in note 27(a), the carrying amounts of the Group's other financial instruments carried at cost or amortised cost were not materially different from their fair values as at 31 December 2022 and 2021.

32 COMMITMENTS

Capital commitments outstanding at 31 December 2022 not provided for in the financial statements were as follows:

	2022 US$'000	2021 US$'000
Contracted for	**184,904**	200,538
Authorised but not contracted for	**401,100**	343,900
	586,004	544,438

33 MATERIAL RELATED PARTY TRANSACTIONS

(a) Key management personnel remuneration

Remuneration for key management personnel of the Group, including amounts paid to the Company's directors as disclosed in note 7 and certain of the highest paid individuals as disclosed in note 8, is as follows:

	2022	2021
	US$'000	US$'000
Salaries and other benefits	**7,555**	2,926
Discretionary bonuses	**4,426**	981
Retirement scheme contributions	**126**	130
Defined benefit plans costs	**140**	–
Equity-settled share-based payment expenses	**11,263**	51,857
Cash-settled share-based payment expenses	**128**	299
	23,638	56,193

Total remuneration was included in staff costs (note 5(b)).

(b) Financing arrangements

	2022	2021
	US$'000	US$'000
Loans to equity-accounted investees (Note)	**12,310**	22,413
Loans repaid by equity-accounted investees	**8,985**	47,097
Interest income on loans to equity-accounted investees	**73**	167
Loans repaid by Hopeway Biotech	**–**	44,500
Loans to Hopeway Biotech	**–**	17,800

Note: As at 31 December 2022, loans to equity-accounted investees of the Group bore an interest rate at 2.00% - 7.00% p.a. (2021: 4.75%)

33 MATERIAL RELATED PARTY TRANSACTIONS (CONTINUED)

(c) Leasing arrangement

As a leasee

In May 2021, the Group entered into a 6-year lease in respect of certain leasehold properties located in Shanghai from Shanghai Jushuo Investment Management Co., Ltd. ("Jushuo Investment") for use of manufacturing facilities, warehouses and office buildings. Jushuo Investment is a subsidiary of Shanghai Zhangjiang (Group) Corp. ("ZJ Group", which is a substantial shareholder of the Company). The amount of rent payable by the Group under the lease is US$150,000 per month, which was determined after arm's length negotiations with reference to the prevailing market rents of comparable properties. At 31 December 2022, the outstanding balance of lease liability was US$6,931,000 (31 December 2021: US$9,275,000).

As a leasor

The Group leased out certain property and building in China to several equity-accounted investees under operating lease. The lease term typically lasts 1 to 3 years. During the year ended 31 December 2022, the Group recorded rental income from these equity accounted investees of US$2,956,000 (2021: US$2,105,000).

(d) Cash deposits placed in SHRB

During the year ended 31 December 2022, the Group placed cash deposits in SHRB, an equity-accounted investee of the Group (note 14), with an interest rate from 0.35% to 3.45% per annum. As at 31 December 2022, the amount of bank deposits placed in SHRB was US$12,937,000 (31 December 2021: US$6,018,000).

During the year ended 31 December 2022, the Group received interest income from the above bank deposits amounting to US$152,000 (2021: US$428,000).

33 MATERIAL RELATED PARTY TRANSACTIONS (CONTINUED)

(e) Sales to related parties

For the year ended 31 December 2022 and 2021, the Group entered into sales transactions with the following related parties:

Name of party	Relationship
Thai Otsuka Pharmaceutical Co., Ltd. ("Thai Otsuka")	Subsidiary of Otsuka Holdings Co., Ltd. ("Otsuka Holdings"), the controlling party of substantial shareholder of the Company
Otsuka (Philippines) Pharmaceutical, Inc. ("Otsuka Philippines")	Subsidiary of Otsuka Holdings
P.T. Otsuka Indonesia ("Otsuka Indonesia")	Subsidiary of Otsuka Holdings
Otsuka Pakistan Ltd. ("Otsuka Pakistan")	Subsidiary of Otsuka Holdings
KISCO Co., Ltd.	Subsidiary of Otsuka Holdings
MP EP	Equity-accounted investee of the Group
Zhejiang Accupath Smart Manufacturing (Group) Co., Ltd. ("AccuPath")	Equity-accounted investee of the Group
Shanghai Horizon Medtech Co., Ltd. ("Horizon")	Equity-accounted investee of the Group
Purple Medical Solutions Private Limited ("Purple Medical")	Equity-accounted investee of the Group

Particulars of the Group's sales transactions with these parties are as follows:

	2022 **US$'000**	2021 US$'000
Subsidiaries of Otsuka holdings	**934**	3,392
AccuPath	**5,592**	1,512
MP EP	**759**	–
Horizon	**232**	–
Purple Medical	**1,059**	1,154

Trade receivables due from related parties are unsecured, interest-free and expected to be recovered within one year.

33 MATERIAL RELATED PARTY TRANSACTIONS (CONTINUED)

(f) Other transactions with related parties

Particulars of the Group's other transactions with related parties are as follows:

Name of party	Relationship
MP EP	Equity-accounted investee of the Group
AccuPath	Equity-accounted investee of the Group
Horizon	Equity-accounted investee of the Group
Endophix Medtech Corporation	Equity-accounted investee of the Group
Suzhou ProSteri Medical Technology Co., Ltd. ("Suzhou ProSteri")	Equity-accounted investee of the Group
Suzhou Reveda Medtech Co., Ltd.	Equity-accounted investee of the Group
Shanghai MicroPort Lifesciences Co., Ltd.	Equity-accounted investee of the Group
Yinchuan Conscience Care Internet Hospital Co., Ltd.	Equity-accounted investee of the Group
Shanghai IntBot Robotics Co., Ltd.	Equity-accounted investee of the Group
Shanghai TargBot Medtech Co., Ltd.	Equity-accounted investee of the Group
CathBot (Shanghai) Robot Co., Ltd.	Equity-accounted investee of the Group

	2022	2021
	US$'000	US$'000
Purchase from equity-accounted investees	**43,071**	36,114
Service fee income from equity-accounted investees	**5,703**	907
Payment on behalf of equity-accounted investees by the Group	**1,812**	780
Transfer of non-current assets to equity-accounted investees	**204**	4,866
Financial guarantee issued to an equity-accounted investee	**3,733**	–

(g) Applicability of the Listing Rules relating to connected transactions

The related party transactions with subsidiaries of ZJ Group and Otsuka Holding constitute connected transactions or continuing connected transactions as defined in Chapter 14A of the Listing Rules. The disclosures required by Chapter 14A of the Listing Rules are provided under the paragraph "Connected transactions" in the reports of the directors.

34 COMPANY-LEVEL STATEMENT OF FINANCIAL POSITION

	31 December 2022 US$'000	31 December 2021 US$'000
Non-current assets		
Investments in subsidiaries	**1,256,810**	1,000,489
Interest in equity-accounted investees	**4,000**	5,061
Other non-current assets	**3,035**	–
	1,263,845	1,005,550
Current assets		
Other receivables	**6,132**	7,369
Cash and cash equivalents	**207,061**	474,533
	213,193	481,902
Current liabilities		
Amounts due to subsidiaries	**1,672**	40,797
Other payables	**7,347**	11,720
Interest-bearing borrowings	**11,255**	12,253
Derivative financial liabilities	**871**	–
	21,145	64,770
Net current assets	**192,048**	417,132
Total assets less current liabilities	**1,455,893**	1,422,682
Non-current liabilities		
Convertible bonds	**676,623**	660,369
Interest-bearing borrowings	**33,765**	47,538
Other payables	**1,422**	13,641
Derivative financial liabilities	**–**	1,651
	711,810	723,199
NET ASSETS	**744,083**	699,483
CAPITAL AND RESERVES (note 29(a))		
Share capital	**18**	18
Reserves	**744,065**	699,465
TOTAL EQUITY	**744,083**	699,483

(Expressed in United States dollars unless otherwise indicated)

35 POSSIBLE IMPACT OF AMENDMENTS, NEW STANDARDS AND INTERPRETATIONS ISSUED BUT NOT YET EFFECTIVE FOR THE YEAR ENDED 31 DECEMBER 2022

Up to the date of issue of these financial statements, the HKICPA has issued a number of new or amended standards, which are not yet effective for the year ended 31 December 2022 and which have not been adopted in these financial statements. These developments include the following which may be relevant to the Group.

	Effective for accounting periods beginning on or after
HKFRS 17, *Insurance contracts*	1 January 2023
Amendments to HKAS 1 and HKFRS Practice Statement 2, *Disclosure of accounting policies*	1 January 2023
Amendments to HKAS 8, *Definition of accounting estimates*	1 January 2023
Amendments to HKAS 12, *Deferred tax related to assets and liabilities arising from a single transaction*	1 January 2023
Amendments to HKAS 1, *Classification of liabilities as current or non-current*	1 January 2024
Amendments to HKAS 1, *Non-current Liabilities with Covenants*	1 January 2024
Amendments to HKFRS 16, *Lease liabilities in a Sale and Leaseback*	1 January 2024
Amendments to HKFRS 10 and HKAS 28, *Sale of contribution of assets between an investor and its associate or joint venture*	To be determined

The Group is in the process of making an assessment of what the impact of these developments is expected to be in the period of initial application. So far it has concluded that the adoption of them is unlikely to have a significant impact on the consolidated financial statements.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