MicroPort®
一个属于患者和医生的品牌
微创医疗

ANNUAL REPORT 2018

MicroPort Scientific Corporation
微創醫療科學有限公司
(Incorporated in the Cayman Islands with limited liability)
(Stock code: 00853)

CONTENTS

DIRECTORS

EXECUTIVE DIRECTOR

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

NON-EXECUTIVE DIRECTORS

Mr. Norihiro Ashida
Mr. Hiroshi Shirafuji
Mr. Hongliang Yu

INDEPENDENT NON-EXECUTIVE DIRECTORS

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

COMPANY SECRETARY

Ms. Wing Sze Chan, *ACS, ACIS*

AUTHORIZED REPRESENTATIVES

Dr. Zhaohua Chang
Ms. Wing Sze Chan

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

REGISTERED OFFICE

PO Box 309, Ugland House
Grand Cayman, KY1-1104
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PRINCIPAL PLACE OF BUSINESS AND HEAD OFFICE IN THE PEOPLE'S REPUBLIC OF CHINA (THE "PRC")

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The PRC

PLACE OF BUSINESS IN HONG KONG

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AUDITORS

KPMG, *Certified Public Accountants*

LEGAL CONSULTANT

Freshfields Bruckhaus Deringer

SHARE REGISTRAR IN HONG KONG

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COMPANY WEBSITE

www.microport.com

PRINCIPAL BANKERS

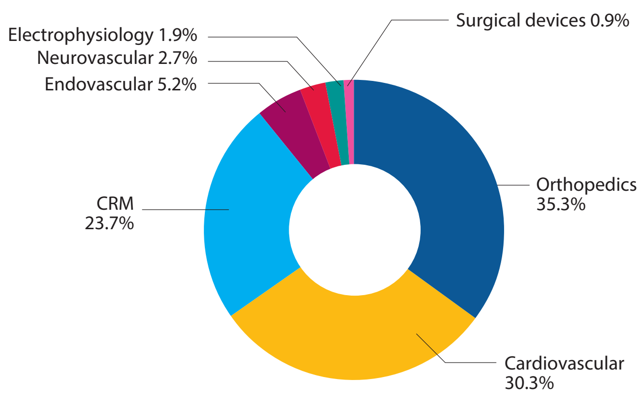
Bank of China (Hong Kong) Limited
China Construction Bank Corporation Shanghai Pudong Branch
Bank of China Limited Shanghai Zhangjiang Sub-Branch
China Minsheng Banking Corp., Ltd
Shanghai Pilot Free Trade Zone Branch

FINANCIAL HIGHLIGHTS

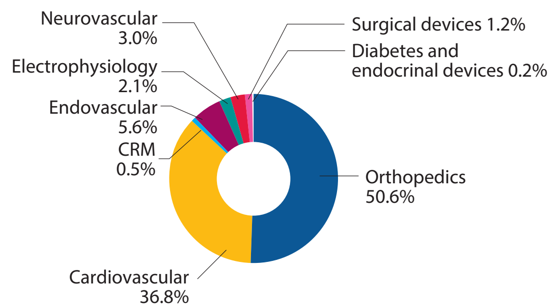
	Financial Year Ended		
	2018 **US$'000**	2017 US$'000	Change %
Revenue	**669,490**	444,190	50.7%
Gross profit	**470,016**	318,397	47.6%
Profit for the year	**18,381**	16,951	8.4%
Profit attributable to equity shareholders of the Company	**23,913**	18,823	27.0%
Earnings per share –			
Basic (in cents)	**1.63**	1.31	24.4%
Diluted (in cents)	**1.28**	1.28	–

Revenue Analysis

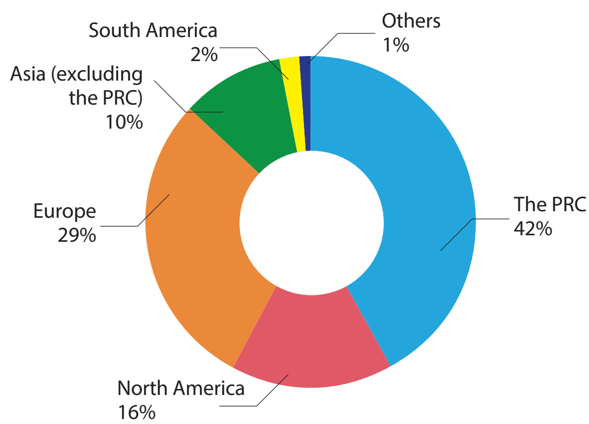
Revenue by Business Segment
For the Year Ended 31 December 2018



Revenue by Business Segment
For the Year Ended 31 December 2017



Revenue by Geographical Region
For the Year Ended 31 December 2018



FIVE YEARS' FINANCIAL SUMMARY

	2018	2017	2016	2015	2014
	US$'000	US$'000	US$'000	US$'000	US$'000
Revenue	**669,490**	444,190	389,921	375,844	355,284
Net profit/(loss)	**18,381**	16,951	15,069	(11,379)	(59,571)
Assets					
Non-current assets	**719,756**	473,918	417,074	402,403	431,622
Current assets	**554,691**	429,705	357,476	331,240	508,112
Total assets	**1,274,447**	903,623	774,550	733,643	939,734
Liabilities					
Current liabilities	**440,390**	198,893	210,039	164,601	328,032
Non-current liabilities	**305,111**	265,278	218,032	251,214	267,959
Total liabilities	**745,501**	464,171	428,071	415,815	595,991
Total equity	**528,946**	439,452	346,479	317,828	343,743

Note: As a result of the adoption of HKFRS 15 and HKFRS 9 with effect from 1 January 2018, the Group has changed its accounting policies in relation to revenue recognition and financial instruments. In accordance with the transitional provisions of these two standards, the changes in accounting policies were adopted by way of opening balance adjustments to equity as at 1 January 2018. Figures in years earlier than 2018 are stated in accordance with the policies applicable in these years.

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 nearly 10,000 hospitals of approximately 80 countries or regions, the Group maintains world-wide operations in a broad range of business segments including orthopedics, cardiovascular, cardiac rhythm management ("CRM"), endovascular, neurovascular, electrophysiology ("EP"), surgical, diabetes care and endocrinal management. Our products are now being used worldwide at an average rate of one for every 8 seconds. The Group is dedicated to becoming a patient-oriented global enterprise that we continuously innovate and provide the best yet accessible ways and means to prolong and reshape 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 best yet accessible ways and means to prolong and reshape life for patients. We are a young group with an ambition to establish MicroPort as a globally recognised 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 the next generation medical devices and treatments for chronic ailments, our R&D team applied their expertise to ensure the sustained innovation of our latest products.

With a large global footprint of R&D and manufacturing facilities in Shanghai, Jiaxing, Suzhou, Dongguan in China, Memphis in the United States, suburb of Paris in France, suburb of Milan in Italy and Dominican Republic, a strong focus on technology innovation with over 3,000 approved patents, and a global workforce of around 5,000 employees, 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

Bring about a People-Centric SuperCluster of Emerging Medical Technologies.

OUR MISSION

Provide the Best Yet Accessible Ways & Means to Prolong and Reshape Lives.

CHAIRMAN'S STATEMENT

Dr. Zhaohua Chang   Chairman

Dear Shareholders,

Year of 2018 marks the 20th anniversary of the Group's establishment and a milestone in the Group's development. Over the past 20 years, we upheld the management credo of "Eye for Greatness, Hands on Details", with the focus on people, and strived to fulfill the socially responsible mission of "Provide Best Yet Accessible Ways and Means to Prolong and Reshape Life". During the year, the Group made further achievements in executing globalization and diversification strategy. The acquisition of overseas cardiac rhythm management business contributed revenue to the Group and provided new momentum to enhance its comprehensive competitiveness and achieve long-term sustainable development.

During the year, a further increase in demand for public medical devices and further improvement of national policies enabled the medical device industry to maintain a rapid and healthy momentum. With its high-quality core products and market expansion, the Group achieved fast development in all business segments. The Group's revenue grew by 48.6% (excluding the impact of foreign exchange) compared to the same period of last year. Profit attributable to equity shareholders of the Company was recorded as US$24 million, representing an increase of 27.0% over the same period of last year. In 2018, the Group actively expanded sales on the global market, strengthened its brand and improved its product portfolio, supporting the stable development of the orthopedics business. The same year marked the 20th anniversary of the launch of the orthopedic Medial-Pivot Total Knee Replacement System, of which global implant volume currently exceeds 600,000. During the reporting period, the international (non-China) orthopedics business recorded a revenue of US$218.5 million, representing an increase of 2.0% compared to last year (excluding the foreign exchange impact), which was basically the same as the market level. Joints sales from the China orthopedics business also maintained rapid growth. The annual implant volume of joints products exceeded 10,000. The annual sales revenue growth rate was 31.6%, excluding the impact of foreign exchange. The Group also accelerated domestic manufacturing and achieved milestones in early 2019 which will lead to further improvement of the domestic joint products line. Also operating steadily was the Group's Global Supply Center. Orthopedic instruments continued to help improve the operation's efficiency.

The Group's cardiovascular business continued to expand in the market, with particular attention given to county-level markets, ensuring a leading market share position throughout China. At the same time, the Group was also developing the international market. During the year, our high-quality Firehawk™ Coronary Rapamycin Target Eluting Stent ("Firehawk™") was first approved and marketed in several countries. Revenue from the cardiovascular business increased by 22.0% compared with the same period last year (excluding the impact of foreign exchange), which was mainly attributable to the continuous sales growth of Firehawk™ Stent and value-end product Firebird 2™ Coronary Rapamycin-Eluting CoCr Coronary Stent ("Firebird 2™"). Meanwhile, the endovascular, electrophysiology and neurovascular device businesses all achieved different degrees of growth above 30%. During the year, MicroPort's products were recognized by different sectors. In 2018, the Ministry of Science and Technology released the "Catalogue of Innovative Medical Devices (2018)", with the Group's Implantable Pacemakers, Firehawk™ Stent, Thoracic Branch Stent-Graft and Delivery System and 3D EP Navigation System being included among them. Firehawk™ Stent and Rega™ Pacemakers were also among the Top Ten Medical Devices of the 11th session of China Health Forum. Results of the large-scale clinical trial (TARGET AC) in Europe of the Firehawk™ stent were published in The Lancet, the world's leading authoritative medical journal, marking the product the new world leader for the new heart stent industry.

CHAIRMAN'S STATEMENT

Excellent R&D capability is a key driver for the sustainable development of innovative medical device companies. Over the past 20 years, with the goal of import substitution and building a Chinese brand – and through implementing higher standards and better practices – we are committed to the innovation and development of leading technologies, to creating a technological innovation system combining production, education and research, to providing quality products and services to a global market, and to provide momentum to the Group's sustainable development.

The Group's R&D projects advanced steadily in 2018. During the year, a total of 18 products gained approval. For orthopedics, a hip joint prosthesis stem was independently developed by combining SuperPATH™ technology, and obtained a registration certificate issued by National Medical Products Administration ("NMPA"). This was the first registration certificate obtained by the Group's domestic joint products. In early 2019, the Aspiration™ Stable Total Knee Replacement System-PS Prosthesis also received a registration certificate. As the Group's first domestic total knee replacement system product, it marks a solid step forward in the import substitution process. For the CRM Business, the CompassAnalyzer™ Pacing System Analyzer and Beflex™ active pacing lead were respectively certified; and in the EP devices Business, the second-generation Columbus™ 3D EP Navigation System and EasyFinder™ 3D steerable curve mapping catheter independently developed by the Group were certified. For the neurovascular devices business, the Group's Tubridge™ Vascular Reconstruction Device received registration approval from NMPA, becoming the first flow diverting stent approved in China. During the year, three products of the Group were granted access to the NMPA's Green Path (a special approval process for innovative medical devices), including the new generation Fontus™ single-branched stent graft system, the Vertebral Artery Rapamycin Target Eluting Stent, and the new generation VitaFlow™ II Transcatheter Aortic Valve and its Retrievable Delivery System. As of the end of 2018, the Group had 15 products access to the NMPA's the Green Path, ranking it first among all medical device companies in China. During the year, a number of Group's products gained approval and were launched for the first time in the international market.

In terms of clinical trials, the Group announced a one-year follow-up study for the VitaFlow™ Transcatheter Aortic Valve and its Delivery System ("VitaFlow™"). The VitaFlow™ II System successfully enrolled its first patient in the VITALE Trial ("VITALE Trial"), the Group's first pre-marketing clinical research project in Europe.

In the future, the Group will continue to innovate as a driving force for its development. Targeting patients and physicians and surgeons, we will continue to develop high-quality, high-end medical devices while improving our existing product portfolio. With the maturity of the Group's international business, MicroPort products will gradually enter more countries and further expand their global market. MicroPort will also continue "doing their best in every detail" to bring high quality products and medical technology to patients, physicians and surgeons.

During the reporting period of the year, our Directors, senior management officers and all staff members continued to carry out their work in a pragmatic, diligent and committed fashion. On behalf of all members of the Company, I express my gratitude and appreciation to our shareholders, vendors, distributors, physicians and surgeons, as well as business communities and partners, for their dedicated support over the years.

Dr. Zhaohua Chang
Chairman

27 March 2019

MANAGEMENT DISCUSSION AND ANALYSIS

BUSINESS OVERVIEW

OVERVIEW

In 2018, with the further increase in the demand for public medical devices and the further improvement of relevant national policies, the medical device industry has continued to maintain a rapid and healthy development momentum under favourable policies. In 2018, adjustments were made to relevant institutions under the State Council, including the establishment of the National Health Commission (國家衛生健康委員會) and the Bureau of National Health Care (國家醫療保障局) and name change of the former China Food and Drug Administration ("CFDA") to NMPA under the supervision of the State Administration of Market Regulation. The newly revised "Special Procedures for Examination and Approval of Innovative Medical Devices"(《創新醫療器械特別審查程序》) was issued by NMPA in November 2018, which improved the applicable situations, refined the application process, enhanced the effectiveness of the innovation approval, and play an active role in encouraging the innovation and development of the medical device industry. In June 2018, in order to deepen the reform of the examination and approval system and encourage innovations in medical devices, the Ministry of Justice issued the "Revision of Regulation on the Supervision and Administration of Medical Devices (the Draft for Review) (《醫療器械監督管理條例修正案(草案送審稿)》) (the "Regulation"). Such revision improved the Marketing Authorization Holder system, reformed the clinical trial management system, optimized the approval procedures and enhanced the post-listing regulatory requirements, representing that China's regulatory requirements for medical devices have entered a new stage. In addition, the General Office of the State Council issued the "Key Tasks for Deepening Reform on Pharmaceutical and Healthcare System for the Second Half of 2018" (《深化醫藥衛生體制改革2018年下半年重點工作任務》), and proposed to facilitate the domestic manufacturing of medical devices and push forward the application and promotion of innovative products. The introduction of a series of national reform policies has far-reaching and positive significance on encouraging medical device innovation, accelerating the domestic manufacturing process and regulating industry order. From international perspective, the global medical device market maintains high vitality, and medical device safety is becoming the focus of public concern. Governments have revised relevant regulations to strengthen supervision and improve the registration and approval system.

As at 31 December 2018, the Group had eight business segments, namely, orthopedics devices, cardiovascular devices, CRM, endovascular devices, EP devices, neurovascular devices, surgical devices as well as diabetes and endocrinal devices, covering over 300 varieties of medical devices.

In 2018, the Group formulated and improved its corporate strategy, promoted R&D projects in an orderly manner and further expanded the domestic sales market to benefit more patients, as well as actively deployed overseas markets to implement its international strategic goals. On 30 April 2018, the Group completed the acquisition of the CRM business from LivaNova Plc ("LivaNova"). Such newly acquired business not only contributes to the Group's revenue, but also helps the Group to enhance its competitiveness and attaining sustainable development in the long run. For the year ended 31 December 2018, the Group recorded revenue of US$669.5 million, representing an increase of 50.7% from 2017, and excluding the foreign exchange impact, the increase was 48.6%, and net profit amounted to US$18.4 million (profit attributable to equity owners of the Company: US$23.9 million).

For the year ended 31 December 2018, the Group derived 35.3% of its revenue from the orthopedics devices business, 30.3% from the cardiovascular devices business, 23.7% from the CRM business, 5.2% from the endovascular devices business, 1.9% from the EP devices business, 2.7% from the neurovascular devices and 0.9% from the surgical devices business. In 2018, the Group's various businesses, including cardiovascular, endovascular and neurovascular businesses continued to maintain the leading positions in the market, and various segments achieved growth with varying degrees.

ORTHOPEDICS DEVICES BUSINESS

The Group's orthopedics devices business offers an extensive range of products that include reconstructive joints, spine and trauma, and other professional implants and equipment. In addition, the orthopedics Global Supply Chain Center (the "GSC") established in 2015 provides centralized purchasing and logistic distribution services of surgical instruments for joints, spine and trauma in order to optimize the management of surgical instruments and consumables used in the implantation of our products.

In 2018, the Group actively expanded sales in the global market and strengthened brand building. The Group accelerated the domestic-manufacturing process and further improved domestic joint products line, to provide more diversified choices for Chinese doctors and patients. For the year ended 31 December 2018, the Group's orthopedics devices business recorded revenue of US$236.3 million, representing a year-on-year growth of 3.8% (excluding the foreign exchange impact).

In 2018, the international (non-China) orthopedics business recorded revenue of US$218.5 million, representing an increase of 2.0% as compared to the previous year (excluding the foreign exchange impact), which was basically in line with the market level. The decrease in revenue growth rate was due to the change in the high-level marketing staff in the US and Italy in the second half of 2018, and the loss of a major US distributor. By region, businesses in the US and Japan achieved a growth of 2.7% and 7.9% (excluding the foreign exchange impact), respectively, and continued to maintain growing. In 2018, based on the high-quality performance of existing products, the Group further upgraded its products and continued its efforts in development and research of new products, including the launch of the Evolution™ CCK system, the Evolution™ tibial tool with stem and the optimized 12 patch lining of the Prime™ Acetabular System. In addition, 2018 marked the 20th anniversary of launch of the Medial-Pivot Total Knee Replacement System in orthopedics. Currently, the global implant volume has exceeded 600,000. The Group held its 20th anniversary celebrations in various places to further enhance its brand recognition. The Group also actively participated in industry conferences, held seminars and started more industry cooperation. In terms of clinical trial, the 9-year clinical and radiological outcomes of cemented and cementless aMP™ Knee System were released by the Group in 2018, the survivorship rate analysis of which showing that the 9-year cumulative success rate of the two Medial-Pivot Knees reached 100%, and all patients showed significant improvement in the Knee Society scores and Oxford knee scores post-operatively as well. For the year ended 31 December 2018, the international (non-China) orthopedics business recorded positive operating profit for the very first time since its acquisition, and the losses continued to narrow. However, due to the facts that the revenue growth and improvement in gross profit margins were below expectation, coupled with fluctuations in the US dollar exchange rate which negatively impacted the sales from the Group's international distributors businesses, the Group did not reach the breakeven target of this segment.

For the year ended 31 December 2018, the China orthopedics business recorded revenue of US$17.8 million, representing a growth of 32.8% as compared to last year (excluding the foreign exchange impact), which was mainly due to the rapid sales growth of 31.6% of its joint business. Leveraging the superiority of its product concepts, the Group strengthened its centralized and high-frequency promotion in the market, actively carried out product training and enhanced customer acceptance. In 2018, the joint products of the Group were continuously recognized by major hospitals with implant volume exceeding 10,000, and the hospital coverage rate increased steadily, the joint surgery also grew rapidly, surpassing the industry average. For the spine and trauma business, the Group continued to optimize and improve existing products, and actively developed products after layout. The revenue maintained rapid growth in 2018 and gross profit margin improved significantly as well. GSC operates steadily and explores the international market. Orthopedics instrument continued to improve its operation efficiency. The Group's in-house developed instrument kit for ADVANCE™ total knee replacement system and Evolution™ instrument kit case, which gained NMPA approval and launched in 2018, were expected to significantly save device costs for the Chinese orthopedics business. The outstanding R&D capability of China's orthopedic business also provides strong support for the development of such business segment, and diversifies sales mix in China and increases competitiveness. In December 2018, the domestic hip prosthesis component femoral stem was certified. In January 2019, the Group's first domestic total knee replacement system product Aspiration™ Medial Stability Total Knee Replacement System-PS Type Implant was certified, which enabled the Group to take a solid step in the import substitution process.

CARDIOVASCULAR DEVICES BUSINESS

The Group's cardiovascular devices business offers products and services for the treatment of coronary artery related diseases. The Group's committed to develop, manufacture and commercialize market-leading coronary stents and the relevant delivery systems, along with balloon catheters and accessories.

For the year ended 31 December 2018, the Group's cardiovascular devices business recorded revenue of US$202.8 million, representing an increase of 22.0% as compared to last year (excluding the foreign exchange impact). On the basis of consolidating the original market, the Group actively explored new markets to secure a leading position in terms of market share in China. For the year ended 31 December 2018, the sales revenue of the Group's drug-eluting stent ("DES") in the Chinese market increased by 22.2% as compared to the same period of last year (excluding the foreign exchange impact), among which, revenue from the Group's premium product Firehawk™ stent increased by 48.5% as compared to the same period of last year (excluding the foreign exchange impact). The revenue from value-end product Firebird2™ Coronary Rapamycin-Eluting CoCr Coronary Stent ("Firebird2™") increased by 11.7% as compared to the same period of last year. The Group's balloon products business continued to maintain rapid growth, with an increase of 60.1% in sales revenue as compared to the same period of last year (excluding the foreign exchange impact).

In 2018, the Group's cardiovascular business continued its market expansion, with particular focus on the development of county-level markets. As at 31 December 2018, the Group's DES covered more than 1,700 hospitals in China, representing an year-on-year increase of 18.9%, of which, the hospital coverage of Firebird2™ increased by 16.0% on an year-on-year basis; and the hospital coverage of Firehawk™ increased by 29% on an year-on-year basis. In the international market, Firehawk™ has been sold in 24 countries or regions, an addition of 6 countries or regions as compared to 2017, including Hong Kong, Taiwan region, Spain, Bulgaria, Panama and Peru, among them, Firehawk™ had already received approvals for registration in Taiwan region, Myanmar, and Serbia for the first time.

In terms of clinical trial, in September 2018, the world's leading authoritative medical journal, The Lancet, published the research results of the large-scale clinical trial (TARGET AC) of the Firehawk™ stent independently developed by the Group in Europe, marking that the Firehawk™ stent has become the world's new leader in the new heart stent industry.

CRM BUSINESS

The Group's CRM business principally develops, manufactures and markets products including defibrillators, cardiac resynchronization therapy devices and pacemakers for the diagnosis, treatment and management of heart rhythm disorders and heart failure.

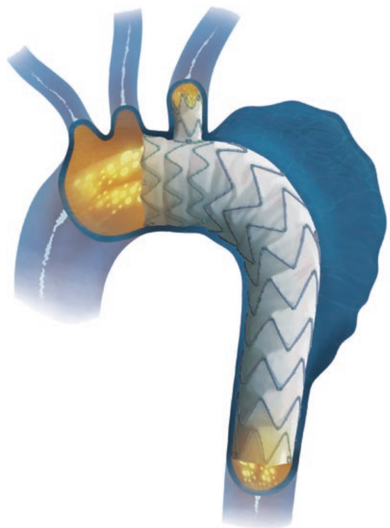
Since the Group completed the acquisition of CRM business from LivaNova on 30 April 2018, the globalization strategy of CRM business has been further implemented, and it is conducive to the launch of domestic products and enhance competitiveness. During the consolidated period in 2018, the CRM business recorded revenue of US$158.4 million.

In 2018, the sales performance of the international (non-China) CRM business was less satisfactory than that of the competitors due to the incomplete product portfolio. In view of this, the Group focused on R&D investment and product innovation. Products newly launched in 2018 included xFine ("xFine™") electrode leads and the new Smart Touch™ tablet program controller ("Smart Touch™") for implantable electrocardiograph ("ECG") devices. In June 2018, PLATINIUM™ 4LV SonR CRT-D ("SonR") cardiac resynchronization therapy ("CRT") device and its ancillary SonRtip™ electrode leads with innovative technology were approved for launch in Japan. SonR is the world's first and only sensor based therapeutic optimization for CRT. The world's smallest 1.5T and 3T magnetic resonance conditional pacemakers Eno™ and Teo™ series were launched in early 2019 and completed the first worldwide implant. The new product launch has promoted its overall competitiveness. In the second half of 2018, the decline in revenue of such business slowed down. The international (non-China) CRM business recorded revenue for the period from 30 April 2018 to 31 December 2018, and achieved reported revenue of US$152.7 million.

MicroPort Sorin CRM (Shanghai) Co., Ltd. ("MSC") manages the R&D, production and marketing of the Company's CRM business in China. Since its establishment, the business has pushed forward its operation in an orderly manner with the guideline of the "Serving China", "Made in China" and "Created in China". For the year ended 31 December 2018, the China CRM business achieved revenue of US$5.7 million representing a rapid growth of 145.6 % as compared to previous year (excluding the foreign exchange impact), mainly due to the new growth opportunities brought by the launch of new products and the rapid increase in brand recognition. As the first Chinese domestic pacemaker with world-class quality, the Rega™ Family Implantable Pacemakers ("Rega™ Pacemakers") began its first implantation in March 2018, and was applied in more than 130 hospitals in 11 provinces in more than 9 months, the domestic brand quickly gained recognition. In August 2018, the Group's self-developed CompassAnalyzer™ Pacing System Analyzer ("PSA") officially obtained the domestic medical device registration certificate. In November 2018, Beflex™ active fixed spiral electrode leads was officially approved by the State Drug Administration of China. MSC will now provide patients with CRM disease in China with complete solutions, including pacemakers with world-class quality, pacing leads, pacing system analyzers, pacing program control follow-up and patient electronic guarantee card system.

ENDOVASCULAR DEVICES BUSINESS

The Group's endovascular devices business focuses on providing a range of products and services for the interventional treatment of thoracic and abdominal aortic aneurysm, peripheral vascular disease, aortic dissection, and other endovascular related diseases.



For the year ended 31 December 2018, the endovascular devices business recorded revenue of US$35.0 million, representing a rapid increase of 39.6% as compared to the previous year (excluding the foreign exchange impact), significantly exceeding the average growth rate of the market, which was benefited from the competitive advantage in all levels of cities and the rapid growth of the Chinese endovascular repair market. In addition, Castor™ single-branched thoracic aortic stent ("Castor™") was launched and successfully promoted. With good clinical results, it has been promoted and applied in nearly 150 hospitals across the country and as a positive result driver, marking that the independent research and development and innovation capability of such business is at the leading level in the industry. In 2018, the Group continued its sales strategy of "Development of the Second, Third and Fourth-Tier Hospitals with Intensive Efforts" of such business, building connections with a total of more than 100 newly developed hospitals.

With its own R&D and innovation capability, the Group has developed a new generation of intraoperative stent system, the Fontus™ Branch Intraoperative Stent System ("Fontus™"), based on the original CRONUS™ Straight Intraoperative Stent System. In August 2018, Fontus™ passed the inspection of NMPA and entered the Green Path. So far, a total of five products in the endovascular segment have been approved for Green Paths, with significant innovation advantages and driving long-term development.

EP DEVICES BUSINESS

The principal business of the EP devices segment is the manufacturing and marketing of minimally invasive medical devices for the intervention treatment of electrophysiological diseases. The Group has launched a complete set of solutions for treatment of tachyarrhythmia supraventricular tachycardia and atrial fibrillation radio frequency ablation, providing physicians and patients with a more comprehensive EP product instrument portfolio. The Group has also become the only Chinese company that can provide arrhythmia with complete 3D mapping equipment and catheter solutions in such field.

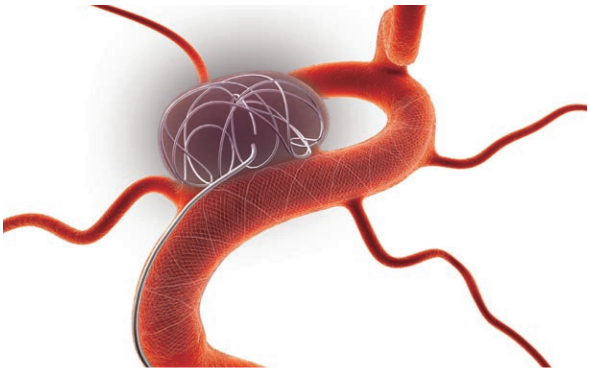
MANAGEMENT DISCUSSION AND ANALYSIS

For the year ended 31 December 2018, the revenue of the EP devices business recorded a year-on-year growth of 34.5% (excluding foreign exchange impact), due to the high quality of self-developed products and the promotion of 3D surgery throughout China. In 2018, the second-generation Columbus™ 3D EP Navigation System ("Columbus™") and EasyFinder™ Deflectable Mapping Catheter 3D ("EasyFinder™") independently developed by the Group obtained approval from CFDA, now known as NMPA, effectively filling the vacancy in domestic EP devices in China. In June 2018, the Health Economic Evaluation Report on Columbus™ and its Matching Catheters was successfully published. As the first domestically developed magnet location full curve visualization 3D EP Navigation System, and the only domestically certified system that has obtained CE certification, the Columbus™ system has won unanimous recognition from domestic and foreign experts since its launch.

On 30 November 2018, the quotation of Shanghai MicroPort EP MedTech Co., Ltd. on the National Equities Exchange and Quotation was terminated as a part of the Group's business development needs and long-term strategic development plan.

NEUROVASCULAR DEVICES BUSINESS

The Group's neurovascular devices business segment specializes in providing products and services for the treatment of neurovascular diseases including Cerebral Aneurysms, Intracranial Atherosclerotic Diseases ("ICAD"), Carotid Artery Diseases ("CAD") and other neurovasculature related diseases. Three neurovascular devices were available for sale in 2018. APOLLO™ Intracranial Stent System ("APOLLO™") for cerebral ischemia is for treatment of intracranial atherosclerotic cerebrovascular stenosis. WILLIS™ Intracranial Stent Graft System is the only stent graft system for intracranial cerebral aneurysms approved by NMPA. The Tubridge™ Vascular Reconstruction Device (the "Tubridge™") is the first approved domestic blood flow device for the treatment of intracranial large and giant aneurysms in China. In addition, there are a number of products of the Group under development to strengthen the neurovascular product line in the future.



For the year ended 31 December 2018, the neurovascular devices business continued its rapid growth and its revenue increased by 36.5% (excluding the foreign exchange impact) as compared to that of last year, of which, the revenue of our APOLLO™ with 14 years' launch remains organic growth, which was mainly attributable to the safety and effectiveness of the product and its market dominance. WILLIS™, the only stent graft system for treatment of intracranial aneurysms in China, recorded a year-on-year decrease in revenue due to changes in the competitive landscape. In March 2018, the Group's self-developed Tubridge™ received registration approval from NMPA, becoming the first flow diverting stent approved in China. In April of the same year, Tubridge™ successfully completed the first clinical implantation in China after being approved by NMPA. The launch of Tubridge™ brings new growth momentum to the business segment. In addition, Vertebral Artery Rapamycin Target Eluting Stent, the world's first DES indicated for the treatment of vertebral artery stenosis, has passed review and entered the Green Path.

RESEARCH AND DEVELOPMENT ("R&D")

Excellent R&D capability and effective R&D are key drivers for the sustainable development of the Group as an innovative medical device company. Over the past 20 years, the Group has been pursuing the mission of "making continuous innovation to provide doctors with the best inclusive medical solutions that can save and reshape patients' lives or improve their quality of life". With the goal of import substitution and building Chinese brand, we, through higher standards and better practices, are committed to innovation and R&D of global leading technologies, to create a technological innovation system combining production, education and research, and provide quality products and services to the global market, providing the strongest driving force for the sustainable development of the Group.

In 2018, the Group's R&D projects were carried out in an orderly manner. A total of 10 products gained NMPA approval and three products entered the Green Path. Since the establishment of the Green Path, 15 products of the Group has been granted access to the Green Path as at the end of 2018.

For orthopedics products, the hip joint prosthesis stem that is independently developed by the Group combining the SuperPATH™ technology has obtained the registration certificate issued by NMPA, which is the first registration certificate obtained by the Group's domestic joint products. The approval for launch of this product will further accelerate the promotion and popularization of SuperPATH™ technology to serve more patients. In early 2019, the Aspiration™ medial stability Total Knee Replacement System-PS Type Implant received a registration certificate issued by NMPA. It is the first approved domestic total knee replacement system for MicroPort Orthopedics, which will provide a more comprehensive total knee replacement solution for Chinese patients. In addition, the Group's self-developed domestic instrument kit for ADVANCE™ and knee kit for Evolution™ also have obtained certification for launch.

For the cardiovascular devices business, the Group announced two-year follow-up results of the First-In-Man study (the FUTURE-I) of the Group's in-house developed Firesorb™ Bioresorbable Sirolimus Target Eluting Coronary Scaffold System (the "Firesorb™"), which has further demonstrated the feasibility, preliminary safety and efficacy of Firesorb™ in treating patients with single-vessel coronary diseases.

For the endovascular devices business, the Group's self-developed Fontus™ single-branched stent graft system passed NMPA's review and entered the Green Path. Its single-branched stent structure reduces the difficulty of surgery, shortens the operation time, and allows the stent to be more accurate, smoother and safer.

For the EP devices business, the second-generation Columbus™ 3D EP Navigation System and EasyFinder™ 3D steerable curve mapping catheter independently developed by the Group were certified. The single-channel ECG recorder gained approval from Shanghai Municipal Food and Drug Administration (now known as "Shanghai Municipal Medical Products Administration") and became the first product approved through the Marketing Authorization Holder system nationwide.

For the neurovascular devices business, the Group's self-developed Tubridge™ Vascular Reconstruction Device received registration approval from NMPA, becoming the first flow diverting stent approved in China. The Vertebral Artery Rapamycin Target Eluting Stent is the world's first DES indicated for the treatment of vertebral artery stenosis and entered the Green Path in March 2018 with an expectation to accelerate the market launch process to benefit more patients.

As for its structural heart business, the Group announced the one-year follow-up study results for the Group's in-house developed VitaFlow™ Transcatheter Aortic Valve and its Delivery System ("VitaFlow™"). The data demonstrated the occurrence of all-cause mortality is as low as 2.7%, and there is no major stroke. All of the patients reported good hemodynamic function, no moderate or severe paravalvular leakage. The one-year clinical data of VitaFlow™ demonstrated that VitaFlow™ is safe and effective in treating severe calcified aortic stenosis. In December 2018, the Group's self-developed new generation of VitaFlow™ II Transcatheter Aortic Valve and its Retrievable Delivery System ("VitaFlow™ II System") passed the special review procedure regarding innovative medical device of NMPA and was granted to enter the Green Path, which further promoted the clinical application and popularization of the product in China. In addition, VitaFlow™ II System successfully enrolled its first patient in the pre-marketing clinic research project VITALE trial in Europe ("VITALE Trial"). VITALE Trial is the first pre-marketing clinical trial in Europe. In 2018, R&D for surgical robotics was continuously promoted and achievements gradually came out.

MANAGEMENT DISCUSSION AND ANALYSIS

MANUFACTURING

In 2018, the Group continued to focus on the refined management of the supply chain process, automation and digitization of the production process, instillation of the safety culture and the effective implementation of energy saving and emission reduction.

In 2018, the Group was committed to increasing production efficiency through optimizing the supply chain, improving product processes, shortening production cycles, and continuously developing automated and intelligent equipment. Through the adjustment of production line layout, the Group made the best use of existing space, optimized production process to lower quality risk, and laid the foundation for the automated operation in the future. With the constantly improving intelligent manufacturing technology, the Group developed an automatic assembly line and achieved full automation for part of the production process in 2018. In addition, the Group also developed an automatic testing prototype to improve the traceability and stability of product testing, decrease the operation difficulty of staff and increase their work efficiency.

QUALITY ASSURANCE

Priority is given to “quality” in the values of the Group as the Group knows that the quality of each of its products has close bond with human life. The Group has an independent quality and regulatory business department and devote significant resources to quality management of our products through monitoring every stage of our quality control process, including R&D, product design, procurement of raw materials, manufacturing, product release, product feedback and risk management, so as to assure that the product quality meets the Group’s quality management standards and policies. The quality and regulatory business department also conducts inspection on our products both during and after the manufacturing process, including raw material inspection, manufacturing process inspection and final products delivery inspection.

In 2018, the Group made a comprehensive breakthrough in quality control, providing strong quality assurance for the R&D of products and post-market products. The Group improved the inspection skills and reduced inspection costs to ensure smooth delivery of products. Electronic recording is now applied to the whole manufacturing process of products and acceptance check is done without the use of paper. In addition, the Group also optimized the compliance control process of software and continued to explore the level of intelligent inspection. In order to coordinate with the implementation of the system of the registrant of medical device, the Group has well defined the special requirements of the quality management system related to trusted production, and formulated the management system to standardize the process, thus opening up a duplicable and worth popularising registrant path within the Group. In 2018, the excellent quality brand of the Group was fully recognized by the society and the Group was awarded the Golden Quality Award of Shanghai Municipality in 2018, becoming the first enterprise in the medical device industry to win such award since the establishment of the Quality Award of Shanghai Municipality. The Group was also honored with the title of “Quality Benchmark” enterprise of Shanghai in 2018 in recognition of its “practical experience in implementing integrated management model of technological innovation and industrialization”.

COMPETITION

The environment in which we operate is continuously evolving. As a domestic market leader among PRC companies manufacturing medical devices, the Group is facing competition both domestically and internationally. In spite of the foregoing, the Group insists on independent innovation to strengthen its core competitiveness, and takes a leading position in various market segments by virtue of its high-quality products. The Group is also highly recognized by all sectors of society for its products and brands. Therefore, the Group is confident that it will maintain its current leading market position domestically and continue to expand the overseas market share.

INTELLECTUAL PROPERTY

Intellectual property is an important intangible asset of the Group, and also an inherent driver to enhance our core competitiveness in the medical devices market. Thus, while being devoted to technological innovation, we also attach great importance to the patent application and the intellectual property protection, which are conducive to the healthy and sustainable development of the Group in the long run. In 2018, the Group filed 298 patent applications and 156 trademark applications domestically and internationally. As at the end of 2018, the Group had a total of 3,432 patents (including applications) covering 28 countries and 1,679 trademarks (including applications) covering 66 countries.

FINANCIAL REVIEW

OVERVIEW

Faced with technical changes in the global medical device industry, in particular the challenges in the rapidly growing medical device industry from a highly competitive global market, the Group has successfully achieved a revenue growth of 50.7% for the year ended 31 December 2018. The Group's cardiovascular devices, endovascular devices and neurovascular devices businesses as maintained the leading positions in China. The Group firmly continued to provide diversified products and continued our globalization strategy thereby generated 57.9% of the revenue from overseas market. The Group aims to continuously bring our innovations, technologies and services to millions of global patients and become a patient-oriented global leading enterprise in minimally invasive treatment and other emerging medical market.

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

REVENUE

US$'000	**Financial year ended**		Percent change	
	2018	2017	in US$	excluding the foreign exchange impact
Orthopedics devices business	**236,279**	224,607	5.2%	3.8%
Cardiovascular devices business	**202,817**	163,299	24.2%	22.0%
CRM devices business (*Note 1)	**158,376**	2,348	6,644.8%	6,575.8%
Endovascular devices business	**34,975**	24,793	41.1%	39.6%
Neurovascular devices business	**18,427**	13,513	36.4%	36.5%
EP devices business	**12,691**	9,417	34.8%	34.5%
Surgical devices business	**5,925**	5,498	7.8%	6.2%
Diabetes and endocrinal devices business (*Note 2)	**–**	715	(100.0%)	(100.0%)
Total	**669,490**	444,190	50.7%	48.6%

Note:

1 The acquisition of the CRM business from LivaNova was completed on 30 April 2018. The financial results of the CRM business have been consolidated into the financial statement of the Group thereafter. As such, the revenue of this segment for the year ended 31 December 2018 includes the acquired business for the period from 30 April 2018 to 31 December 2018 and the original pacemaker business for the year ended 31 December 2018.

The revenue of the cardiovascular devices business and the CRM business for the year ended 31 December 2017 was reclassified and the revenue attributable to the pacemaker business previously included in the cardiovascular devices business was reallocated to the CRM business.

2. This segment was restructured in 2017 whereby the Group ceased to hold the controlling interest of Shanghai MicroPort Lifesciences Co., Ltd. (the "MP Lifesciences Shanghai") and therefore MP Lifesciences Shanghai became an associate entity of the Group.

The Group's revenue for the year ended 31 December 2018 was US$669.5 million, representing a growth of 50.7% compared to US$444.2 million for the year ended 31 December 2017. The Group's reported revenue was impacted by translation from Renminbi ("RMB"), the functional currency of the Group's PRC subsidiaries, to US$, the presentation currency of the Group due to the appreciation or depreciation of US$ against RMB during 2018. Excluding the foreign exchange impact, the Group's revenue growth rate was 48.6%. Such increase was primarily driven by the strong sales performance of the cardiovascular devices business. The following discussion is based on the Group's eight major business segments.

– ORTHOPEDICS DEVICES SEGMENT

US$'000	**Financial year ended**		Percent change	
	2018	2017	in US$	excluding the foreign exchange impact
Orthopedics devices business	236,279	224,607	5.2%	3.8%
– US	99,673	97,074	2.7%	2.7%
– Europe, Middle East and Africa	60,122	58,930	2.0%	(2.1%)
– Japan	34,494	31,377	9.9%	7.9%
– PRC	17,838	13,472	32.4%	32.8%
– Others	24,152	23,754	1.7%	1.6%

Orthopedic devices segment achieved revenue of US$236.3 million for the year ended 31 December 2018, representing a growth of 3.8% (excluding the foreign exchange impact) or 5.2% in US$ compared to the year ended 31 December 2017. Such operational increase was mainly because (i) revenue in the US market achieved a 2.7% growth (excluding the foreign exchange impact) over the previous year as the US market focused on opening new sales channels, surgeon training effectiveness, and new product launches which accelerated revenue growth trend in the US market; (ii) revenue in Japan market increased by 7.9% (excluding the foreign exchange impact) over the previous year, which was mainly attributable to positive momentum from Japan market driven by a focus on sales execution and customer development; (iii) revenue in EMEA market decreased by 2.1% (excluding the foreign exchange impact) over the previous year, mainly attributable to the strategy to shift away from lower margin sales channels to higher margin subsidiaries for the optimization of the allocation of resources; (iv) revenue in the PRC market increased by 32.8% (excluding the foreign exchange impact) over the previous year, which was attributable to greater market recognition and brand awareness of MicroPort orthopedics leading to a significant increase in clinical implants volume; and (v) sales in other markets achieved growth of 1.6% (excluding the foreign exchange impact) over the previous year driven by steady growth in Australia market.

– CARDIOVASCULAR DEVICES SEGMENT

The Group's cardiovascular devices segment achieved revenue of US$202.8 million for the year ended 31 December 2018, representing a growth of 22.0% (excluding the foreign exchange impact) or a growth of 24.2% in US$ compared to the year ended 31 December 2017. Such increase was mainly attributable to: (i) Firehawk™ penetrating into an increasing number of hospitals in China and more overseas countries, with its global revenue achieving a 40.9% growth (excluding the foreign exchange impact) over the previous year; and (ii) Firebird2™ sales in the PRC market maintaining an organic growth of 11.7% (excluding the foreign exchange impact) as compared with the year ended 31 December 2017 through advanced distribution channels.

– CRM DEVICES BUSINESS

The CRM devices business was acquired by the Group from LivaNova, and such acquisition was completed on 30 April 2018. Following completion of such acquisition, the financial results of the CRM business have been consolidated into the financial statements of the Group. The revenue of this segment for the year ended 31 December 2018 has included the results of the acquired business for the period from 30 April 2018 to 31 December 2018 and the results of the original pacemaker business for the year ended 31 December 2018. CRM business achieved revenue of US$158.4 million for the year ended 31 December 2018.

– ENDOVASCULAR DEVICES SEGMENT

The Group's endovascular devices segment achieved revenue of US$35.0 million for the year ended 31 December 2018, representing a growth of 39.6% (excluding the foreign exchange impact) or a growth of 41.1% in US$ compared with the year ended 31 December 2017. Such increase was mainly attributable to (i) positive market recognition and enhanced competitiveness of the Group's endovascular products in thoracic aortic aneurysm and endovascular treatment market as a result of the market launch of Hercules™ Low Profile product; (ii) positive market recognition of the newly launched product Castor™, the world's first thoracic branch stent-graft system; and (iii) in response to government guideline, cultivating markets in second-tier and third-tier cities in China through effective promotion mechanisms.

– NEUROVASCULAR DEVICES SEGMENT

The Group's neurovascular devices segment recorded revenue of US$18.4 million for the year ended 31 December 2018, representing a growth of 36.5% (excluding the foreign exchange impact) or a growth of 36.4% in US$ compared to the year ended 31 December 2017. Such increase was mainly attributable to (i) APOLLO™ Intracranial Stent System maintained an organic growth driven by its greater market recognition; (ii) positive market recognition for newly launched Tubridge™, the first flow diverting stent approved for product launch in China; and (iii) rapid growth of an agent product, neurovascular guide wire ASAHI.

– EP DEVICES SEGMENT

The Group's EP devices segment recorded revenue of US$12.7 million for the year ended 31 December 2018, representing a growth of 34.5% (excluding the foreign exchange impact) or a growth of 34.8% in US$ compared to the year ended 31 December 2017. Such increase was mainly attributable to (i) the significant expansion of the Group's distribution network and hospital coverage, the premium quality of the in-house-developed products, and (ii) rapid revenue growth of new products i.e. Columbus™ 3D EP Navigation System, FireMagic™ 3D Irrigated Ablation Catheter.

– SURGICAL DEVICES SEGMENT

The Group's surgical devices segment recorded revenue of US$5.9 million for the year ended 31 December 2018, representing a growth of 6.2% (excluding the foreign exchange impact) or a growth of 7.8% in US$ as compared to the year ended 31 December 2017. Such increase was mainly attributable to the sales growth of ultrafiltration and surgical consumables driven by effective sales promotion activities.

– **DIABETES AND ENDOCRINAL DEVICES SEGMENT**

The Group's diabetes and endocrinal devices segment was restructured in 2017 whereby the Company ceased to hold the controlling interest in MP Lifesciences Shanghai which therefore became an associate of the Company, and its revenue was no longer consolidated since the date of restructuring.

COST OF SALES

For the year ended 31 December 2018, the cost of sales of the Group was US$199.5 million, representing a 58.6% increase as compared to US$125.8 million for the year ended 31 December 2017. Such increase was mainly attributable to (i) the increased sales volume of the major segments; and (ii) the increased cost of the CRM business which was acquired in 30 April 2018 and consolidated in the year ended 31 December 2018.

GROSS PROFIT AND GROSS PROFIT MARGIN

As a result of the foregoing factors, the gross profit of the Group increased by 47.6% from US$318.4 million for the year ended 31 December 2017 to US$470.0 million for the year ended 31 December 2018. Gross profit margin is calculated as gross profit divided by revenue. The gross profit margin of the Group decreased from 71.7% for the year ended 31 December 2017 to 70.2% for the year ended 31 December 2018, mainly due to the dilutive impact of the newly acquired CRM business with a gross margin lower than the average of the Group.

OTHER NET INCOME/(LOSS)

Other net income of the Group amounted to US$13.8 million for the year ended 31 December 2018, while incurred other net loss of US$2.5 million for the year ended 31 December 2017. Such increase was mainly attributed to the increase in government grant and the foreign exchange net gain for the year ended 31 December 2018 as compared with a foreign exchange net loss for the year ended 31 December 2017.

GAIN ON DEEMED DISPOSAL OF A JOINT VENTURE

MSC was previously jointly controlled by the Group and LivaNova. After the completion of the CRM Acquisition, MSC became a subsidiary of the Company with its assets and liabilities consolidated into the Company's consolidated financial statements. Accordingly, the acquisition-date fair value of the existing equity interests in MSC owned by the Group forms part of the consideration in determining the amount of goodwill. A gain of US$4.1 million in relation to the deemed disposal of interests in a joint venture was recognised in the consolidated statement of profit or loss of the Group for the year ended 31 December 2018, which was determined as the excess of the fair value of the existing equity interests in MicroPort Sorin CRM, over the nil carrying value of investment in the joint venture.

RESEARCH AND DEVELOPMENT COSTS

Research and development costs increased by 80.2% from US$58.2 million for the year ended 31 December 2017 to US$104.8 million for the year ended 31 December 2018. Such increase was mainly attributable to (i) the acquisition of the CRM business, which incurred R&D costs of US$31.6 million for the year ended 31 December 2018; and (ii) the increased investments in the on-going R&D projects and the newly kicked off R&D projects.

DISTRIBUTION COSTS

Distribution costs increased by 58.1% from US$137.8 million for the year ended 31 December 2017 to US$217.8 million for the year ended 31 December 2018. Such increase was mainly attributable to (i) the acquisition of the CRM business, which incurred distribution costs of US$61.1 million for the year ended 31 December 2018; (ii) increase in sales promotion and post-launching clinical trial expenses; and (iii) increase in staff cost.

ADMINISTRATIVE EXPENSES

Administrative expenses increased by 43.3% from US$66.8 million for the year ended 31 December 2017 to US$95.7 million for the year ended 31 December 2018. Such increase was mainly attributable to (i) the acquisition of the CRM business, which incurred administrative expenses of US$18.6 million for the year ended 31 December 2018; and (ii) increase in staff cost.

OTHER OPERATING COSTS

The Group's operating costs increased by 154.2% from US$5.3 million for the year ended 31 December 2017 to US$13.4 million for the year ended 31 December 2018. Such increase was mainly attributable to (i) the increase in related professional fees for business acquisition and (ii) increase of impairment loss of intangible assets.

FINANCE COSTS

The Group's finance costs increased from US$13.5 million for the year ended 31 December 2017 to US$21.0 million for the year ended 31 December 2018. Such increase was mainly attributable to the interest expenses of new interest-bearing borrowings for the acquisition of the CRM business.

INCOME TAX

The Group's income tax increased from US$13.4 million for the year ended 31 December 2017 to US$14.5 million for the year ended 31 December 2018. Such increase was mainly attributable to the increase in profit before tax of the PRC subsidiaries of the Company.

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 our 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 2018, the Group had cash and cash equivalents of US$130.1 million, as compared to US$160.2 million as at 31 December 2017. Such decrease was mainly attributable to the cash consideration paid for the acquisition of the CRM business. The Board's approach to manage liquidity of the Group is to ensure sufficient liquidity at any time to meet its matured liabilities to avoid any unacceptable losses or damage to the Group's reputation.

BORROWING AND GEARING RATIO

Total borrowings of the Group, including interest-bearing borrowings and convertible bonds, as at 31 December 2018 were US$329.1 million, with an increase of US$77.6 million as compared to US$251.5 million as at 31 December 2017. Such increase was driven by the new interest-bearing bank loans for the acquisition of the CRM business. As at 31 December 2018, the gearing ratio (calculated by dividing total borrowings by total equity) of the Group increased to 62.2%, while that as at 31 December 2017 was 57.2%.

NET CURRENT ASSETS

The Group's net current assets as at 31 December 2018 were US$114.3 million, as compared to US$230.8 million as at 31 December 2017.

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 Japanese yen). For the year ended 31 December 2018, the Group recorded a net exchange gain of US$9.6 million, as compared to a net foreign exchange loss of US$11.0 million for the year ended 31 December 2017. 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

On 30 April 2018, the Group had additions in property, plant and equipment with fair value of US$22.8 million through the acquisition of the CRM business from LivaNova. In addition, during the year ended 31 December 2018, the Group's total capital expenditure amounted to approximately US$90.1 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 2018, the Group had set pledge on its bank deposits, manufactory building, headquarter building and land use rights held for own use for the purpose of securing bank loans with a carrying value of US$62.3 million.

As at 31 December 2018, a bank loan amounting to US$88.8 million in connection with the acquisition of the CRM Business was secured by the equity interests of the Company's four subsidiaries, namely Shanghai MicroPort Medical (Group) Co., Ltd. ("MP Shanghai"), MicroPort International Corp. Limited, MicroPort International Corp. and MicroPort Cardiac Rhythm B.V. and guaranteed by MP Shanghai.

FUTURE INVESTMENT PLANS AND EXPECTED FUNDING

Looking forward, the Group will continue to expand its markets at home and abroad so as to tap into its internal potential, hereby maximizing shareholders' interest and creating higher value. The Group will continue to grow the Group both in scale and strength through self-development, mergers and acquisitions, and other means. The Group's future business plan will employ a combination of financing channels to finance capital expenditures, including but not limit to internal funds and bank loans. Currently, the bank credit lines available to the Group are adequate.

SUBSEQUENT EVENTS

1. In February 2019, MicroPort EP MedTech Co., Ltd. ("MPEP") and the original shareholders of MPEP entered into a capital increase and share transfer agreement and a shareholder agreement with Jiaxing Huajie I Equity Investment Limited Partners (Limited Partnership) ("Jiaxing Huajie"), an independent third party of the Company, pursuant to which, Jiaxin Huajie agreed to (i) subscribe for 16,477,942 newly issued ordinary shares of MPEP at a cash consideration of RMB200,000,000; and (ii) acquire 18,362,194 ordinary shares of MPEP from the Group at a cash consideration of RMB222,870,000. Upon the completion of the above transactions, the Group's equity interest in MPEP will be decreased from 81.93% as at 31 December 2018 to 45.10%. As the highest applicable percentage ratio applied in accordance with Rule 14.07 of Listing Rules in respect of the transactions mentioned above is less than 5%, the transactions mentioned above do not constitute disclosable transactions under Chapter 14 of the Listing Rules.

2. On 22 March 2019, the Group, the other original shareholders (or its subsidiary) of MP CardioFlow Shanghai and Qianyi Investment I L.P. (the "CardioFlow Series C Investor") entered into a framework agreement in relation to, among others, the restructuring of shareholding of MP CardioFlow Shanghai (the "Restructuring"). Upon the completion of the Restructuring (without consideration of the investment by Series C Investor) (i) MicroPort CardioFlow Medtech Corporation (the "MP CardioFlow Cayman", a subsidiary of the Group) will indirectly hold the entire equity interest in MP CardioFlow Shanghai; and (ii) the original shareholders of MP CardioFlow Shanghai will, directly or indirectly, hold shares of MP CardioFlow Cayman in the same proportion to their shareholdings in MP CardioFlow Shanghai before the Restructuring.

   On 22 March 2019, the Group, the other original shareholders (or its subsidiary) of MP CardioFlow Shanghai and the CardioFlow Series C Investor also entered into a share purchase agreement (the "CardioFlow Series C SPA"), pursuant to which, among others, the CardioFlow Series C Investor agreed to subscribe for, and MP CardioFlow Cayman agreed to sell and issue 12,500,000 preferred shares of MP CardioFlow Cayman to the CardioFlow Series C Investor at a price of US$50,000,000. The CardioFlow Series C Investor will hold 12.5% of enlarged share capital (including ordinary shares and preferred shares) of MP CardioFlow Cayman and Group's effective interest in MP CardioFlow Shanghai will decrease from 64.72% as at 31 December 2018 to 56.63% upon the completion of the Restructuring (including investment by CardioFlow Series C Investor under the CardioFlow Series C SPA).

   In connection with the above transactions, MP CardioFlow Cayman also intends to write put options to the CardioFlow Series C Investor and certain other original shareholders (or its subsidiary) of MP CardioFlow Shanghai (the "Investors") upon adoption of its first amended and restated memorandum and articles of association (the "Restated Memorandum and Articles"). The put options will give the CardioFlow Series C Investor the rights to require MP CardioFlow Cayman to re-acquire the redeemable preferred shares from the CardioFlow Series C Investor under certain conditions at a consideration specified under the Restated Memorandum and Articles of MP CardioFlow Cayman.

   Further details of the Restructuring and the CardioFlow Series C SPA were set out in the Company's announcement dated 22 March and 27 March 2019.

3. After the reporting period, the Directors of the Company proposed a final dividend for the year ended 31 December 2018 of HK2.9 cents per ordinary share, which has not been recognized as a liability at 31 December 2018.

4. The Company proposes to spin off and separately list the shares of Shanghai MicroPort Endovascular MedTech Co., Ltd. (the "MP ENDO"), a subsidiary of the Company, on the Sci-Tech Board of the Shanghai Stock Exchange (the "Sci-Tech Board"). On 3 April 2019, MP ENDO submitted an application to the Sci-Tech Board for the listing of its shares on the Sci-Tech Board. It is intended that MP ENDO will conduct an offering of its new shares in connection with the listing. Please refer to the Company's announcement dated 3 April 2019 for further details.

MANAGEMENT DISCUSSION AND ANALYSIS

PROSPECT

With the development of China's economy, increased investment from the government in social medical insurance, policy benefits from reform of the medical system and gradual improvement in people's health awareness, the medical equipment market in the PRC has been growing rapidly to provide an opportunity for the rapid development of the Group's business. At the same time, such rapid development has also attracted more and more multinational corporations to enter into the market, resulting in fierce competition. In order to compete in this rapidly growing market, the Group will continuously perform proactive strategies, including but not limited to:

1. Further strengthening our leading position in the domestic medical devices market. The Group will take advantage of our brand recognition and sales distribution network in the domestic market to further reinforce our expansion in the PRC market to maintain and strengthen our leading position in the PRC medical devices market.

2. Overall integrating MicroPort brand and its global operation. The Group will continuously promote the global brand and operation strategy based on localization, implement the operation mode of "global strategy, localized execution, diversified layout and unified positioning", and efficiently integrate global resources with the market to complete the global layout and introduce the products of the Group to more countries or regions, thus benefiting patients around the world.

3. Developing and improving our existing products with diversification of products through innovation. The Group will further develop and improve the performance and manufacturing process of the Group's existing products, and foster firm R&D activities to develop a new generation of products, actively advance the clinic trial and approval of new products and thus diversify the Group's product offering and provide a comprehensive portfolio of medical devices to physicians and patients.

4. Reforming our management system. The Group will carry out reform of our management system to integrate resources, streamline processes, and optimize our management structure so as to enhance the competitiveness and the risk resistance capability of the the Group.

DIRECTORS

EXECUTIVE DIRECTOR

Dr. Zhaohua Chang (常兆華博士), is the Chairman, Executive Director and Chief Executive Officer of the Company. He has over 28 years' experience in the medical device industry, and currently also serve as a professor at School of Medical Instrument, 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) ("MP Shanghai") in 1998, from 1996 to 1997, Dr. Chang served as Vice President of Research and Development 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 Research and Development and Vice President of Engineering at Cryomedical Sciences Inc., a 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 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. Mr. Ashida is currently holding directorship in certain subsidiaries of the Group. Mr. Ashida is also a Director of Otsuka Medical Devices Co., Ltd. ("OMD"), 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.

Mr. Hiroshi Shirafuji (白藤泰司), born in 1944, is a non-executive Director of the Company. Mr. Shirafuji has served as a Director since 1 November 2006 and is also a director of certain subsidiaries of the Group. Mr. Shirafuji is the President of OMD. Prior to joining OMD in February 2011, he was an executive director responsible for pharmaceuticals marketing at Otsuka Pharmaceutical from 1997 to 1998. Mr. Shirafuji joined Otsuka Pharmaceutical in 1967. Mr. Shirafuji received his bachelor's degree in economics from Doshisha University in Kyoto in 1967. Mr. Shirafuji was also appointed as President, CEO and representative director of OMD in February 2011.

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 Putong District Small-Credit 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.

INDEPENDENT NON-EXECUTIVE DIRECTORS

Mr. Jonathan H. Chou (周嘉鴻先生), born in 1964, was appointed as our independent non-executive Director ("INED") on 3 September 2010. Mr. Chou has more than 25 years of professional experience from various senior finance leadership positions with Fortune 500 companies as well as Asia headquartered U.S. listed companies. These companies include Honeywell International and Tyco Fire & Security (ADT) where he held the position of Asia Pacific Chief Financial Officer. More recently, Mr. Chou held the position of Chief Financial Officer of Kulicke & Soffa Industries, Inc. (NASDAQ: KLIC) ("K&S"), a USD$2 Billion market capitalization company from 2010 to 2018. K&S is a leading provider of semiconductor packaging and electronic assembly solutions supporting the global automotive, consumer, communications, computing and industrial segments. Mr. Chou holds an MBA from Duke University, Fuqua School of Business, North Carolina and a B.A. from the University at Buffalo, New York.

Dr. Guoen Liu (劉國恩博士), 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 a BOYA professor of economics of Peking University, vice dean of Economics Management Department of Peking University, MOH Yangtze River Scholar professor of economics at the Peking University National School of Development, and director of the China Center for Health and Economic Research of Peking University. 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 a member of the editorial board in various periodic in the field of 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 in 1991, and post-doctoral training in health economics from Harvard University in 1994.

Mr. Chunyang Shao (邵春陽), born in 1964, was appointed as our INED 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. Mr. Shao is currently the 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 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 and MP Shanghai. 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 Shanghai MicroPort Medical (Group) 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 20 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, member of IOC and ICC. Mr. Sun has over 21 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, IOC and ICC. Dr. Luo has over 27 years of experience in the medical device industry. Prior to joining the Company in 2003, he worked as Principal Research and Development Engineer and Senior Manufacturing/Development Engineer at Medtronic AVE in the United States and Canada from 1995 to 2002. From 1991 to 1995, he worked as Supervisor and Engineer of the angioplasty research and development team at Vas-Cath Inc., a subsidiary of C.R. Bard, Inc., in Canada. Dr. Luo, jointly with others, owns 375 patent 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 2014.

Mr. Yimin Xu (徐益民), is Executive Vice President of Regulatory Affairs & Property Management of Shanghai MicroPort Medical (Group) Co., Ltd. and a member of CEC. Prior to current position, Mr. Xu has served as Vice President of Quality and Regulatory of the Company. He has over 19 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 First Vice President of Business Development and Project Management of MP Shanghai and a member of CEC. Prior to current position, Dr. Yue has served as 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 First Vice President of Coronary Manufacturing and Engineering of MP Shanghai and a member of CEC. Prior to current position, Mr. Que served as Vice President of Manufacturing and Engineering of the company and has over 13 years' experience in medical device industry. Prior to joining the Company in 2006, Mr. Que served as an engineering manager in Lenovo (Group) 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.

INTERCONTINENTAL ORTHOPEDICS COMMITTEE

Mr. Jonathan Chen, is the Chief International Business Officer ("CIBO") of the Company, Chairperson of ICC, 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 and South America. Mr. Chen has over 21 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. He led the management team to build near $300 million medical products business through various acquisitions and licensing transactions. Prior to joining Angiotech, Mr. Chen was a life sciences investment banker for Credit Suisse and Alex. Brown & Sons. He helped his clients raise in excess of $2 billion in equity and debt capital and advised on over $3 billion in 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. Hongbin Sun (孫洪斌), CFO of the Company, Co-Chairman of CEC, member of IOC and member of ICC. Please refer to the above for the details of his biography.

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

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 serves 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. Stefano Peverelli, is the Vice President of International Business 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 serves as Vice President of International Business in MicroPort Orthopedics Inc., leading sales, marketing and operations in 52 countries out of North America and China. He is also the Chairman of the Board of Directors in each international subsidiary of MicroPort Orthopedics Inc. Prior to his current position, Mr. Peverelli served for 2 years as Vice President of EMEA Sales, Regional Vice President of South Europe and Middle East and Managing General Manager of Italian Branch of Wright. Prior to Wright, Mr. Peverelli served as Chief Director of Italian Business in B. Braun Aesculap and Chief Director of Italian Market in Johnson & Johnson. Mr. Peverelli holds a 5-years Engineering master's degree from Politecnico in Milan and a master's degree in Management from ICHEC Brussels Management School.

Mr. Robin Weng (翁資欣), is the China Orthopedic president of the Company and a member of IOC. Mr. Weng has almost 30 years of marketing, sales development and operation management experiences in the orthopedics (including joints, spine and trauma) industry. He has served several management roles in multi-national orthopedics and medical devices companies, where he was responsible for business development within mainland China, regions of Hong Kong, Macau and Taiwan and oversea markets and achieved significant results. He has considerable experience in corporate operation, management and development. Before joining the China Orthopedic business of the Company, Mr. Weng was responsible for Trauma and Joint Recon business and served as General Manager of Joint Business at Smith & Nephew (China) over 14 years. Mr. Weng graduated from Chung Yuan Christian University, majoring in Medical Engineering.

INTERCONTINENTAL CRM COMMITTEE

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

Mr. Benoît Clinchamps, is President of MicroPort CRM and Co-Chairperson of ICC. Following the Company's asset purchase of LivaNova PLC's CRM Business in May 2018, he serves as Managing President of MicroPort CRM. Mr. Benoit Clinchamps has 20 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 CRM business, Vice-President for Product Development & Regulatory Affairs, Vice President for Quality Assurance & Regulatory Affairs, Vice Director of Plant Manager and Quality Assurance & Regulatory Affairs in LivaNova group. Prior to joining LivaNova group, Mr. Clinchamps spent 6 years at GE Healthcare and was the Director of Operations and Manufacturing in Europe where he won the 6 Sigma Champion. Before entering the healthcare and medical product industry, Mr. Clinchamps served as Project Managers 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-Chairman of CEC, member of IOC and member of ICC. Please refer to the above for the details of his biography.

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

Dr. Philippe Wanstok, is Senior Vice President of Global Sales of MircroPort CRM and a member of ICC. Following the Company's asset purchase of LivaNova PLC's CRM Business in May 2018, he serves as Senior Vice President of Global Sales of MircroPort CRM. He has over 25 years of experience in medical device industry. Most recently, 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. Dr. 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, Dr. Wanstok served as Vice President of International Marketing for Boston Scientific, where he established and launched global marketing strategies. Dr. 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. Following the Company's asset purchase of LivaNova PLC's CRM Business in May 2018, he serves as Vice President of Finance of MicroPort CRM. Mr. Vodden served as Vice Finance President in Sorin group from 2011 to 2018 where he was responsible for its CRM business and business in Europe and Japan markets. From 2003 to 2011, he took several finance management roles of Europe business in Boston Scientific. Before then, he worked in Hewlett Packard until 2003, in its branches and subsidiaries in UK and then in France, with several roles including Finance Director of 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 Economics and Accounting from the University of Southampton.

Dr. Wang Li (王勵), is CEO of MicroPort Sorin CRM (MSC) and a member of ICC. Following the Company's asset purchase of LivaNova PLC's CRM Business in May 2018, he serves as the CEO of MSC. Dr. Wang has over 26 years' experience in the domestic and overseas medical device industry. From 1992 to 2014, Dr. Wang worked in Medtronic US as the Senior Business Director of CRDM business in Greater China, he was responsible for the CRDM business in Greater China, leading more than 300 employees to achieve more than 10% annual growth of business, setting up and implementing strategic investment to promote the long-term growth of regional business in China. He also served as Staff Scientist of CRM Research, Senior Product Planning Manager of CRM Product and Market and Marketing Director of CRM business in Asia Pacific, leading or participating in the development and global launch of 15 CRM products. Dr. Wang has excessive publications and holds dozens of invention patents. Dr. Wang received his masters' degrees in Biomedical Engineering and Electrical Engineering, Ph.D in Biomedical Engineering from the University of Minnesota. Dr. Wang is the fellow of Heart Rhythm Society (HRS).

REPORT OF THE DIRECTORS

The Board of the Company is pleased to present this report together with the audited financial statements of the Group for the year ended 31 December 2018.

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 performance of the Group for the financial year ended 31 December 2018 and the state of the Group's affairs as at that date are set out in the consolidated financial statements on pages 97 to 216 of this annual report.

BUSINESS REVIEW

OVERVIEW

In 2018, with further completion of government policy and increasing demand for medical devices, the medical device industry maintained a fast and healthy development momentum. We have successfully closed the acquisition of the CRM business from LivaNova and consolidated it since 30 April 2018. For the year ended 31 December 2018, the Company recorded a revenue of US$66.9 million, with an increase of 50.72% from 2017. Meanwhile, the Company achieved a net profit of US$18.3 million (profit attributable to equity's shareholders: US$23.9 million). We continued to diversify our product portfolio and executed our globalization strategy. We continuously innovate and subsequently commercialize the best and yet affordable therapeutic solutions to save and reshape lives.

A fair review of the business of the Group and a discussion and analysis of the Group's performance during the year under review and the material factors underlying its results and financial position are provided in the part of "Management discussion and analysis" from page 9 to page 24 of this annual report.

ENVIRONMENTAL POLICIES AND PERFORMANCE

Realizing the responsibility of protecting the environment, the Company is committed to achieve its success in business without the expense of environment, and is dedicated to maintain an environmentally friendly and sustainable operation. To optimize energy efficiency and reduce carbon emissions, we have invested in energy monitoring system in our Shanghai site during the year.

Spearheaded by the top management, environmental issues are managed across various levels in the Company. We regularly review relevant laws and regulations, and the Company's functional departments are responsible for updating internal policies of the Company in aspects of environment and health, making sure that they are up-to-date and match with the latest standards and requirements.

A comprehensive review on the Company's environmental policies and performance during the year 2018 is provided in the "Environment, Social and Governance Report" from page 62 to page 89 of this annual report.

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, the government of the Hong Kong Special Administrative Region, Food and Drug Administration, the US Commerce Department, the US Department of Justice, and such entities global counterparts in countries where MicroPort conducts business. We maintain cordial working relationships with regulators through effective communications. During 2018, 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 by the government. The execution 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 devices is subject to significant uncertainty and varies from region to region, therefore, the Group is 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 respects every employee and strive to create a comfortable and safe working environment. During the year, we launched a leadership development project and an outstanding executive managerial skills enhancement project to further strengthen our management succession.

Details of employees of the Company during the year are set out in the "Environmental, Social and Governance Report" from page 62 to page 89 of this annual report.

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.

We have established relationships with many key opinion leaders in medical community, including physicians, researchers and hospital administrators. Through regular visits with specialists, attendance of conferences, holding physician education programs and other activities, our brand recognition are enhanced greatly.

Our Customer Service Center also collects complains from world-wide customers through our online complain system, so as to help rational settlement of medical disputes.

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 glad 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 2019, 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.

MAJOR CUSTOMERS AND SUPPLIERS

For the financial year ended 31 December 2018, purchases from the Group's largest supplier and the five largest suppliers in aggregate accounted for 7.0% and 18.2% 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 3.9% and 16.5% 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 reporting period are set out in note 28 to the consolidated financial statements.

GROUP FINANCIAL SUMMARY

A summary of the Group's results and assets and liabilities for the past 5 financial years is set out in the section Five Year's Financial Summary of this annual report.

DIRECTORS

Directors during the year and up to the date of this report were:

EXECUTIVE DIRECTOR

Dr. Zhaohua Chang

NON-EXECUTIVE DIRECTORS

Mr. Norihiro Ashida
Mr. Hiroshi Shirafuji
Ms. Weiwei Chen (Resigned on 21 June 2018)
Mr. Hongliang Yu (Appointed on 21 June 2018)
Ms. Janine Junyuan Feng (Resigned on 20 November 2018)

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, Mr. Hongliang Yu and Mr. Chunyang Shao will retire from office as Directors at the forthcoming annual general meeting. All of them 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 25 to 31 of this annual report.

DIRECTORS' SERVICE CONTRACT

None of the Executive Director and Non-executive Directors has entered into a service contract regarding their office of director with the Company. For the Independent Non-executive Directors, Mr. Jonathan H. Chou and Dr. Guoen Liu, each entered into a letter of appointment with the Company for a term of three years commencing from 24 September 2010, and Mr. Chunyang Shao has entered into a letter of appointment with the Company for a term of three years commencing from 23 September 2016. All the appointments will continue thereafter unless and until terminated by either party in accordance with the letters of appointment.

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).

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 Scheme" 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 routines, 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 2018, 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:

Name of Director/ Chief Executive	No. of Shares	Note	Capacity	Nature of Interest	Approximate percentage of interest in the Company
Zhaohua Chang	58,472,359	1	Beneficial owner	Long position	3.65%

Note:

(1) Zhaohua Chang is interested in the underlying Shares of the Company by virtue of the options granted to him under the share option scheme of the Company. For further details, please refer to the below section headed "Share Option Scheme".

Save as disclosed above, as at 31 December 2018, 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 2018, 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	23.90
Otsuka Medical Devices Co., Ltd.	382,994,120	1	Beneficial owner	Long position	23.90
Maxwell Maxcare Science Foundation Limited	234,384,296	2	Interest of controlled corporation	Long position	14.62
We'Tron Capital Limited	234,384,296	2	Beneficial owner	Long position	14.62
Shanghai We'Tron Capital Corp.	234,384,296	2	Interest of controlled corporation	Long position	14.62
Shanghai Zhangjiang (Group) Co., Ltd.	221,748,050	3	Interest of controlled corporation	Long position	13.83
Shanghai Zhangjiang Science and Technology Investment Co.	221,748,050	3	Interest of controlled corporation	Long position	13.83
Shanghai Zhangjiang Haocheng Venture Capital Co., Ltd.	221,748,050	3	Interest of controlled corporation	Long position	13.83
Shanghai Zhangjiang Hi-Tech Park Development Co., Ltd.	221,748,050	3	Interest of controlled corporation	Long position	13.83
Shanghai Zhangjiang Science and Technology Investment (Hong Kong) Co., Ltd.	221,748,050	3	Interest of controlled corporation	Long position	13.83
Shanghai ZJ Hi-Tech Investment Corporation	221,748,050	3	Interest of controlled corporation/Beneficial Owner	Long position	13.83
Shanghai ZJ Holdings Ltd.	221,748,050	3	Interest of controlled corporation	Long position	13.83
Shanghai Zhangjiang Health Solution Holdings Limited	214,705,470	3	Beneficial Owner	Long position	13.39
CAP IV, L.L.C.	108,238,011	4	Interest of controlled corporation	Long Position	6.75
	37,056,193	4	Interest of controlled corporation	Short Position	2.31
CAP IV General Partner, L.P.	108,238,011	4	Interest of controlled corporation	Long Position	6.75
	37,056,193	4	Interest of controlled corporation	Short Position	2.31
Carlyle Asia Partners, IV L.P.	108,238,011	4	Interest of controlled corporation	Long Position	6.75
	37,056,193	4	Interest of controlled corporation	Short Position	2.31

Name of Substantial Shareholder	No. of Shares	Notes	Capacity	Nature of interest	Percentage of total number of Shares in issue (%)
Erudite Holdings Limited	108,238,011	4	Interest of controlled corporation	Long Position	6.75
	37,056,193	4	Interest of controlled corporation	Short Position	2.31
Grand Eternity Limited	97,632,486	5	Interest of controlled corporation	Long position	6.09
East Image Limited	97,632,486	5	Interest of controlled corporation	Long position	6.09
East Mega Limited	97,632,486	5	Interest of controlled corporation	Long position	6.09
Helix Capital Partners	97,632,486	5	Interest of controlled corporation	Long position	6.09
Starwick Investments Limited	97,632,486	5	Beneficial Owner	Long position	6.09

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 holds 100% interest of Shanghai We'Tron Capital Corp. which in turn is interested in 94.19% of We'Tron Capital Limited. Therefore, Maxwell Maxcare Science Foundation Limited, Shanghai We'Tron Capital Corp. and We'Tron Capital Limited are interested in the same 234,384,296 Shares held by We'Tron Capital Limited.

(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% 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 221,748,050 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	214,705,470	13.40
Shanghai ZJ Hi-Tech Investment Corporation	7,042,580	0.44
Total	221,748,050	13.84

(4) Erudite Holdings Limited holds the entire issued share capital of Erudite Parent Limited and Erudite Investment Limited respectively. Erudite Parent Limited and Erudite Investment Limited hold 71,181,818 Shares and 37,056,193 Shares, both in long position respectively. In addition, Erudite Investment Limited holds 37,056,193 Shares in short position. Therefore, CAP IV L.L.C., CAP IV General Partner, L.P., Carlyle Asia Partners IV, L.P., CAP IV Coinvestment, L.P. and Erudite Holdings Limited are deemed to be interested in the same 108,238,011 Shares in long position and 37,056,193 Shares in short position.

(5) Grand Eternity Limited holds 20.5% Interests of East Image Limited. East Image Limited and East Mega Limited and Helix Capital Partners have control in East Image Limited. East Image Limited and Grand Eternity Limited jointly holds 92.96% of Starwick Investments Limited. Therefore, Grand Eternity Limited and East Image Limited are interested in the same 97,632,486 Shares held by Starwick Investments Limited.

Save as disclosed above, as at 31 December 2018, 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

No contract concerning the management and administration of all or any substantial part of our business was entered into by the Company or existed in 2018.

DIRECTORS' INTERESTS IN CONTRACTS

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 of its subsidiaries was a party during the year.

Save as disclosed in note 34 to the consolidated financial statements, no contract of significance had been entered into between the Company or any of its subsidiaries and the Controlling Shareholders (as defined in the Listing Rules) of the Company or any of its subsidiaries.

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.

ADVANCE TO AN ENTITY

For the year ended 31 December 2018, the Company did not provide any advance to any entity which gives rise to a disclosure under Rule 13.20 of the Listing Rules.

PLEDGING OF SHARES BY THE CONTROLLING SHAREHOLDER

The Controlling Shareholder did not pledge any of its shares in the Company to secure the Company's debts or to secure guarantees or other support of the Company's obligations for the year ended 31 December 2018.

LOAN AGREEMENTS AND FINANCIAL ASSISTANCE OF THE COMPANY

For the year ended 31 December 2018, the Company did not enter into any loan agreement with covenants relating to specific performance of its Controlling Shareholder nor breach the terms of any loan agreements for the year ended 31 December 2018.

DIRECTORS' RIGHTS TO ACQUIRE SHARES OR 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; or was the Company and any of its 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) EXCLUSIVE DISTRIBUTION AGREEMENTS

On 23 January, 2017, the Company and Otsuka Holdings Co., Ltd. ("Otsuka Holdings") entered into a Distribution Framework Agreement ("Distribution Framework Agreement"), details of which were disclosed in the announcement of the Company dated 23 January 2017. According to the Distribution Framework Agreement, the Company appointed Otsuka Holdings' associates as exclusive distributors for the medical devices of the Company's subsidiaries in certain countries or region where the respective business of Otsuka Holdings and its associates covers. The Distribution Framework Agreement has a term commencing from 23 January 2017 and ending on 31 December 2019 (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' associates, and were made at prices no less favourable than those of similar transactions with independent third parties in accordance with the pricing terms therein.

As Otsuka Holdings is the substantial shareholder of the Company as at the date of this report, it is the connected person of the Company as defined under 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 2017, 2018 and 2019 were US$10 million, US$11 million and US$12 million, respectively. During the year 2018, the actual transaction amount under the Distribution Framework Agreement was US$4.0 million.

(II) SERVICE FRAMEWORK AGREEMENT

On 23 January 2017, the Company and Maxwell Maxcare Science Foundation Limited ("Maxwell") entered into the Service Framework Agreement, pursuant to which Maxwell and/or its associates will provide respective members of the Group with various services, including, among others, properties rental and management, and publicity planning services. The Service Framework Agreement has a term commencing from 23 January 2017 and ending on 31 December 2019 (both days inclusive).

The transactions under the Service Framework Agreement were conducted via specific agreements between specific members of the Group and Maxwell, and were made at prices no less favorable than such prices offered by any comparable independent third party to the Group or by Maxwell and/or its associates to any comparable independent third party.

As Maxwell is the substantial shareholder of the Company as at the date of this report, it is the connected person of the Company as defined under the Listing Rules. Accordingly, the transactions conducted under the Service Framework Agreement constituted continuing connected transactions under Chapter 14A of the Listing Rules. The annual caps for the transactions under the Service Framework Agreement in 2017, 2018 and 2019 were US$2 million, US$3 million and US$4 million, respectively. During the year 2018, the actual transaction amount under the Service Framework Agreement was US$0.6 million.

In the opinion of the Independent Non-executive Directors, the above transactions pursuant to the Distribution Framework Agreement and Service Framework Agreement were carried out in the ordinary and usual course of business of the Group, on normal commercial terms and were in accordance with the relevant Agreements governing them and the pricing policies of the Company, and on terms that were fair and reasonable and in the interests of the Group and the shareholders of the Company as a whole.

The Company's auditors were 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 auditors have issued their unqualified 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 auditors have 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.

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

Save for the 6,191,000 Shares of the Company purchased by the trustee of the share award scheme at cash consideration of US$6,236,823 on the Stock Exchange, 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 2018.

MATERIAL ACQUISITIONS AND DISPOSAL OF SUBSIDIARIES AND ASSOCIATED COMPANIES

ACQUISITION OF THE CRM BUSINESS FROM LIVANOVA PLC

Reference is made to the announcements of the Company dated 20 November 2017, 8 March 2018, 3 April 2018 and 30 April 2018. On 20 November 2017, the Company (as the guarantor), MicroPort Cardic Rhythm B.V. (as the purchaser) and LivaNova (as the seller) entered into a legally binding Letter of Intent, pursuant to which the parties have agreed to enter into the Stock and Asset Purchase Agreement upon clearance of the Works Council Process in France.

The Works Council Process in France has been concluded as of 27 February 2018. Pursuant to the Letter of Intent, the Company, the purchaser and the seller entered into the Stock and Asset Purchase Agreement on 8 March 2018 (after trading hours). Pursuant to the Stock and Asset Purchase Agreement, subject to certain closing conditions, the purchaser has agreed to acquire, and the seller has agreed to sell, the CRM Business for an initial consideration of US$190 million (equivalent to approximately HK$1.5 billion), subject to adjustment (the "Acquisition").

On 30 April 2018, all the conditions precedents to completion of the Acquisition have been fulfilled and the Acquisition was completed. Following completion of the Acquisition, the financial results of the CRM Business will be consolidated into the financial statements of the Company.

Saving as disclosed above, during the reporting period, there was no material acquisition and disposal of subsidiaries and associated companies by the Company.

INTEREST IN A COMPETING BUSINESS

During the reporting period, the Directors were not aware of any business or interest of the Directors or any substantial shareholder (as defined under the Listing Rules) of the Company and their respective associates that had competed or might compete with the business of the Group and any other conflicts of interests which any such person had or might have with the Group.

CODE OF CONDUCT REGARDING SECURITIES TRANSACTIONS BY DIRECTORS

The Company has adopted the Model Code as set out in Appendix 10 of 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 2018.

SHARE AWARD SCHEME

The Board approved and adopted a share award scheme on 26 August 2011 ("Share Award Scheme") as a means of recognising the contributions of selected employees of the Group.

SHARE OPTION SCHEMES

PRE-IPO SHARE OPTION SCHEME

In order to attract and retain eligible persons, and to provide an additional incentive for them to promote the success of the Group, the Company had adopted a share option scheme in 2004 (the "2004 Option Plan") and 2006 (the "2006 Incentive Plan") (collectively the "Pre-IPO Share Option Scheme"). The 2004 Option Plan, authorised to grant up to 10,261,030 share options, was modified when the Company agreed to assume the obligation of all outstanding and unvested share options of MicroPort Medical (Cayman) Corporation, while the 2006 Incentive Plan was modified prior to IPO by increasing the maximum aggregate number of shares which may be issued to 6,509,157.

As part of the restructuring of the Company due to the IPO, the Company approved a 10-for-1 share split, which as a result adjusted all share options issued prior to the share split by a 10-for-1 ratio accordingly. As such, total number of securities available for issue under the Pre-IPO Share Option Scheme are 102,610,300 and 65,091,570 for the 2004 Option Plan and the 2006 Incentive Plan, respectively. As at 31 December 2018, the total aggregate share options that may be granted under the Pre-IPO Share Option Scheme is 167,701,870, which represented 10.47% of the issued share capital of the Company. However, no additional options have been issued under the Pre-IPO Share Option Scheme since the listing of the Company on the Stock Exchange, and the total outstanding options that has been issued under the Pre-IPO Share Option Scheme is 3,342,000.

The administrator of the Pre-IPO Share Option Scheme may at its discretion select the employees, Directors and consultants to whom options may be granted from time to time. The exercise period for the options granted under the Pre-IPO Share Option Scheme shall be no more than ten (10) years from the date of grant, and five (5) years if the grantee who owns Shares representing more than ten percent (10%) of the voting power of all classes of Shares in the Company. The exercise price under the Pre-IPO Share Option Scheme shall be based on one hundred percent (100%) of the fair market value per Share on the date of grant, and one hundred and ten percent (110%) if the grantee owns Shares representing more than ten percent (10%) of the voting power of all classes of Shares in the Company. The administrator shall determine the provisions, terms and conditions of each grant including, but not limited to, the vesting schedule, repurchase provisions, rights of first refusal, forfeiture provisions, form of payment (cash, shares, or other consideration) upon settlement of the options, payment contingencies, and satisfaction of any performance criteria.

SHARE OPTION SCHEME

A share option scheme (the "Share Option Scheme") was approved and adopted pursuant to a written resolution of all the shareholders on 3 September 2010 (the "Adoption Date"), which will stay effective for ten years ending at 3 September 2020.

The purpose of the Share Option Scheme is to provide the Company with a means of incentivizing Directors, employees of business associates and retaining employees, and to encourage employees to work towards enhancing the value of our Company and promote the long-term growth of the Company. The 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 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 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 is 140,411,234 Shares. As at 31 December 2018, 132,579,869 Shares were available for issue under the Share Option Scheme, which represented 8.27% of the issued share capital. 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 Share Option Scheme and any other share option scheme of the Group (including both exercised or outstanding options) to each participant in any 12-months 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 grant of the option. The amount payable by each grantee of option to the Company on acceptance of the offer for the grant of option is US$1.00.

At the time of the grant of the options, the Company will specify the minimum period for which an option must be held before it can be exercised. The Share Option Scheme does not contain any 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 Share Option Scheme, provided that it shall be no 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.

The Share Option Scheme will remain in force for a period of 10 years after the Adoption Date.

During the year, 33,690,820 share options were granted and the status of the share options granted up to 31 December 2018 is as follows:

Catatofy of participants	As at 30 June 2018	Granted during the Period	Exercised during the Period	Expired during the Period	Cancelled during the Period	As at 31 December 2018	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)
Directors												HKD10.48
Zhaohua Chang	2,500,000	–	1,250,000	–	–	1,250,000	9 Jul 2010	9 Jul 2010 – 9 Jul 2014	9 Jul 2011 – 8 Jul 2020	USD0.3062	N/A	
	13,500,000	–	–	–	–	13,500,000	20 Jan 2015	20 Jan 2015 – 20 Jan 2021	20 Jan 2016 – 19 Jan 2025	HKD3.210	HKD3.170	
	14,100,000	–	–	–	–	14,100,000	30 Mar 2016	30 Mar 2016 – 30 Mar 2021	30 Mar 2017 – 29 Mar 2026	HKD3.482	HKD3.36	
	13,500,000	–	–	–	–	13,500,000	23 Jan 2017	23 Jan 2017 – 23 Jan 2022	23 Jan 2022 – 22 Jan 2027	HKD5.628	HKD5.45	
	313,636	–	–	–	–	313,636	30 Mar 2017	30 Mar 2017 – 30 Mar 2022	30 Mar 2022 – 29 Mar 2027	HKD5.798	HKD5.70	
	214,535	–	–	–	–	214,535	29 Mar 2018	29 Mar 2023	29 Mar 2023 – 28 Mar 2028	HKD8.510	HKD8.51	
	–	15,594,188	–	–	–	15,594,188	24 Dec 2018	24 Dec 2020 – 30 Dec 2022	24 Dec 2020 – 23 Dec 2028	HKD7.692	HKD7.15	
In Aggregate	44,128,171	15,594,188	1,250,000	–	–	58,472,359						
Consultants												N/A
	500,000	–	–	–	–	500,000	14 Jun 2007	24 Sep 2010 – 24 Sep 2014	24 Sep 2011 – 23 Sep 2020	USD0.3062	N/A	
	750,000	–	–	–	–	750,000	1 Sep 2016	1 Sep 2016 – 1 Sep 2021	1 Sep 2017 – 31 Aug 2026	HKD4.950	HKD4.950	
	–	500,000	–	–	–	500,000	8 Oct 2018	8 Oct 2019 – 8 Oct 2023	8 Oct 2019 – 7 Oct 2028	HKD9.992	HKD9.54	
In Aggregate	1,250,000	500,000	–	–	–	1,750,000						
Employees												HKD10.65
	480,000	–	110,000	–	–	370,000	8 Jul 2010	1 Aug 2010 – 1 Aug 2014	1 Aug 2011 – 7 Jul 2020	USD0.3062	N/A	
	82,000	–	10,000	–	–	72,000	8 Jul 2010	8 Jul 2010 – 8 Jul 2014	8 Jul 2011 – 7 Jul 2020	USD0.3062	N/A	
	1,150,000	–	–	–	–	1,150,000	9 Jul 2010	9 Jul 2010 – 9 Jul 2014	9 Jul 2011 – 8 Jul 2020	USD0.3062	N/A	
	150,000	–	–	–	–	150,000	17 Oct 2011	17 Oct 2011 – 17 Dec 2018	17 Oct 2012 – 16 Oct 2021	HKD4.790	HKD4.790	
	6,800,000	–	–	–	–	6,800,000	28 Aug 2012	28 Aug 2018 – 28 Aug 2019	28 Aug 2019 – 27 Aug 2022	HKD3.350	HKD3.350	

Catatofy of participants	As at 30 June 2018	Granted during the Period	Exercised during the Period	Expired during the Period	Cancelled during the Period	As at 31 December 2018	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)
	500,000	–	–	–	–	500,000	7 Sep 2012	7 Sep 2012 – 5 Sep 2017	6 Sep 2013 – 6 Sep 2022	HKD3.330	HKD3.330	
	7,800,000	–	–	–	–	7,800,000	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	
	500,000	–	400,000	–	–	100,000	28 Aug 2014	28 Aug 2014 – 28 Aug 2019	28 Aug 2015 – 27 Aug 2024	HKD4.718	HKD4.520	
	830,000	–	–	–	–	830,000	20 Jan 2015	20 Jan 2015 – 20 Jan 2019	20 Jan 2016 – 19 Jan 2025	HKD3.210	HKD3.170	
	2,420,000	–	–	–	–	2,420,000	20 Jan 2015	20 Jan 2015 – 20 Jan 2020	20 Jan 2016 – 19 Jan 2025	HKD3.210	HKD3.170	
	3,120,000	–	–	–	–	3,120,000	20 Jan 2015	20 Jan 2015 – 20 Jan 2021	20 Jan 2016 – 19 Jan 2025	HKD3.210	HKD3.170	
	100,000	–	–	–	–	100,000	30 Jun 2015	30 Jun 2015 – 30 Jun 2018	30 Jun 2016 – 29 Jun 2025	HKD3.900	HKD3.820	
	20,539,000	–	380,000	–	240,000	19,919,000	30 Mar 2016	30 Mar 2016 – 30 Mar 2021	30 Mar 2017 – 29 Mar 2026	HKD3.482	HKD3.36	
	700,000	–	–	–	–	700,000	27 Jun 2016	27 Jun 2016 – 27 Jun 2021	27 Jun 2017 – 26 Jun 2026	HKD3.850	HKD3.850	
	500,000	–	–	–	–	500,000	23 Jan 2017	23 Jan 2017 – 23 Jan 2022	23 Jan 2018 – 22 Jan 2027	HKD5.628	HKD5.45	
	9,040,000	–	–	–	–	9,040,000	23 Jan 2017	23 Jan 2022	23 Jan 2022 – 22 Jan 2027	HKD5.628	HKD5.45	
	2,486,413	–	–	–	–	2,486,413	30 Mar 2017	30 Mar 2022	30 Mar 2022 – 29 Mar 2027	HKD5.798	HKD5.70	
	2,000,000	–	–	–	–	2,000,000	25 Aug 2017	25 Aug 2018 – 25 Aug 2022	25 Aug 2018 – 24 Aug 2027	HKD7.418	HKD7.020	
	2,236,939	–	–	–	–	2,236,939	29 Mar 2018	29 Mar 2023	29 Mar 2023 – 28 Mar 2028	HKD8.51	HKD8.51	
	–	15,145,158	–	–	–	15,145,158	24 Dec 2018	24 Dec 2020 – 30 Dec 2022	24 Dec 2020 – 23 Dec 2028	HKD7.692	HKD7.692	
In Aggregate	61,684,352	15,145,158	900,000	–	240,000	75,689,510						
Total	107,062,523	31,239,346	2,150,000	–	240,000	135,911,869						

Note: 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.

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 reporting period.

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 2018 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 reporting period, the Company made donations of approximately US$813,009.

ANNUAL GENERAL MEETING

The Annual General Meeting ("AGM") of the Company will be held on 13 June 2019. The notice of AGM will be sent to shareholders at least 20 clear business days before the AGM.

FINAL DIVIDEND

The Directors have resolved to recommend the payment of a final dividend of HK$2.9 cent (tax inclusive) per Share for the year ended 31 December 2018 to the shareholders whose names appear on the register of members of the Company on 21 June 2019 and also to recommend the offer to the shareholders the right to select as an alternative, to receive such final dividend wholly by allotment of new Shares credited as fully paid in lieu of cash (the "Scrip Dividend Scheme"), subject to the approval of the shareholders on the payment of final dividend at the AGM and the granting by the Stock Exchange of the listing of, and permission to deal in, the Shares to be issued pursuant thereto.

Once the relevant resolution is passed at the AGM, the proposed final dividend is expected to be paid on or about 15 August 2019. Dividend warrants and share certificates for new shares to be issued under the Scrip Dividend Scheme will be dispatched by ordinary mail on or about 15 August 2019. The Shares to be issued pursuant to the Scrip Dividend Scheme will rank pari passu in all respects with the Shares in issue on the date of allotment and issue of such Shares save that they will not be entitled to the final dividend for the year ended 31 December 2018.

On condition that the payment of the above final dividend is approved by the shareholders at the AGM, a circular containing details of the Scrip Dividend Scheme will be dispatched to the shareholders on or about 16 July 2019.

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.

CLOSURE OF THE REGISTER OF MEMBERS

For determining the entitlement to attend and vote at the AGM, the register of members of the Company will be closed from 7 June 2019 to 13 June 2019, both days inclusive, during which period no transfer of shares will be registered. In order to be eligible to attend and vote at the AGM, all transfers of shares, accompanied by the relevant share certificates, must be lodged with the Company's share registrar in Hong Kong, Computershare Hong Kong Investor Services Limited, at Shops 1712-1716, 17th Floor, Hopewell Centre, 183 Queen's Road East, Wanchai, Hong Kong, for registration not later than 4:30 p.m. on 6 June 2019 (Hong Kong Time), being the last registration date.

The proposed final dividend for the year ended 31 December 2018 is subject to approval by the shareholders at the AGM. For determining the entitlement to the proposed final dividend, the register of members of the Company will be closed from 19 June 2019 to 21 June 2019, both days inclusive, during which period no transfer of shares will be registered. In order to qualify for the proposed final dividend, all transfers of shares, accompanied by the relevant share certificates, must be lodged with the Company's share registrar in Hong Kong, Computershare Hong Kong Investor Services Limited, at Shops 1712-1716, 17th Floor, Hopewell Centre, 183 Queen's Road East, Wanchai, Hong Kong, for registration not later than 18 June 2019 (Hong Kong Time), being the last registration date.

CORPORATE GOVERNANCE

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

AUDITORS

KPMG has acted as auditors of the Company for the financial year ended 31 December 2018. KPMG has been the auditors of the Company for the past nine years.

KPMG shall retire at the forthcoming AGM and, being eligible, will offer themselves for re-appointment. A resolution for the re-appointment of KPMG as auditors of the Company will be proposed at the forthcoming AGM.

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 2018.

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

Shanghai, the PRC
27 March 2019

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 2018.

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 and embedding best governance practices throughout the organization.

CORPORATE GOVERNANCE PRACTICES

The Company 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 2018, the Company complied with all Code Provisions and, where appropriate, adopted the Recommended Best Practices set out in the Corporate Governance Code ("CG Code") as set out in Appendix 14 of the Listing Rules with the exceptions as addressed below:

Pursuant to the Code Provision A.2.1, 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. Reference is made to the announcement of the Company dated 21 September 2012. Dr. Zhaohua Chang ("Dr. Chang") has re-assumed the responsibility of the executive Director and at the same time, Dr. Chang was appointed as the chairman of the Company, who is responsible for managing the Board and the 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 has re-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.

Pursuant to the Code Provision A.4.1, all the non-executive directors should be appointed for a specific term, subject to re-election. Currently, all Non-executive Directors (except for the Independent Non-executive Directors) of the Company are not appointed for a specific term but are subject to retirement by rotation at least once every three years and re-election at the annual general meeting of the Company in accordance with the provisions of the Articles of Association of the Company. Since their appointments will be reviewed when they are due for re-election, the Board considers that sufficient measures have been taken to ensure that the Company's corporate governance practices are no less exacting than those set out in the CG Code. Nevertheless, the Nomination Committee will review and consider the necessity to engage the Non-executive Directors for a fixed term and make recommendation to the Board for approval accordingly.

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

All Directors have full and timely access to all the information of the Company as well as the services and advice from the company secretary and senior management. The Directors may, upon request, seek independent professional advice in appropriate circumstances, at the Company's expenses for discharging their duties to 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 abovementioned officers.

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

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.

As at 31 December 2018, the Board comprises 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 member of committees, held by each Director is set out under "Corporate Information" on page 3. 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 comprises the following Directors as of 31 December 2018:

EXECUTIVE DIRECTOR:

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

NON-EXECUTIVE DIRECTORS:

Mr. Norihiro Ashida
Mr. Hiroshi Shirafuji
Mr. Hongliang Yu

INDEPENDENT NON-EXECUTIVE DIRECTORS:

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

None of the members of the Board is related to one another.

Throughout the financial year ended 31 December 2018, the Board at all-time met the requirements of the Listing Rules relating to the appointment of at least three independent non-executive directors with at least one independent non-executive director possessing appropriate professional qualifications or accounting or related financial management expertise, and the Board at all times met the requirement of the Listing Rules in regard of independent non-executive directors to constitute one-third of an issuer's board.

INDEPENDENCE OF NON-EXECUTIVE DIRECTORS

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. In order to oversee particular aspects of the Company's affairs and to assist in the execution of its responsibilities, the Board has established three Board Committees, namely the Audit Committee, the Remuneration Committee and Nomination Committee. The Independent Non-executive Directors are invited to serve on these three committees.

APPOINTMENT AND RE-ELECTION OF DIRECTORS

Under the Code Provision A.4.1, all the non-executive directors should be appointed for a specific term, subject to re-election. Accordingly, each of the Independent Non-executive director is engaged on an appointment letter for a term of three years and such appointment will continue thereafter unless terminated by either party in one-month's written notice.

In accordance with the Company's Articles of Association, all Directors are subject to retirement by rotation at least once every three years and any new director appointed to fill a causal vacancy or as an addition to the Board shall hold office until the next annual general meeting of the Company.

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 on the first occasion of his 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 and financing 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 2018, an seminar was conducted covering the rights and obligations of Directors, especially in information disclosure, inside information, connected transactions, dealing of securities of the Company, compliance of Model Code, and so on. All Directors attended the seminar.

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, reasonable notice is generally given.

Board papers 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.

DIRECTORS' ATTENDANCE RECORDS

During the financial year ended 31 December 2018, six Board Meetings were held for 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 for reviewing financial statements, approving re-election of directors, re-appointment of auditors, etc. In addition, an extraordinary general meeting was held for reviewing and approving the resolution relating to the acquisition of the CRM Business from LivaNova PLC.

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 2018 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	Attendence/Number of extraordinary general meeting held during the term of office of the Director Concerned
Executive Director			
Dr. Zhaohua Chang	6/6	1/1	1/1
Non-executive Directors			
Mr. Norihiro Ashida	6/6	1/1	1/1
Mr. Hiroshi Shirafuji	6/6	1/1	1/1
Mr. Hongliang Yu (Appointed on 21 June 2018)	2/2	–	–
Ms. Weiwei Chen (Resigned on 21 June 2018)	3/3	1/1	1/1
Ms. Janine Junyuan Feng (Resigned on 20 November 2018)	5/5	1/1	1/1
Independent Non-executive Directors			
Mr. Jonathan H. Chou	6/6	1/1	1/1
Dr. Guoen Liu	6/6	1/1	1/1
Mr. Chunyang Shao	6/6	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.

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 2018.

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 reserves for its decision all major matters of the Company, in terms of approval and monitoring of all policy matters, overall strategies and budgets, internal control and risk management systems, material transactions (in particular those that may involve conflict of interests), financial information, appointment of directors and other significant financial and operational matters.

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

The Board has delegated a schedule of responsibilities to the President and senior management of the Company. These responsibilities include implementing decisions of the Board, 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 three committees, namely, the Nomination Committee, Remuneration Committee and Audit 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. Aside from the aforesaid three Board committees, the Company has also established three Executive Committees to oversee the day-to-day operations of the Group.

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 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 interim and annual results, interim and annual reports for the year ended 31 December 2018, the financial reporting and compliance procedures, the Company's internal control and risk management systems and processes, and the re-appointment of the external auditors.

The Audit Committee held 3 meetings during the year ended 31 December 2018. The attendance records of each member at the Audit Committee meetings during the year ended 31 December 2018 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

Majority of the members are Independent Non-executive Directors.

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 Scheme" in the Report of the 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 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.

During the year under review, 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 3 meetings during the year ended 31 December 2018. The attendance records of each member at the Remuneration Committee meetings during the year ended 31 December 2018 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)*	3/3
Mr. Jonathan H. Chou	3/3
Dr. Zhaohua Chang	3/3

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 (Appointed on 21 June, 2018)
Ms. Weiwei Chen (Resigned on 21 June, 2018)

Majority of the members 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 and/or the Board should also review and determine whether the retiring director continues to meet the criteria as set out above.

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.

During the financial year ended 31 December 2018, a meeting of Nomination Committee was held.

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	1/1
Mr. Hongliang Yu (Appointed on 21 June, 2018)	–
Ms. Weiwei Chen (Resigned on 21 June, 2018)	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 recommended the re-appointment of the Directors standing for re-election at the forthcoming AGM of the Company. In accordance with the Company's Articles of Association, Dr. Zhaohua Chang, Mr. Hongliang Yu and Mr. Chunyang Shao shall retire and be eligible to offer themselves for re-election at the forthcoming AGM.

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 2018, the CEC comprises five members: Mr. Bo Peng (Chairman of CEC), Mr. Hongbin Sun (Co-chairman of CEC), Dr. Qiyi Luo, Mr. Yimin Xu and Dr. Chengyun Yue. The majority are heads or Vice Presidents of operational departments.

As of 31 December 2018, the IOC comprises seven members: Mr. Aurelio Sahagun (Chairman of IOC), Mr. Jonathan Chen (Co-chairman of IOC), Mr. Hongbin Sun, Dr. Qiyi Luo, Mr. Todd Smith, Mr. Stefano Peverelli and Mr. Robin Weng. The IOC reports to Ms. Glendy Wang, the COO of the Company.

As of 31 December 2018, the ICC comprises seven members: Mr. Jonathan Chen (Chairman of ICC), Mr. Benoit Clinchamps (Co-chairman of ICC), Mr. Hongbin Sun, Dr. Qiyi Luo, Dr. Philippe Wanstock, Mr. Paul Vodden and Dr. Li Wang.

The purpose of CEC, IOC, ICC are to oversee 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 MiroPort Shanghai, MicroPort Orthopedics and MicroPort CRM respectively.

During the reporting period, CEC, IOC and ICC held meetings periodically and frequently to carry out their duties.

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 financial year ended 31 December 2018.

The Directors are responsible for overseeing the preparation of 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 page 54 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 2018, 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.

Internal Audit Department conducted risk assessment regularly to identify risks that potentially impact the business of the Group and various aspects including key operational and financial processes, information security and so on.

The management, in coordination with division/department heads, assessed the likelihood of risk occurrence, 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 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 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 AUDITORS AND AUDITORS' REMUNERATION

The statement of the external auditors of the Company about their reporting responsibilities for the financial statements is set out in the "Independent Auditor's Report" on pages 90 to 96 in this annual report.

For the financial year ended 31 December 2018, the fees for audit services and non-audit services rendered by external auditor, KPMG were as follows:

Audit Services

Auditors	Fees (US$'000)
KPMG	1,801

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 2018.

Non-audit Services

Auditors	Fees (US$'000)
KPMG	3,704

During the year ended 31 December 2018, non-audit services performed by KPMG are primarily in relation to a proposed acquisition.

COMPANY SECRETARY

Ms. Yee Har Susan Lo of Tricor Services Limited, the external service provider, has resigned as the company secretary of the Company from 12 October, 2018. Ms. Chang Hang Yee, Florence was appointed as the company secretary of the Company and the authorised representative on 12 October, 2018. Ms. Chan Wing Sze has been appointed as the Company's company secretary and the authorized representatives in place of Ms. Chang Hang Yee, Florence on 27 March 2019. The primary contact person at the Company is Ms. He Li, the Board Secretary of the Company. They are responsible for ensuring that Board procedures are followed, and for facilitating communications among Directors as well as with shareholders and management. During 2018, the Company Secretary undertook over 15 hours of professional training to update her skills and knowledge.

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.

To promote effective communication, 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 and Audit 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 AGM 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 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 (Level 54, Hopewell Centre, 183 Queen's Road East, 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 pf 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 are no changes in the Company's constitutional documents during the year ended 31 December 2018.

CHANGES AFTER CLOSURE OF FINANCIAL YEAR

This report takes into account the significant changes that have occurred since the end of 2018 to the date of approval of this report.

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

Shanghai, The PRC, 27 March 2019

ENVIRONMENTAL, SOCIAL AND GOVERNANCE REPORT

ABOUT THIS REPORT

MicroPort Scientific Corporation's Environmental, Social and Governance ("ESG") Report 2018 is prepared in compliance with the ESG Reporting Guide set out in Appendix 27 to the Rules Governing the Listing of Securities (the "Listing Rules") on the Hong Kong Stock Exchange.

MicroPort considers sustainability as a direction for its long-term development. The purpose of the report is not only to communicate our management approaches and performances to our stakeholders, but also to comprehensively introduce our ongoing sustainable development activities that are directed towards the society and environment in which we operate.

REPORTING PERIOD AND SCOPE

This report presents information relevant to ESG performance and related activities and information of MicroPort Scientific Corporation, and its subsidiaries in the PRC, the US and Europe, for the fiscal year, from 1 January 2018 to 31 December 2018.

ENVIRONMENTAL, SOCIAL AND GOVERNANCE REPORT

CEO MESSAGE

Dear stakeholders,

On behalf of the Board, I am pleased to present the 2018 ESG report of MicroPort. With our fruitful R&D achievements in various business segments during the year, we will continue our efforts to contribute more to the health care industry through innovation and manufacturing high-end medical devices. We shoulder our social responsibility by resolving relevant sustainability issues, including product safety, talent management and environmental impacts. In this report, we have included the newly acquired CRM business of Europe into the reporting boundary, marking an important step in enhancing our ESG reporting and responding to stakeholders' expectations.

We are a leading medical technology group and our products reach a wide-range of customers in different parts of the world. Committing to provide reliable products of high quality, we always strive to respond to customers' feedback and keep on improving our products to satisfy their needs. We adopt stringent production procedures and maintain the highest standards of quality assurance. We believe that use of smart technologies is the best way of ensuring product quality. We have made progress during the year in transforming part of our production lines with automated and informationalized systems. With our focused R&D capacity, we have a total of 3,432 patents (including applications) in 28 countries/ regions. At the same time, we have put great efforts in protecting customer privacy and intellectual properties.

Recognizing the environmental impact of our operations, we are committed to mitigating the same through our EHS management system. The Company strictly complies with relevant laws and regulations in the locations where we operate regarding carbon emissions, hazardous waste disposal, water discharge and handling and disposal of other pollutants. We have invested in energy monitoring system in Shanghai during the year, aiming to optimize our energy efficiency.

Our business would not be sustainable without the support of capable and dedicated talents. MicroPort is committed to providing as much opportunities as possible for employees' skills enhancement and career development. We respect every employee and strive to create a comfortable and safe working environment where they can achieve common goals with the Company.

During the year, we further strengthened our system for management succession by launching a leadership development project and an outstanding executive managerial skills enhancement project. We value our employees' contribution that facilitates our success and continuous growth. By striving to provide a respectful and safe workplace, we make sure our employees are able to align their personal development with our sustainable business goals.

As our operation continues to grow, we will gradually integrate sustainability into our business strategies. I would like to express my sincere thanks to all our employees, customers, business partners, shareholders, the government and the wider community for their contribution and support. We look forward to further engaging in sustainable development and cooperation with them.

By Order of the Board
Dr. Zhaohua Chang
Chairman

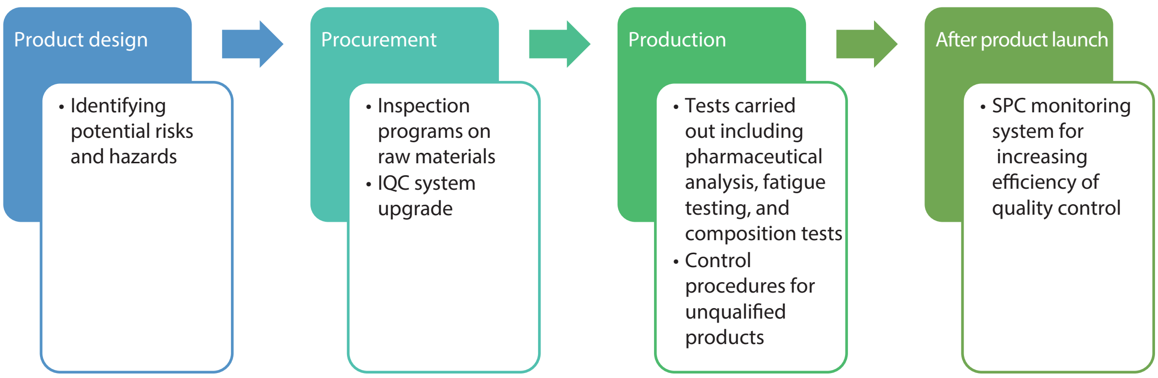
Shanghai, 27 March, 2019

OPERATIONAL EXCELLENCE

MicroPort puts product quality and safety first, undertaking all necessary procedures from the R&D stage to production stage in monitoring product quality.

QUALITY ASSURANCE

To ensure that our products are safe and of consistent quality, our quality and regulatory affairs department monitors product quality and safety through a stringent quality management system. Monitoring procedures are carried out at every stage in product design, procurement, production and after product launch in order to maintain the highest quality level.



Our laboratory in Shanghai and orthopedic laboratory in Tennessee are accredited with ISO 9001[1] and ISO 13485[2]. Our Shanghai laboratory is also certified by CNAS[3], in accordance with ISO/IEC 17025[4], while our laboratory in France is certified with ISO 13485. In 2018, our China factories passed all 8 external audits and inspection conducted by national authorities and independent third parties.

Regarding product conformity, a series of tests are conducted on raw materials, semi-finished and finished products throughout the product R&D and manufacturing processes. Unqualified products are labeled and separated according to the control procedures, which are then arranged for rework or disposal, and clear records are kept. To minimize direct human contact with products, maximize efficiency of quality control and the product passing rate, the Company utilizes technology and builds automated quality control systems as a significant step towards smart manufacturing.

To eliminate and prevent products-related flaws and hazards, our corrective actions and preventive actions committee conducts nonconformity review before implementing corrective action plans. The committee comprises representatives from relevant departments, ensuring that the entire product life-cycle has been considered in the analysis of the cause of nonconformity.

1 ISO 9001 sets out the framework for a quality management system.
2 Requirements issued by international organization for standardization for a comprehensive quality management system for the design and manufacture of medical devices.
3 China National Accreditation Service for Conformity Assessment.
4 General requirements for the competence of testing and calibration laboratories – A standard issued by International Organization for Standardization for testing and calibration of laboratories.

Measures in 2018 on Enhancing Product Quality Inspections	
Statistical process control (SPC)	To increase the efficiency of inspection of coronary products on the market, we have set up the SPC system at the final inspection stage, before product delivery. Through auto data analysis and alarm notifications, it allows immediate response on non-conformity and provides reference for effective measures to prevent reoccurrence of non-conformity.
Increased efficiency on materials inspection	During the year, we have strengthened the Incoming Quality Control (IQC) by modifying the Acceptance Quality Limit (AQL) standards and upgrading the data system. The time lag between arrival of materials and inspection taking place has been shortened from 30 days to 5 days.
Level-up on smart inspections	We have continued to expand the use of smart technologies in quality inspection. We began to implement smart inspection procedures on coronary products, including reorganizing inspection means, procedures and location of quality control points. Inspection efficiency for coronary products has increased by 10%.
Automation of production process	We strive for automated, informationalized and paperless inspection as our strategic goal. As the production processes are rearranged after automation, we have established a control procedure for change in software in order to accommodate the need for modifying and adapting to new software system. All quality control records and product certification are digitalized, which eventually increases the overall passing rate of the final products.

MicroPort complies with all laws and regulations governing product quality and safety applicable at locations where we operate, including but not limited to Product Quality Law of the PRC, relevant requirements of the NMPA[5] and the European Union. During the reporting year, the Company complied with all relevant laws and regulations that have a significant impact on the Group relating to product quality and safety issues.

5 National Medical Products Administration

CUSTOMER SATISFACTION

The Company closely manages and monitors whether its products satisfy customers' needs. Our customer complaints department handles, responds to and analyzes customer complaints, and then provides supportive information for improvement on product design and effectiveness of quality management system.

Any complaints from customers are handled through our online complaint system and all necessary information is recorded. Selected products are returned for inspection and analysis and are assessed by the quality control and sales departments to identify the cause of the complaint. We maintain communication with the complainant, including health care professionals and patients, to ensure the issues are resolved in a prompt and fair manner. For complaints caused by deficiency in product functionality or quality, we establish improvement plans to modify relevant production process and techniques. Before closing the case, the analysis report must be approved by the customer complaints department. We ensure constant communication of any feedback on resolution of the complaint from the complainant.

SUPPLY CHAIN MANAGEMENT

Ensuring the quality and safety of raw materials is vital in maintaining product quality. The Company has clearly defined requirements for supplier selection and evaluation. Suppliers are categorized by their nature and risks of the products provided, including raw materials, general materials and service suppliers, with different performance criteria applied. Suppliers providing key materials are required to be certified with ISO 9001 and ISO 13485 standards. Approved suppliers are listed in our qualified suppliers' list. Procurement is conducted in accordance with our procurement management procedures. During the year, we maintained 4,178, 117 and 212 suppliers for operations in China, the US and Europe respectively.

To ensure all suppliers meet our quality and safety requirements, we conduct supplier performance reviews quarterly, through questionnaires, interviews and on-site audits. Supplier performance reports are prepared based on acceptance rate, on-time delivery rate, quality and compliance history etc. We require corrective actions to be completed in cases where suppliers' non-conformity is found, and the effectiveness of those actions is evaluated before any procurement is permitted.

INTELLECTUAL PROPERTY RIGHTS

Our independent R&D and innovation capacity are essential to our business success. With our R&D achievements being recognized by the regulatory authorities, MicroPort values intellectual property rights and exercises serious control in protecting its intellectual properties, including patents, trademarks and copyrights. We are also committed to respecting intellectual property rights of other parties. Employees are encouraged to protect the Company's intellectual properties without disclosing information to other parties. The legal department monitors any unauthorized use of our intellectual properties. As at 31 December 2018, we have a total of 3,432 patents (including applications) in 28 countries/regions and 1,679 trademarks (including applications) in 66 countries/regions. During the year, there was no reported incident of violation of intellectual property rights, patents or trademarks.

DATA SECURITY AND PRIVACY

MicroPort takes responsibility to protect IT resources and data privacy in the interests of the Company and its stakeholders, including employees, business partners and customers. We comply with relevant data protection laws and regulations at locations where we operate. Our privacy policy and IT policy include well defined responsibilities and measures for preventing leakage of confidential information such as personal data and trade secrets. Disciplinary actions are taken in the event of any violations of the policies.

To minimize cyber risks, we ensure the IT system's security by installing encryption systems, data leakage prevention tools and data backup systems, etc., thereby preventing any unauthorized access to confidential information. The Company provides training to employees to raise their awareness on cyber security issues, especially in the medical industry. The latest laws and regulations and case studies are introduced to emphasize the potential impact of privacy infringement and data leakages. During the year, the Group was not aware of any non-compliance with laws and regulations having a significant impact on the Group relating to customer privacy matters.

ADVERTISING AND PROMOTION

To strengthen the reputation of the Company and build trustful relationships with customers, MicroPort remains committed to ensuring truthful and accurate advertising throughout the marketing and sales processes. All marketing materials are reviewed by legal department and regulatory department to ensure the content complies with relevant laws and regulations on product advertising. No changes on the materials are allowed after they have been approved by the Company. Distribution of false and outdated materials are also prohibited. During the year, the Group was not aware of any instance of non-compliance with laws and regulations having a significant impact on the Group relating to advertising issues.

ANTI-CORRUPTION

MicroPort upholds the highest standards of integrity in the course of its business. A code of business ethics is established and applied globally to all locations where we operate. The code covers a wide-range of business activities including interactions with health care professionals and business partners, business travel and entertainment, accepting gifts and providing grants, etc. A compliance committee is established, which reviews and monitors the effectiveness of the compliance policies and ways to mitigate compliance risks.

Following relevant local anti-bribery and corruption laws, including but not limited to Criminal Law of the People's Republic of China, we strictly monitor the implementation of the code and guidelines. A speaking-up policy is in place, encouraging employees to report any suspected cases of unethical behavior to the management, through channels such as email and phone. All reported cases are handled under confidentiality.

To remind employees to stay vigilant about incidents of unethical behaviour, MicroPort organizes annual compliance training at all locations where we operate. We educate employees on relevant laws and regulations, code of conduct and compliance policy, ensuring they understand and uphold ethical norms and values.

During the year, the company has complied with relevant laws and regulation that have a significant impact relating to bribery, extortion, fraud and money laundering. No cases of corrupt practices against the Company were recorded.

ENVIRONMENTAL PROTECTION

Responsible and sound environmental management is embedded in MicroPort's values and management approach. We dedicate adequate resources to improve our performance in environmental protection and impact mitigation.

ENVIRONMENTAL MANAGEMENT

Having led by the senior management, environmental issues are managed across various levels in the Company. We regularly review relevant laws and regulations, and the Company's functional departments are responsible for updating internal policies of the Company in aspects of environment and health, making sure that they are up-to-date and match with the latest standards and requirements.

The Group promises to prevent pollution, proactively control our environmental risks and communicate environmental issues, in compliance with legal requirements including the Environmental Protection Law of the PRC, Tennessee Waste Minimization Law in the US and the EU Environmental Policy. CRM, our subsidiary in Europe, asserts its environmental commitment through its Environmental, Health and Safety (EHS) Policy. We have also performed an internal audit and a third-party audit of our operations in Europe to ensure compliance on the EHS topics. The environmental management system in our operations in Europe is ISO 14001:2015 certified.

During the reporting period, the Company was not aware of any violation of relevant laws and regulations that have a significant impact on the Company relating to air and greenhouse gas emissions, discharges into water and land and generation of hazardous and non-hazardous waste.

RESOURCES CONSUMPTION

ENERGY

Energy consumption of the Company includes direct consumption in the forms of petrol, diesel and natural gas and indirect consumption of electricity. In 2018, the total energy consumption was 203,425.85 GJ, comprising 42,631,265.00 kWh of electricity usage (approximately 75% of total energy consumption), combustion of 12,000.91 litres of petrol, 217,843.00 litres of diesel and 1,072,949.00 cubic meters of natural gas. The energy consumption intensity was computed as 0.30 GJ per thousand USD revenue. The table below shows a breakdown of our energy consumption by region.

Energy Consumption	**Unit**	**2018**
Total Energy Consumption	GJ	203,426
China	GJ	74,047
US	GJ	83,155
Europe	GJ	46,223
Energy Intensity	GJ/USD ('000)	0.30

GHG EMISSIONS

In 2018, our total Greenhouse Gas (GHG) emissions were 26,284.41 tCO_2e. Of these our direct (Scope 1) GHG emissions were 2,273.16 tCO_2e and our indirect (Scope 2) GHG emissions were 24,011.24 tCO_2e. Emission intensity was computed based on 0.039 tCO_2e per thousand USD revenue.

GHG emissions	Unit	China	US	Europe
Scope 1: direct carbon emissions	tCO_2e	166.20	1,006.15	1,100.81
Scope 2: indirect carbon emissions	tCO_2e	14,045.35	9,781.07	184.83
Total GHG Emissions	tCO_2e	14,211.55	10,787.22	1,285.64
Emission Intensity	tCO_2e/USD ('000)	0.039		

GHG mitigation measure
We have been implementing different measures to reduce the overall GHG emissions. In Europe, we have adopted an approach advocated by Association Bilan Carbone, a French agency for go-green actions to promote and formulate internal policies for employees' business travel and teleworking.

WATER

The main uses of water are for production as well as daily operations in the offices. The Company confirms that there were no issues in sourcing water that is fit for purpose.

Water Consumption	Unit	2018
Total Water Consumption	Tonnes	172,442
China	Tonnes	67,438
US	Tonnes	89,200
Europe	Tonnes	15,804
Water Intensity	Tonnes/USD ('000)	0.26

In 2018, the Company consumed a total of 172,441.67 tonnes of water, with a consumption intensity of 0.26 tonnes per thousand USD revenue.

PACKAGING MATERIALS

Our packaging materials comprise of plastic bags, cartons and cardboard boxes, etc. Although we use raw materials for finished products to ensure protection and product quality, we have been recycling cardboard boxes used in production processes to the greatest possible extent. In 2018, the Company consumed 4.04 tonnes of plastic bags, 120.10 tonnes of cartons, 15.56 tonnes of trays and lidstock, and 3.72 tonnes of paper.

RESOURCES CONSERVATION

ENERGY SAVING

Optimal energy usage and management practices can boost efficiency of our operations, reduce cost and conserve more natural resources. In view of this, the Company has been exploring opportunities to optimize its management approach and improve its energy efficiency. During the year, the Company strengthened its energy management system with the establishment of a new energy monitoring platform in Shanghai. By upgrading our facilities, such as adjusting the frequency of the central air-conditioning water pump and adding a pre-cooled solution dehumidifier in purifying air-conditioners, we have managed to achieve energy reduction in our operations with an estimated annual energy saving of approximately 657 tonnes of standard coal equivalent per year.

In addition to upgrading our management system, we have formulated the energy consumption pattern of the Company by monthly data analysis and adopted new energy-saving initiatives to enhance energy efficiency. During the year, we installed LED lighting throughout the Arlington campuses in the US and used variable speed compressors to achieve greater energy consumption reduction. Other initiatives include regulating the operating hours of central air-conditioners, educating employees about energy saving, etc. During the year, the Company has abided by relevant laws and regulations including the Law of the PRC on Conserving Energy and Regulations of Shanghai Municipality on Energy Conservation (上海市節約能源條例).

WATER CONSERVATION

We monitor the water meters on a regular basis and report monthly consumption of water. We also keep track of the water consumption pattern and spot any unusual usage. Through regular checks, cases of water leakage in factories, water supply systems and other facilities of the Company are identified and promptly addressed. Low flow faucets are currently in use in our US operations as a measure of water-saving. In Europe, manufacturing and rain water are reused for green space management.

EMISSIONS CONTROL

The major sources of air emissions of the Company were from its production and vehicle usage. Exhaust gases are mainly produced during the production processes of pickling, electropolishing, purification of chemical reagents and drug spraying, while other emissions in daily operation mainly includes fumes generated in canteens.

MITIGATION OF AIR EMISSIONS

Exhaust gases from stationary sources are purified by passing through a fume purification device, which filters pollutants from exhaust gases through electrostatic adsorption.

In 2018, air emissions generated from the Company's mobile sources included 3.68 kg of sulphur oxides (SOx), 1,096.03 kg of nitrogen oxides (NOx) and 94.29 kg of particulate matters (PM).

	Unit	**2018**
SO_x	kg	3.68
NOx	kg	1,096.03
PM	kg	94.29

Acknowledging the environmental and health impacts brought by Volatile Organic Compounds (VOCs), the Company has installed an activated carbon adsorption device, which effectively reduce VOCs generated at our preclinical medical research centre to a standard level. At our US operations, VOCs are the major sources of emissions during the production processes, contributing to 3.09 tonnes of emissions during 2018.

Assured by third-party professionals, all emissions from our operations are in compliance with relevant laws and regulations, including the Law of the PRC on the Prevention and control of Air Pollution and the Integrated Emission Standard of Air Pollutants (大氣污染物綜合排放標準).

NOISE

Noise is generated by wind turbines, air compressors and other equipment used in our operations. In 2018, we stepped up our efforts for managing noise level in our operations in Shanghai by adopting new noise reduction measures, including installation of a muffler device at the exhaust port of the air compressors and building soundproof panels around the air compressors. The noise level of our Shanghai operations is assured by third-party professionals to ensure compliance with relevant laws and regulations, such as the Law of the PRC on the Prevention and Control of Pollution from Environmental Noise.

WASTE AND SEWAGE MANAGEMENT

WASTE MANAGEMENT

Recognizing that waste in relation to the Company's operations may consist of hazardous chemicals, sound management of waste is crucial to the Company in reducing its impacts to the environment. Hazardous waste such as organic solutions and acidic solutions generated from operations processes are stored separately in the hazardous waste repository and are collected by a qualified third-party collector to ensure legal disposal. Non-hazardous municipal solid waste is collected and handled daily by the sanitation department of the Company.

In 2018, our operations generated approximately 59 tonnes of hazardous waste. 179 tonnes of non-hazardous waste was generated, of which approximately 42% was recycled.

Waste	Unit	China	US	Europe	Total
Hazardous waste	Tonnes	56	1.5	1.5	59
Non-hazardous waste (recyclable)	Tonnes	0	57	19	76
Non-hazardous waste (non-recyclable)	Tonnes	32	60	11	103

To maintain effective management, specific roles have been assigned to each department. Whenever there is a new equipment or new process involving generation of waste, the Engineering Department is responsible for estimating the amount of waste and is required to submit an Environmental Check List to the Department of Health, Safety and Environment (HSE Department), which then carries out analysis and determines the disposal method of the new waste type, avoiding contamination of non-hazardous waste streams with hazardous waste. Cases of spillage, leakage or accidental discharge must be reported to the HSE Department or other related personnel in time.

Our Europe operations strictly abide by relevant laws and regulations including the Law on Waste Disposal and Materials Recovery (Loi relative à l'élimination des déchets et à la récupération des matériaux). Internal policies are also in place for appropriate collection, storage, tracking and valuation of various waste types. After proper sorting, they are collected by a qualified and legal supplier for further treatment. For specific waste types such as refrigerants, we periodically check to ensure that the storage equipment are waterproof and there is no leakage. Other measures such as bacteriological analysis are carried out for sanitary risk prevention.

Waste management in our US operations has adhered to relevant local regulations such as the Tennessee Waste Minimization Law, and internal policies of the Company including Special Waste Procedure and Universal Waste Procedure. The Special Waste Procedure facilitates management of special types of wastes such as metal dust and the Universal Waste Procedure stipulates appropriate handling, recycling, disposal and tracking procedures for non-hazardous and hazardous waste including batteries, mercury-containing equipment, pesticides and lamps. All the waste is sent to an approved handler with records properly maintained.

SEWAGE MANAGEMENT

Sewage generated from our operations is strictly monitored and gained assurance by third parties to ensure legal discharge, compliance with relevant local and national sewage discharge standards, such as the Integrated Wastewater Discharge Standard in Shanghai. Before discharging into municipal sewers, sewage is properly treated to an acceptable level. A Process Water Neutralization System is installed in our US operations to maintain a pH value within the permitted level.

EMERGENCY MANAGEMENT

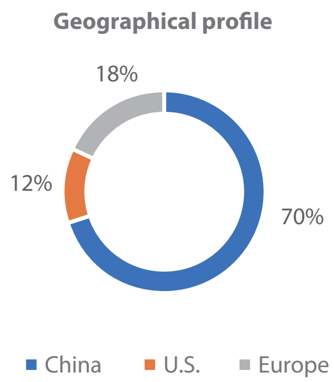
Unexpected physical disturbances can also cause impacts to the environment. The Company strives to mitigate and avoid any potential impacts that could cause fire or other accidents. Firefighting equipment and facilities are regularly inspected, well-maintained and properly managed with a layout map. Supervisors are assigned to be responsible for conducting comprehensive inspections and to ensure operational safety of the power distribution room, as well as warning those who violate the guidelines set out in our Property Management Regulations.

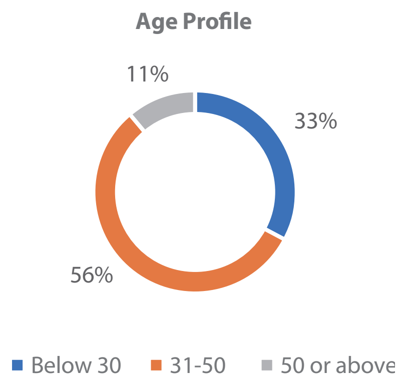
EMPLOYEE CARE

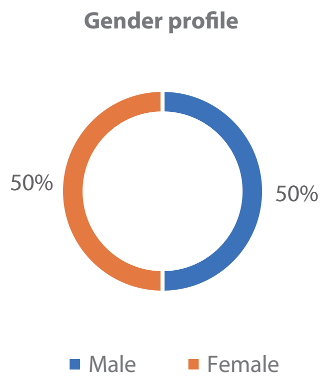
We cannot succeed without employees' dedication and commitment. MicroPort is determined to embrace diversity and earn a reputation as an 'employer of distinction' by treating all employees as individuals, with respect, honesty and fairness.

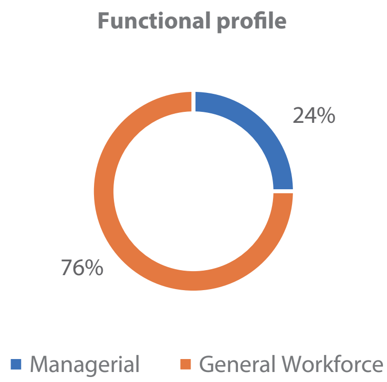
EMPLOYEE PROFILE

As of the end of 2018, we had a total of 4,910 employees in three regions, 3,426 in China (70%), 577 in the U.S. (12%) and 907 in Europe (18%). In terms of age groups, 33% of the employees are below 30; 56% are 31-50; and 11% are 50 or above. The gender ratio is approximately equal. 24% of the employees are managerial level and the remaining 76% are general employees.

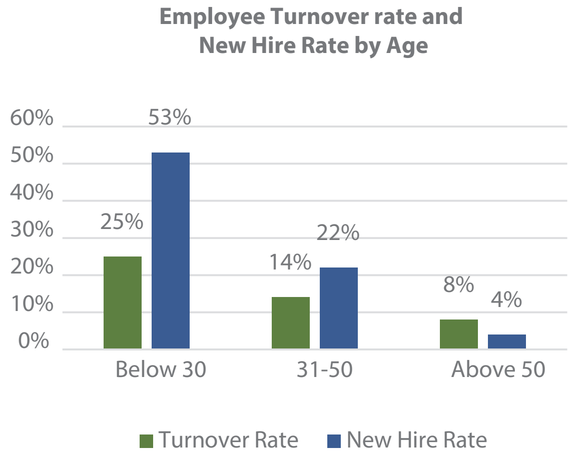


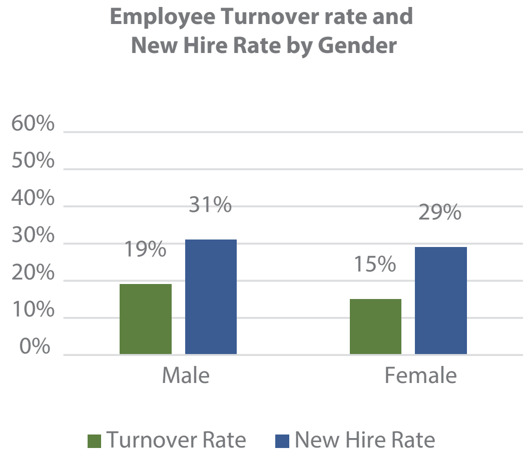






The overall turnover rate in the three regions taken together is approximately 17% and the overall new hire rate is 30%. The distribution by age and gender is presented as below.





LAWFUL RECRUITMENT

MicroPort has established the Control Procedure of Employment, standardizing the employment procedure and departmental employment management for the Human Resources (HR) Department, including hiring procedure, employment channels and interview settings. We comply with laws and regulations where we have operations, including but not limited to the Labor Law of the PRC and Labor Contract Law of the PRC, Guidelines from the U.S. Department of Labors.

The Company is committed to prevent any forms of child and forced labour, under requirements of the Provisions on the Prohibition of Using Child Labor, and the US Labor Laws and other relevant laws and regulations. To avoid the use of child labor, identification documents of newcomers are checked, such as Social Security Number verification in the US, the date of birth verification and background investigation. Labor contracts are based on mutual agreement from both the Company and employees. These measures prevent any form of illegal employment.

During the year, the Company was not aware of any non-compliance of laws and regulations that have a significant impact on the Company relating to the labour practices, nor there was reported case regarding the use child or forced labor.

PROMOTING EQUAL OPPORTUNITY

As an equal-opportunity employer, we follow fair practices relating to compensation and dismissal, recruitment and promotion, working hours, rest periods, equal opportunity, diversity, anti-discrimination, and other benefits and welfare for our staff.

To maintain a comfortable and respectful workplace, we have established an ethics reporting system in the US and Europe operations, named EthicsPoint. The system allows employees to report to the HR Department directly and anonymously if there are any suspected cases of discrimination or harassments. Every case is investigated expeditiously. Where investigations confirm the allegations, appropriate corrective actions are taken. Retaliation on the part of any employee is subject to disciplinary action up to and including termination. If the complaint is not handled to their satisfaction by the chain of command, they may contact the HR and management levels.

BENEFITS AND COMMUNICATION

MicroPort believes in the importance of comprehensive and competitive compensation and benefit plans to reward and recognize the efforts and hard work of the employees that contribute to the Company's growth. We actively review employee benefits policy to maintain satisfaction of employees working at the Company. Current employee welfare measures include economic benefits, certifications, bonus plans, and working meals etc.

In addition, we have established work and holidays regulations to ensure our employees' rights or welfare are protected under these policies, such as Work Attendance Regulation, Overtime Work Regulation, and the Holiday Regulation. To further accommodate special needs of employees, the Company has established the telework and remote work plan. The plan aims to offer flexibility to employees when experiencing any ad hoc or regular demands.

At MicroPort, we believe breast-feeding mothers storing breast milk during working hours should not be discriminated against. We have accommodated such needs and have arranged private rooms and corresponding facilities with special access for the nursing mothers.

Team building and recreational activities are regularly organized to keep our working environment harmonious and to strengthen the bonding between employees.

MicroPort is determined to provide a workplace where all employees can thrive and grow to their fullest potential. We have set up a Fusion Fission Focus Innovation Reactor (3F Innovation Reactor), encouraging employees to raise their ideas and thoughts for innovation.

OCCUPATIONAL HEALTH AND SAFETY

MicroPort understands that productivity and health status of employees are closely related. We are committed to providing a safe and healthy working environment to all of our employees around the world. We proactively reduce injury risks and occupational diseases by establishing management systems and organizing safety training for our workforce.

During the year, the Company was not aware of any violation of relevant laws and regulations that have a significant impact on the Company relating to providing a safe working environment and protection of employees from occupational hazards.

HEALTH AND SAFETY MANAGEMENT

Our Europe operations are certified with OHSAS 18001:2007 Health and Safety Management System and have implemented the Environment Health and Safety Policy. We prioritize preventing occupational disease and injuries in our operations and review the current system regularly to ensure compliance with legal requirements and regulations.

The operations in China strictly comply with the national laws and regulations, including but not limited to the Production Safety Law of the PRC and the Law of the PRC on the Prevention and Treatment of Occupational Diseases. Our safety and production committee is responsible for monitoring daily operations to ensure compliance. The committee reviews related policies regularly. Employees can access the most up-to-date safety information through the internal systems.

Our US subsidiary has established a safety committee which consists of different functional teams of employees, including members of the HSE Department. The team audits different working areas and discusses safety issues on a regular basis. Safety related topics are communicated via the intranet and through departmental meetings to enhance the awareness of safety issues among employees.

SAFETY ACCIDENTS HANDLING

In 2018, there were 11 work-related injuries and 32 lost days recorded. The injury rate was 0.2% and there were no work-related fatalities reported.

Employees have to follow the handling procedures laid out in the Company policy. When a production related accident occurs, the staff on-site are required to report the case to the supervisors for prompt rescue. An Accident Inspection Team is established to investigate the reasons and record the injuries and economic loss caused by the accident. The responsible parties face penalty and disciplinary actions, or legal actions in serious cases.

The Company believes that everyone can contribute to safety prevention. We welcome new ideas from our employees proposing improvement initiatives in daily operations for minimizing occupational safety risks. We encourage employees to suggest constructive improvement measures.

SAFETY OPERATION

To guarantee that we operate in a safe manner, we conduct safety inspections regularly. The responsible departments have to make the corresponding improvements when any potential safety risks are identified. The inspection team follows up on implementation of corrective measures. For regulating the safety monitoring, we have established the Safety Production Inspection Policy covering fire prevention, electronic appliances, hazardous materials handling, daily operations and emergency situations handling.

Fire Prevention

- Conduct monthly fire drills
- Install fire equipment and carry out maintenance regularly

Electronic Appliances

- Only qualified workers can carry out maintenance work
- Check electronic appliances regularly and promptly report the potential risks

Hazardous Materials Handling

- Only qualified workers can handle hazardous materials
- Store hazardous materials separately
- Check stored rooms at least once every day
- Install firefighting equipment in stored rooms

Daily Operation

- Wear personal protective equipment in the laboratories and production sites
- Obtain permits when working in dangerous environment

Emergency Handling

- The person-in-charge in laboratories and production sites are required to understand the emergency handling procedures thoroughly
- They have to evacuate the employees to a safe place when accidents occur

The Safety Production Inspection Policy

To monitor the health status of our employees, we schedule body check-ups for them on a regular basis, especially for those working in hazardous positions

SAFETY TRAINING

MicroPort regards safety training as a vital enabler of minimization of occupational health diseases and injury risks. We have allocated resources for organizing safety training for our employees. In 2018, there was a total of 1,945 person-times and 10,585 hours of safety training.

Safety Training	China	US	Europe	Total
Total person-time of safety training	563	1,091	291	1,945
Total safety training hours	6,755	2,308	1,522	10,585

To ensure safe operations, we require our managerial staff to be familiarized with national safety laws and regulations, safety technical knowledge, and safety management skills. Training is provided to them at least once a year.

Training is provided when the Company adopts new production processes, new technology, new materials, or new facilities. The Technical Department is responsible for delivering a safety education program to all employees. Evaluation is conducted for all employees after the safety training, otherwise they will be prohibited from operating in such position.

In China, we have carried out three major categories of safety training programmes during the year, namely, certified training, three-level programs and drills. We aim to raise our employees' safety consciousness and prevent the occurrence of injuries at work.

Certified Training	Three-level Programs	Drills
Red Cross Training	National and company policies	Fire prevention
Hazardous chemicals practitioner	Safety in production at the operation site	Power outage
Pressure vessel handling	Safety measures for the particular position	

The Major Safety Training Organized by the China Operation

Since production process of medical devices involves chemicals and specialised equipment operation, employees working in these positions are required to be certified with the relevant qualifications before being allowed to start working. We ensure the employees fulfil the requirements of the provision of certified training.

TRAINING AND DEVELOPMENT

TALENT MANAGEMENT

We are committed to providing all MicroPort employees with opportunities to excel in their current roles, anticipate challenges and develop their careers. The talents are guided individually by their direct supervisors to help realize their potentials and achieve success in careers. The personal development plan is reviewed on a half-yearly basis, and both employees and the direct supervisors mutually establish a new planning for the next cycle.

MicroPort's Talent Strategy

We adopt a three-pronged approach for our talent strategy. Through talent review, we provide development opportunities to outstanding talents. Under the dual career development channel, employees choose to take either the management path or the technical path based on their own interests. To attract and retain talents, we have established three targeted plans on talent cultivation, focusing on the "recognition, training, and benefits" of employees.

All employees are evaluated regularly, and the results are applicable to the adjustment of salary, promotion opportunities and implementation of training programs. Those with unsatisfactory performance have to establish an improvement plan with their direct supervisors and review the progress regularly.

TALENT TRAINING

To help our employees to exert their potentials and contribute to the long-term development of the Company, we arrange training programs which align with the Company's strategic plan and employees' appraisal results.

MicroPort has established an Innovation Institute for promoting professionalism among its employees and in the medical devices industry. We manage training targets for employees at various levels with the aim of enhancing leadership and professional skills.

The Company values transfer of knowledge and skills among the employees. The Internal Trainer Certification Center of the Institute plays an important role in developing a team of internal trainers. Employees are assessed regularly by the Human Resources and Innovation Institute Department to determine their qualifications. We hope to make good use of our internal intellectual resources and create a learning atmosphere.

If the internal training programs cannot satisfy the developmental needs, we subsidize our employees to participate in qualified external training programs.

The Company allocates resources for training programs for its employees. During the year, over 64,000 hours of training have been recorded.

Training programs in our China operations:

In 2018, we continued to organize two training programs for our managerial staff, which were the Leadership Development Project and the Outstanding Executive Managerial Skills Enhancement Project, to foster their leadership skills.

Besides, we implemented a training program catering fresh graduates. The program focused on professional skills, general skills and provided personal guidance for them. Therefore, they could adapt to the new working environment in a shorter period of time.

COMMUNITY INVOLVEMENT

MicroPort identifies the importance of giving back to the community. With our strength in healthcare, we are committed to developing new products and solutions to improve the quality of healthcare. In China, we have set up a medical clinic in Heilongjiang Province and offered basic healthcare services and medical equipment in Tibet and Xinjiang. We have been consistently supporting in education projects with donations, scholarships, campus development and regular visits. We established two MircoPort Hope Primary Schools in 2007 and 2012, located at Shandong and Guizhou provinces, in supporting the growth of children in rural areas. Until now, there are 614 graduates from these schools and 42 of them have entered universities. In 2018, we have supported healthcare-related charity foundations in China for over RMB 1,020,000.

In the US, we have continued to support our local community with donations, fund-raising and volunteering. In 2018, we have generated over USD 55,300 donations. The donations have been used to support the Arthritis Foundation, autism research projects, as well as local middle school and high school etc.. We have committed over 279 hours volunteer services in different community events, such as nursing home visit, charity walk, open house school tours to MicroPort facilities and school decoration. We believe volunteering involvement bring positive impact to the community, including enhancing community well-being and nurturing our next generation talents.

In strengthening the effectiveness of our donations and grants to the societies, our Europe subsidiaries have established the Donations and Grants Policy and Procedure, which aimed to standardize the procedure and to ensure the proper use of every dollar of our donations with transparency. This policy prioritizes donations to support educational, charitable and research endeavors and to align with our vision of our Company in creating a positive impact in healthcare. During 2018, we have contributed over EUR 708,000 to these focus areas in Europe.

PERFORMANCE DATA SUMMARY

ENVIRONMENTAL PERFORMANCE

	Unit	2018	2017
Total Resources Consumption			
Total Energy Consumption	GJ	203,426	138,100
China	GJ	74,047	–
US	GJ	83,155	–
Europe	GJ	46,223	–
Total Energy Intensity (by revenue)	GJ/USD ('000)	0.30	0.31
Electricity Consumption	kWh	42,631,265	32,606,944
China	kWh	19,964,955	15,398,000
US	kWh	18,082,516	17,208,944
Europe	kWh	4,583,794	–
Natural gas Consumption	m^3	1,072,949	496,879
China	m^3	0	0
US	m^3	459,616	496,879
Europe	m^3	613,333	–
Diesel Consumption	Litres	217,843	19,170
China	Litres	54,622	19,170
US	Litres	0	0
Europe	Litres	163,221	–
Gasoline Consumption	Litres	12,001	21,483
China	Litres	6,825	17,271
US	Litres	5,175	4,212
Europe	Litres	1	–
Water Consumption	Tonnes	172,442	160,292
China	Tonnes	67,438	98,521
US	Tonnes	89,200	61,771
Europe	Tonnes	15,804	–
Water Intensity (by revenue)	Tonnes/USD ('000)	0.26	0.36
Steam	Tonnes	3,131	2,086
Packaging Materials Consumption			
Plastic Bags	Tonnes	4.04	511,369 (pieces)
Carton	Tonnes	120	484,622 (pieces)
Trays and Lidstock	Tonnes	16	1,090,288 (pages)
Paper	Tonnes	4	–

	Unit	2018	2017
Emissions			
GHG emissions			
Scope 1: direct carbon emissions	tCO_2e	2,273	1,182
Scope 2: indirect carbon emissions	tCO_2e	24,011	21,585
Total GHG Emissions	tCO_2e	26,284	22,767
GHG Emission Intensity	tCO_2e/USD ('000)	0.039	0.05
Air pollutants			
SOx	kg	3.68	1
NOx	kg	1,096	484
PM	kg	94.29	44
VOC	Tonnes	3	2
Waste			
Hazardous waste	Tonnes	59	67
China	Tonnes	56	65
US	Tonnes	1.5	1
Europe	Tonnes	1.5	–
Total hazardous waste intensity (by revenue)	Tonnes/USD ('000)	0.000088	–
Non-hazardous waste (recyclable)	Tonnes	76	47
China	Tonnes	0	–
US	Tonnes	57	47
Europe	Tonnes	19	–
Non-hazardous waste (non-recyclable)	Tonnes	103	44
China	Tonnes	32	–
US	Tonnes	60	44
Europe	Tonnes	11	–
Total non-hazardous waste intensity (by revenue)	Tonnes/USD ('000)	0.00027	–

WORKFORCE DEMOGRAPHICS

	2018	2017
Total Headcount	4,910	3,108
By Geography		
China	3,426	2,357
US	577	548
Europe	907	–
Others	–	203
By Age		
Below 30	1,613	944
31-50	2,768	1,876
50 above	529	288
By Gender		
Male	2,440	1,654
Female	2,470	1,454
By Educational Background *		
Degree or above	2,015	1,320
High School or below	1,988	1,788
Employee Turnover Rate ^		
Total	17%	16%
By Age		
Below 30	25%	29%
31-50	14%	12%
50 above	8%	6%
By Gender		
Male	19%	13%
Female	15%	19%
Employee New Hire Rate		
Total	30%	19%
By Age		
Below 30	53%	43%
31-50	22%	12%
50 above	4%	4%
By Gender		
Male	31%	19%
Female	29%	21%

* Employee profile by education excludes the data from Europe.

^ Number of employee turnover in Europe only covers from second to fourth quarter of 2018.

HEALTH AND SAFETY

	2018			2017
	China	US	Europe	
Number of work-related injuries	0	6	5	1
Injury rate (total)	0.2%			/
Lost days due to work-related injury	0	3	29	0
Work-related fatalities	0	0	0	0
Safety training (Person-times)	563	1,091	291	2,374
Safety training hours	6,755	2,308	1,522	6,977

Category of employees by function was changed to managerial staff and general staff in 2018.

HKEX CONTENT INDEX

KPIs	HKEX ESG Reporting Guide Requirements		Section/Remarks
A. Environmental			
Aspect A1: Emissions	**General Disclosure** Information on: (a) the policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to air and greenhouse gas emissions, discharges into water and land, and generation of hazardous and non-hazardous waste.		Environmental Management
	KPI A1.1	The types of emissions and respective emissions data.	Emissions Control
	KPI A1.2	Greenhouse gas emissions in total (in tonnes) and, where appropriate, intensity.	GHG Emissions
	KPI A1.3	Total hazardous waste produced (in tonnes) and, where appropriate, intensity.	Waste and sewage management
	KPI A1.4	Total non-hazardous waste produced (in tonnes) and, where appropriate, intensity.	Waste and sewage management
	KPI A1.5	Description of measures to mitigate emissions and results achieved.	Emissions Control
	KPI A1.6	Description of how hazardous and non-hazardous wastes are handled, reduction initiatives and results achieved.	Waste and sewage management
Aspect A2: Use of Resources	**General Disclosure** Policies on the efficient use of resources, including energy, water and other raw materials.		Resources Consumption
	KPI A2.1	Direct and/or indirect energy consumption by type in total (kWh in ’000s) and intensity.	Resources Consumption
	KPI A2.2	Water consumption in total and intensity.	Resources Consumption
	KPI A2.3	Description of energy use efficiency initiatives and results achieved.	Resources Conservation
	KPI A2.4	Description of whether there is any issue in sourcing water that is fit for purpose, water efficiency initiatives and results achieved.	Resources Conservation
	KPI A2.5	Total packaging material used for finished products (in tonnes) and, if applicable, with reference to per unit produced.	Resources Conservation

KPIs	HKEX ESG Reporting Guide Requirements		Section/Remarks
Aspect A3: The Environment and Natural Resources	**General Disclosure** Policies on minimizing the issuers' significant impact on the environment and natural resources.		Environmental Management
	KPI A3.1	Description of significant impacts of activities on the environment and natural resources and the actions taken to manage them.	Environmental Management
B. Social			
Aspect B1: Employment	**General Disclosure** Information on: (a) the policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer related to compensation and dismissal, recruitment and promotion, working hours, holidays, equal opportunity, diversity, anti-discrimination, and other benefits and welfare.		Employee Care
	KPI B1.1	Total workforce by gender, employment type, age group and geographical region.	Performance Data Summary
	KPI B1.2	Employee turnover rate by gender, age group and geographical region.	Performance Data Summary
Aspect B2: Health and Safety	**General Disclosure** Information on: (a) the policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to providing a safe working environment and protecting employees from occupational hazards.		Occupational health and safety
	KPI B2.1	Number and rate of work-related fatalities.	Performance Data Summary
	KPI B2.2	Lost days due to work injury.	Performance Data Summary
	KPI B2.3	Description of occupational health and safety measures adopted, how they are implemented and monitored.	Occupational health and safety
Aspect B3: Development and Training	**General Disclosure** Policies on improving employees' knowledge and skills for discharging duties at work. Description of training activities.		Training and development

KPIs	HKEX ESG Reporting Guide Requirements		Section/Remarks
Aspect B4: Labour Standards	**General Disclosure** Information on: (a) the policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to preventing child or forced labour.		Lawful Recruitment
Aspect B5: Supply Chain Management	**General Disclosure** Policies on managing environmental and social risks of the supply chain		Supply chain management
	KPI B5.1	Number of suppliers by geographical region.	Supply chain management
	KPI B5.2	Description of practices relating to engaging suppliers, number of suppliers where the practices are being implemented, how they are implemented and monitored.	Supply chain management
Aspect B6: Product Responsibility	**General Disclosure** Information on: (a) the policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to health and safety, advertising, labelling and privacy matters relating to products and services provided and methods of redress.		Operational Excellence
	KPI B6.3	Description of practices relating to observing and protecting intellectual property rights.	Intellectual property rights
	KPI B6.4	Description of quality assurance process and recall procedures.	Quality Assurance
	KPI B6.5	Description of consumer data protection and privacy policies, how they are implemented and monitored.	Data security and privacy

KPIs	HKEX ESG Reporting Guide Requirements		Section/Remarks
Aspect B7: Anti-corruption	**General Disclosure** Information on: (a) the policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to bribery, extortion, fraud and money laundering.		Anti-corruption
	KPI B7.1	Number of concluded legal cases regarding corrupt practices brought against the issuer or its employees during the reporting period and the outcomes of the cases.	Anti-corruption
	KPI B7.2	Description of preventive measures and whistle-blowing procedures, how they are implemented and monitored.	Anti-corruption
Aspect B8: Community Investment	**General Disclosure** Policies on community engagement to understand the needs of the communities where the issuer operates and to ensure its activities take into consideration the communities' interests.		Community Involvement
	KPI B8.1	Focus areas of contribution.	Community Involvement
	KPI B8.2	Resources contributed to the focus area.	Community Involvement

INDEPENDENT AUDITOR'S REPORT

Independent auditor's report
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 97 to 216, which comprise the consolidated statement of financial position as at 31 December 2018, 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 flows 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 2018 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 page 131 to 133.

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 and the rights of customers to return the goods sold by the Group explicitly identified in the sales contracts signed with customers.

In addition, in respect of the cardiac rhythm management ("CRM") business acquired by the Group in 2018, 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. This implied promise in the contract with the customer requires the allocation of the transaction price between the sale of devices performance obligation and the post-sales services performance obligation.

The 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.

Revenue from sales where the customer has the right of return is recognised net of the estimated amount of consideration which the Group expects to have to refund to customers, based on the expected level of returns.

When the Group no longer expects to rebate or refund the customer, any amounts previously deferred are recognised as revenue.

How the matter was addressed in our audit

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

- obtaining an understanding of and assessing 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 and sales returns;

- inspecting, on a sample basis, key customer contracts to identify terms and conditions relating to transfer of goods control, sales rebates, the rights of return of goods sold 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 purchase volumes and rebate rates) with the relevant source documents (including sales invoices, sales contracts and cumulative sales data in the computer 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;

- comparing the actual sales rebates and sales returns recorded 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;

KEY AUDIT MATTERS (CONTINUED)

Revenue recognition (continued)

Refer to note 3 to the consolidated financial statements and the accounting policies on page 131 to 133.

The Key Audit Matter

For the CRM business, 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 costs plus a margin approach to estimate the stand-alone selling price. Upon the sales of those implanted devices, which requires post-sales service, the Group defers revenue allocated to those unfulfilled performance obligations and recognises these services income over the service period when they are rendered, which is estimated as 7 to 11 years based on the expected product lives of different implanted devices.

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 because significant management judgement can be required to estimate sales rebates, and sales returns for all products and to estimate the standalone selling price and product lives of implanted devices for CRM business.

How the matter was addressed in our audit

Our audit procedures to assess the recognition of revenue included the following (continued):

- understanding the methodology in deriving the deferred revenue in relation to the post-sales services for CRM business; performing the retrospective review on the historical information in terms of the estimated product lives used in the calculation; evaluating the key assumptions adopted in the estimation of stand-alone selling prices including the average costs for each post-sales service rendered and the average frequency for each sold device; benchmarking the key assumptions and estimations with the available industry reports or government statistics;

- 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 intangible assets and goodwill

Refer to note 11 and 12 to the consolidated financial statements and the accounting policies on pages 123 to 124.

The Key Audit Matter	How the matter was addressed in our audit
The carrying values of the Group's intangible assets and goodwill as at 31 December 2018 were US$117.5 million and US$162.7 million, respectively. Goodwill arose from the acquisition of the OrthoRecon business of Wright Medical Group, Inc. in 2014 of US$54.5 million and CRM business of LivaNova PLC in 2018 of US$108.2 million as at 31 December 2018, which has been allocated to the orthopedics devices and cardiac rhythm management devices segments. Intangible assets principally comprise technology, product licenses, customer relationships and capitalised development costs, which have been allocated to various segments. Management performs annual impairment assessments of the Group's goodwill and intangible assets that are not yet available for use by comparing the carrying values of these assets with their recoverable amounts, which are assessed using the value in use method by preparing discounted cash flow forecasts for each separately identifiable cash-generating unit ("CGU") to which the assets have been allocated. 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. We identified the assessment of potential impairment of intangible assets and goodwill 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.	Our audit procedures to assess the potential impairment of intangible assets and goodwill included the following: • evaluating management's identification of CGUs and the allocation of intangible assets and goodwill 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 our internal 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; • 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 intangible assets and goodwill with reference to the requirements of the prevailing accounting standards.

Independent auditor's report

KEY AUDIT MATTERS (CONTINUED)

Assessing impairment of investments in equity securities

Refer to notes 14 and 15 to the consolidated financial statements and the accounting policies on pages 123 to 124.

The Key Audit Matter	How the matter was addressed in our audit
As at 31 December 2018, the Group held certain convertible preference shares and other equity investments totalling US$14.3 million, which were classified as interests in associates and a joint venture in the Group's consolidated statement of financial position. These investments are reviewed at the end of each reporting period to determine whether there is objective evidence of impairment. If such evidence exists, impairment loss is determined and recognised in accordance with note 1(m)(iii) to the consolidated financial statements. We identified assessing indication of and provision for impairment of investments in equity instruments as a key audit matter because of the significance of the amounts of these investments in the consolidated statement of the financial position and because of the degree of judgement exercised by management in determining whether there was objective evidence of impairment and in adopting the assumptions used, particularly in respect of the future cash flows and the discount rate applied, for determining the amount of impairment if objective evidence exists.	Our audit procedures to assess the impairment of investments of equity instruments included the following: • discussing with management whether there was any objective evidence of impairment of individual investment in equity instruments and challenging management's assertions and conclusions with reference to the guidance in the prevailing accounting standards and by (i) obtaining and reviewing the latest financial statements of the issuers of all equity instruments; and (ii) conducting news searches of the issuers of all equity instruments; (iii) comparing the carrying amount of the investments with recent transaction price, if any; and • involving our internal valuation expert in our discussion with management to understand the rationale, and assess the appropriateness and the consistency, of the methodologies used and the key assumptions applied in management's impairment assessment.

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.

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, related safeguards.

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

The engagement partner on the audit resulting in this independent auditor's report is Fung, Ping Kwong.

KPMG
Certified Public Accountants

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

27 March 2019

CONSOLIDATED STATEMENT OF PROFIT OR LOSS

(Expressed in United States dollars) *For the year ended 31 December 2018*

	Note	2018	2017
			(Note)
		US$'000	US$'000
Revenue	*3*	**669,490**	444,190
Cost of sales		**(199,474)**	(125,793)
Gross profit		**470,016**	318,397
Other net income/(loss)	*4*	**13,796**	(2,540)
Research and development costs		**(104,814)**	(58,150)
Distribution costs		**(217,792)**	(137,766)
Administrative expenses		**(95,742)**	(66,804)
Other operating costs		**(13,410)**	(5,276)
Profit from operations		**52,054**	47,861
Finance costs	*5(a)*	**(21,020)**	(13,489)
Gain on disposal of subsidiaries		**–**	6,531
Gain on deemed disposal of a joint venture	*29*	**4,133**	–
Share of losses of associates		**(2,036)**	(5,493)
Share of losses of joint ventures		**(202)**	(5,042)
Profit before taxation	*5*	**32,929**	30,368
Income tax	*6(a)*	**(14,548)**	(13,417)
Profit for the year		**18,381**	16,951
Attributable to:			
Equity shareholders of the Company		**23,913**	18,823
Non-controlling interests		**(5,532)**	(1,872)
Profit for the year		**18,381**	16,951
Earnings per share	*9*		
Basic (in cents)		**1.63**	1.31
Diluted (in cents)		**1.28**	1.28

Note: The Group has initially applied HKFRS 15 and HKFRS 9 at 1 January 2018. Under the transition method chosen, comparative information is not restated. See note 1(c).

The notes on pages 105 to 216 form part of these financial statements. Details of dividends payable to equity shareholders of the Company attributable to the profit for the year are set out in note 28(b).

(Expressed in United States dollars) *For the year ended 31 December 2018*

	2018 US$'000	2017 *(Note)* US$'000
Profit for the year	**18,381**	16,951
Other comprehensive income for the year, net of tax		
Items that will not be reclassified to profit or loss:		
Remeasurement of net defined benefit liabilities	**272**	–
Items that may be reclassified subsequently to profit or loss:		
Exchange differences on translation of financial statements, net of nil tax	**(44,229)**	34,258
Other comprehensive income for the year	**(43,957)**	34,258
Total comprehensive income for the year	**(25,576)**	51,209
Attributable to:		
Equity shareholders of the Company	**(15,640)**	52,107
Non-controlling interests	**(9,936)**	(898)
Total comprehensive income for the year	**(25,576)**	51,209

Note: The Group has initially applied HKFRS 15 and HKFRS 9 at 1 January 2018. Under the transition method chosen, comparative information is not restated. See note 1(c).

The notes on pages 105 to 216 form part of these financial statements.

CONSOLIDATED STATEMENT OF FINANCIAL POSITION

(Expressed in United States dollars)

	Note	**31 December 2018 US$'000**	31 December 2017 *(Note)* US$'000
Non-current assets			
Investment properties	*10*	**5,451**	5,899
Other property, plant and equipment	*10*	**336,263**	282,280
Land use rights	*10*	**15,087**	16,224
		356,801	304,403
Intangible assets	*11*	**117,489**	83,904
Goodwill	*12*	**162,673**	54,458
Interests in associates	*14*	**12,291**	13,998
Interest in a joint venture	*15*	**5,100**	197
Available-for-sale securities	*16*	**–**	5,000
Other financial assets	*16*	**11,910**	–
Deferred tax assets	*24(b)*	**15,291**	5,584
Prepayments for non-current assets		**6,222**	2,491
Other non-current assets	*17*	**31,979**	3,883
		719,756	473,918
Current assets			
Inventories	*18*	**175,957**	106,160
Trade and other receivables	*19*	**245,143**	162,242
Pledged deposits and time deposits		**3,537**	760
Cash and cash equivalents	*20*	**130,054**	160,229
Derivative financial assets		**–**	314
		554,691	429,705
Current liabilities			
Trade and other payables	*21*	**236,813**	125,085
Contract liabilities	*22*	**10,060**	–
Interest-bearing borrowings	*23*	**100,901**	68,819
Convertible bonds	*26*	**86,834**	–
Income tax payable	*24(a)*	**5,782**	4,989
		440,390	198,893
Net current assets		**114,301**	230,812
Total assets less current liabilities		**834,057**	704,730

(Expressed in United States dollars)

	Note	**31 December 2018 US$'000**	31 December 2017 *(Note)* US$'000
Non-current liabilities			
Interest-bearing borrowings	*23*	**137,829**	28,235
Deferred income	*25*	**23,905**	24,291
Contract liabilities	*22*	**27,766**	–
Convertible bonds	*26*	**3,571**	154,421
Other payables	*21*	**93,625**	54,796
Derivative financial liabilities	*29*	**10,640**	–
Deferred tax liabilities	*24(b)*	**7,775**	3,535
		305,111	265,278
NET ASSETS		**528,946**	439,452
CAPITAL AND RESERVES			
Share capital	*28(c)*	**16**	14
Reserves		**442,780**	401,589
Total equity attributable to equity shareholders of the Company		**442,796**	401,603
Non-controlling interests		**86,150**	37,849
TOTAL EQUITY		**528,946**	439,452

Note: The Group has initially applied HKFRS 15 and HKFRS 9 at 1 January 2018. Under the transition method chosen, comparative information is not restated. See note 1(c).

Approved and authorised for issue by the board of directors on 27 March 2019.

Zhaohua Chang
Chairman

Jonathan H. Chou
Director

The notes on pages 105 to 216 form part of these financial statements.

CONSOLIDATED STATEMENT OF CHANGES IN EQUITY

(Expressed in United States dollars) *For the year ended 31 December 2018*

	Note	Attributable to equity shareholders of the Company								
		Share capital US$'000	Share premium US$'000	Exchange reserve US$'000	Capital reserve US$'000	Statutory general reserve US$'000	Retained profits US$'000	Total US$'000	Non-controlling interests US$'000	Total equity US$'000
Balance at 1 January 2017		14	248,431	(28,120)	46,849	21,890	43,845	332,909	13,570	346,479
Changes in equity for 2017:										
Profit for the year		–	–	–	–	–	18,823	18,823	(1,872)	16,951
Other comprehensive income		–	–	33,284	–	–	–	33,284	974	34,258
Total comprehensive income		–	–	33,284	–	–	18,823	52,107	(898)	51,209
Capital contribution from non-controlling interests and disposal of partial equity interests in subsidiaries		–	–	–	14,964	–	–	14,964	25,163	40,127
Appropriation of statutory general reserve		–	–	–	–	955	(955)	–	–	–
Equity-settled share-based transactions		–	–	–	4,271	–	–	4,271	14	4,285
Shares issued under share option scheme	*28(c)(iii)*	–	8,836	–	(3,358)	–	–	5,478	–	5,478
Shares purchased under share award scheme	*27(b)*	–	–	–	(9,617)	–	–	(9,617)	–	(9,617)
Shares granted under share award scheme	*27(b)*	–	–	–	4,918	–	–	4,918	–	4,918
Change in carrying amounts of share repurchase obligations	*21*	–	–	–	(1,132)	–	–	(1,132)	–	(1,132)
Dividends paid in respect of the previous year	*28(b)*	–	1,215	–	–	–	(3,510)	(2,295)	–	(2,295)
Balance at 31 December 2017 *(Note)*		14	258,482	5,164	56,895	22,845	58,203	401,603	37,849	439,452

Note: The Group has initially applied HKFRS 15 and HKFRS 9 at 1 January 2018. Under the transition method chosen, comparative information is not restated. See note 1(c).

The notes on pages 105 to 216 form part of these financial statements.

	Note	Attributable to equity shareholders of the Company								
		Share capital US$'000	**Share premium US$'000**	**Exchange reserve US$'000**	**Capital reserve US$'000**	**Statutory general reserve US$'000**	**Retained profits US$'000**	**Total US$'000**	**Non-controlling interests US$'000**	**Total equity US$'000**
Balance at 31 December 2017		**14**	**258,482**	**5,164**	**56,895**	**22,845**	**58,203**	**401,603**	**37,849**	**439,452**
Impact on initial application of HKFRS 9	*1(c)*	–	–	–	–	–	(4,163)	(4,163)	(158)	(4,321)
Adjusted balance at 1 January 2018		**14**	**258,482**	**5,164**	**56,895**	**22,845**	**54,040**	**397,440**	**37,691**	**435,131**
Changes in equity for 2018:										
Profit for the year		–	–	–	–	–	23,913	23,913	(5,532)	18,381
Other comprehensive income		–	–	(39,757)	204	–	–	(39,553)	(4,404)	(43,957)
Total comprehensive income		–	–	(39,757)	204	–	23,913	(15,640)	(9,936)	(25,576)
Capital contribution from non-controlling interest and disposal of partial equity interests in subsidiaries		–	–	–	(4,597)	–	–	(4,597)	62,615	58,018
Transfer between reserves		–	–	–	–	(1,839)	1,839	–	–	–
Appropriation of statutory general reserve		–	–	–	–	8,158	(8,158)	–	–	–
Equity-settled share-based transactions		–	–	–	4,365	–	–	4,365	208	4,573
Shares issued under share option scheme	*28(c)(iii)*	1	4,445	–	(1,492)	–	–	2,954	–	2,954
Shares purchased under share award scheme	*27(b)*	–	–	–	(6,237)	–	–	(6,237)	–	(6,237)
Shares granted under share award scheme	*27(b)*	–	–	–	5,820	–	–	5,820	–	5,820
Conversion of convertible bonds	*26*	1	85,087	–	(17,686)	–	–	67,402	–	67,402
Change in carrying amounts of share repurchase obligations	*21*	–	–	–	(5,129)	–	–	(5,129)	–	(5,129)
Dividends paid in respect of the previous year	*28(b)*	–	1,075	–	–	–	(4,657)	(3,582)	–	(3,582)
Dividends to holders of non-controlling interests		–	–	–	–	–	–	–	(4,428)	(4,428)
Balance at 31 December 2018		**16**	**349,089**	**(34,593)**	**32,143**	**29,164**	**66,977**	**442,796**	**86,150**	**528,946**

The notes on pages 105 to 216 form part of these financial statements.

CONSOLIDATED CASH FLOWS STATEMENT

(Expressed in United States dollars) *For the year ended 31 December 2018*

	Note	2018 US$'000	2017 US$'000
Operating activities			
Cash generated from operations	*20(b)*	**100,328**	107,437
Income tax refund received		**293**	3,141
Tax paid:			
– The People's Republic of China ("PRC") income tax paid		**(14,877)**	(11,901)
– Non-PRC income tax paid		**(1,614)**	(1,491)
Net cash generated from operating activities		**84,130**	97,186
Investing activities			
Payments for the purchase of property, plant and equipment		**(68,590)**	(58,038)
Payments for acquisition of subsidiaries, net of cash acquired	*29*	**(184,025)**	–
Placement of security deposits to a related party	*17*	**(17,733)**	–
Proceeds from sale of property, plant and equipment and intangible assets		**2,276**	169
Insurance compensation received in respect of damage of property, plant and equipment		**–**	3,678
Payments for intangible assets		**(21,510)**	(20,132)
Proceeds from government grants related to non-current assets		**1,362**	1,088
Increase in pledged deposits and time deposits		**(2,777)**	(92)
Interest received		**1,208**	868
Payments for the investments in associates		**(3,961)**	(2,800)
Payments for the investment in a joint venture		**(5,100)**	(4,548)
Payments for the investments in other non-current financial assets		**(8,556)**	(3,000)
Loans to a joint venture		**(4,736)**	(8,320)
Loans repaid by a joint venture		**9,315**	1,486
Loans repaid by an associate		**196**	3,609
Advances to a third party	*19*	**(11,900)**	–
Others		**(141)**	(138)
Net cash used in investing activities		**(314,672)**	(86,170)

CONSOLIDATED CASH FLOWS STATEMENT

(Expressed in United States dollars) *For the year ended 31 December 2018*

	Note	2018 US$'000	2017 US$'000
Financing activities			
Proceeds from other interest-bearing borrowings, net of transaction costs	*20(c)*	**194,013**	6,943
Repayments of interest-bearing borrowings	*20(c)*	**(61,541)**	(58,335)
Proceeds from disposal of partial equity interests in subsidiaries		**–**	53,795
Capital contributions from non-controlling interests		**98,066**	31,791
Proceeds from shares issued under the share option scheme	*28(c)(iii)*	**2,954**	5,478
Interest paid for the convertible bonds	*26*	**(5,599)**	(3,154)
Interest paid for interest-bearing borrowings	*20(c)*	**(9,107)**	(4,224)
Payment for repurchase of shares under share award scheme	*27(b)*	**(6,237)**	(9,617)
Dividends paid to holders of non-controlling interests		**(4,428)**	–
Dividends paid to equity shareholders of the Company	*28(b)*	**(3,582)**	(2,295)
Net cash generated from financing activities		**204,539**	20,382
Net (decrease)/increase in cash and cash equivalents		**(26,003)**	31,398
Cash and cash equivalents at 1 January		**160,229**	123,694
Effect of foreign exchange rate changes		**(4,172)**	5,137
Cash and cash equivalents at 31 December	*20(a)*	**130,054**	160,229

The notes on pages 105 to 216 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. Significant accounting policies adopted by the Group are disclosed below.

The HKICPA has issued certain new and revised 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 and prior accounting periods reflected in these financial statements.

(b) Basis of preparation of the financial statements

The consolidated financial statements for the year ended 31 December 2018 comprise the Company and its subsidiaries (together referred to as the "Group") and the Group's interest in associates and a joint venture.

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

The HKICPA has issued a number of new HKFRSs and amendments to HKFRSs that are first effective for the current accounting period of the Group. Of these, the following developments are relevant to the Group's financial statements:

- HKFRS 9, *Financial instruments*
- HKFRS 15, *Revenue from contracts with customers*
- HK(IFRIC) 22, *Foreign currency transactions and advance consideration*

The Group has not applied any new standard or interpretation that is not yet effective for the current accounting period.

HK(IFRIC) 22 does not have a material effect on how the Group's results and financial position for the current or prior period have been prepared or presented in this financial report.

(i) HKFRS 9, *Financial instruments*

HKFRS 9 replaces HKAS 39, *Financial instruments: recognition and measurement*. It sets out the requirements for recognising and measuring financial assets, financial liabilities and some contracts to buy or sell non-financial items.

The Group has applied HKFRS 9 retrospectively to items that existed at 1 January 2018 in accordance with the transition requirements. The Group has recognised the cumulative effect of initial application as an adjustment to the opening equity at 1 January 2018. Therefore, comparative information continues to be reported under HKAS 39.

The following table summarises the impact of transition to HKFRS 9 on retained earnings and reserves and related tax impact at 1 January 2018.

	US$'000
Retained earnings	
Recognition of additional expected credit losses on trade receivables and decrease in retained earnings at 1 January 2018	(4,163)
Non-controlling interests	
Recognition of additional expected credit losses on trade receivables and decrease in non-controlling interests at 1 January 2018	(158)

Further details of the nature and effect of the changes to previous accounting policies and the transition approach are set out below:

1 SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

(c) Changes in accounting policies (continued)

(i) HKFRS 9, *Financial instruments* (continued)

a. Classification of financial assets and financial liabilities

HKFRS 9 categories financial assets into three principal classification categories: measured at amortised cost, at fair value through other comprehensive income ("FVOCI") and at fair value through profit or loss ("FVPL"). These supersede HKAS 39's categories of held-to-maturity investments, loans and receivables, available-for-sale financial assets and financial assets measured at FVPL. The classification of financial assets under HKFRS 9 is based on the business model under which the financial asset is managed and its contractual cash flow characteristics. Under HKFRS 9, derivatives embedded in contracts where the host is a financial asset in the scope of the standard are not separated from the host. Instead, the hybrid instruments as a whole is assessed for classification.

The following table shows the original measurement categories for each class of the Group's financial assets under HKAS 39 and reconciles the carrying amounts of those financial assets determined in accordance with HKAS 39 to those determined in accordance with HKFRS 9.

	HKAS 39 carrying amount at 31 December 2017 US$'000	Reclassification US$'000	Remeasurement US$'000	HKFRS 9 carrying amount at 1 January 2018 US$'000
Financial assets carried at amortised cost				
Cash and cash equivalents	160,229	–	–	160,229
Pledged deposits and time deposits	760	–	–	760
Trade and other receivables	144,309	–	(4,321)	139,988
Debt component of convertible bonds issued by an associate (note (i))	5,365	(5,365)	–	–
Amounts due from associates	3,256	–	–	3,256
	313,919	(5,365)	(4,321)	304,233
Financial assets carried at FVPL				
Convertible bonds issued by an associate (note (i))	314	5,365	–	5,679
Equity securities not held for trading (note (ii))	–	5,000	–	5,000
	314	10,365	–	10,679
Financial assets classified as available-for-sale under HKAS 39 (note (ii))	5,000	(5,000)	–	–

1 SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

(c) Changes in accounting policies (continued)

(i) HKFRS 9, *Financial instruments* (continued)

a. Classification of financial assets and financial liabilities (continued)

Notes:

(i) Under HKAS 39, conversion option embedded in the convertible bonds issued by an associate was separated from the host and recognised as a derivative financial asset, of which fair value was remeasured at the end of each reporting period. The host contract is subsequently carried at amortised cost. Under HKFRS 9, such hybrid instrument as a whole is assessed for classification and is carried at FVPL.

(ii) Under HKAS 39, equity securities not held for trading were classified as available-for-sale financial assets. These equity securities are classified as at FVPL under HKFRS 9, unless they are eligible for and designated at FVOCI by the Group. At 1 January 2018, none of the investments has been designated at FVOCI (non-recycling).

For an explanation of how the Group classifies and measures financial assets and recognises related gains and losses under HKFRS 9, see respective accounting policy notes in notes 1(g), (h), (i), (m), (p), (q) and (r).

The measurement categories for all financial liabilities remain the same, except for financial guarantee contracts (see note 1(m)(ii)). The carrying amounts for all financial liabilities (including financial guarantee contracts) at 1 January 2018 have not been impacted by the initial application of HKFRS 9.

The Group did not designate or de-designate any financial asset or financial liability at FVPL at 1 January 2018.

b. Credit losses

HKFRS 9 replaces the "incurred loss" model in HKAS 39 with the "expected credit loss" ("ECL") model. The ECL model requires an ongoing measurement of credit risk associated with a financial asset and therefore recognises ECLs earlier than under the "incurred loss" accounting model in HKAS 39.

The Group applies the new ECL model to financial assets measured at amortised cost (including cash and cash equivalents, pledged deposits, time deposits, trade and other receivables and amounts due from associates), and financial guarantee contracts issued (see note 1(m)(ii)).

For further details on the Group's accounting policy for accounting for credit losses, see note 1(m).

The following table reconciles the closing loss allowance determined in accordance with HKAS 39 as at 31 December 2017 with the opening loss allowance determined in accordance with HKFRS 9 as at 1 January 2018.

1 SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

(c) Changes in accounting policies (continued)

(i) HKFRS 9, *Financial instruments* (continued)

b. Credit losses (continued)

	US$'000
Loss allowance at 31 December 2017 under HKAS 39	
– trade receivables	6,099
– other receivables	42
Additional credit loss recognised at 1 January 2018 on trade receivables	4,321
Loss allowance at 1 January 2018 under HKFRS 9	10,462

c. Transition

Changes in accounting policies resulting from the adoption of HKFRS 9 have been applied retrospectively, except as described below:

– Information relating to comparative periods has not been restated. Differences in the carrying amounts of financial assets resulting from the adoption of HKFRS 9 are recognised in retained earnings and reserves as at 1 January 2018. Accordingly, the information presented for 2017 continues to be reported under HKAS 39 and thus may not be comparable with the current period.

– The determination of the business model within which a financial asset is held has been made on the basis of the facts and circumstances that existed at 1 January 2018 (the date of initial application of HKFRS 9 by the Group).

(ii) HKFRS 15, *Revenue from contracts with customers*

HKFRS 15 establishes a comprehensive framework for recognising revenue and some costs from contracts with customers. HKFRS 15 replaces HKAS 18, *Revenue*, which covered revenue arising from sale of goods and rendering of services, and HKAS 11, *Construction contracts*, which specified the accounting for construction contracts.

HKFRS 15 also introduces additional qualitative and quantitative disclosure requirements which aim to enable users of the financial statements to understand the nature, amount, timing and uncertainty of revenue and cash flows arising from contracts with customers.

The Group has elected to use the cumulative effect transition method and determines that there is no significant impact of transition to HKFRS 15 on retained earnings and related tax as at 1 January 2018. Therefore, no adjustment to the opening balance of equity at 1 January 2018 was made. Comparative information has not been restated and continues to be reported under HKAS 11 and HKAS 18. As allowed by HKFRS 15, the Group has applied the new requirements only to contracts that were not completed before 1 January 2018.

1 SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

(c) Changes in accounting policies (continued)

(ii) HKFRS 15, *Revenue from contracts with customers* (continued)

Under HKFRS 15, a contract liability is recognised when a customer pays consideration, or is contractually required to pay consideration and the amount is already due, before the Group recognised the related revenue. To reflect these changes in presentation, "Advances received from customers" amounting to US$2,779,000, which were previously included in trade and other payables are now included under contract liabilities. Comparative information is not restated.

(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) 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 a 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 notes 1(f) and 1(m)(iii)). 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.

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)).

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 a joint venture, 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.

(A) Policy applicable from 1 January 2018

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(y)(v)).

1 SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

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

(A) Policy applicable from 1 January 2018 (continued)

Investments other than equity investments (continued)

– 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.

– fair value at 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.

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 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(y)(iv).

(B) Policy applicable prior to 1 January 2018

Investments in securities held for trading were classified as financial assets measured at FVPL. Any attributable transaction costs were recognised in profit or loss as incurred. At the end of each reporting period the fair value was remeasured, with any resultant gain or loss being recognised in profit or loss.

Dated debt securities that the Group had the positive ability and intention to hold to maturity were classified as held-to-maturity securities. Held-to-maturity securities were stated at amortised cost (for impairment see note 1(m)(i) – policy applicable prior to 1 January 2018).

Investments which did not fall into any of the above categories were classified as available-for-sale financial assets. At the end of each reporting period the fair value was remeasured, with any resultant gain or loss being recognised in other comprehensive income and accumulated separately in equity in the fair value reserve (recycling). Dividend income from equity investments and interest income from debt securities calculated using the effective interest method were recognised in profit or loss in accordance with the policies set out in notes 1(y)(iv) and 1(y)(v), respectively. Foreign exchange gains and losses arising from debt securities were also recognised in profit or loss. When the investments were derecognised or impaired (see note 1(m)(i)-policy applicable prior to 1 January 2018), the cumulative gain or loss recognised in equity was reclassified to profit or loss.

1 SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

(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)). 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(y)(iii).

When the Group holds a property interest under an operating lease to earn rental income and/or for capital appreciation, the interest is classified and accounted for as an investment property on a property-by-property basis.

(j) Other property, plant and equipment

Other property, plant and equipment are stated at cost less accumulated depreciation and impairment losses (see note 1(m)).

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(aa)).

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, and

(Expressed in United States dollars unless otherwise indicated)

1 SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

(j) Other property, plant and equipment (continued)

– Equipment and machinery	10 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(aa)). 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.

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 17 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.

1 SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

(l) Leased assets

An arrangement, comprising a transaction or a series of transactions, is or contains a lease if the Group determines that the arrangement conveys a right to use a specific asset or assets for an agreed period of time in return for a payment or a series of payments. Such a determination is made based on an evaluation of the substance of the arrangement and is regardless of whether the arrangement takes the legal form of a lease.

(i) Classification of assets leased to the Group

Assets that are held by the Group under leases which transfer to the Group substantially all the risks and rewards of ownership are classified as being held under finance leases. Leases which do not transfer substantially all the risks and rewards of ownership to the Group are classified as operating leases, with the following exceptions:

– property held under operating leases that would otherwise meet the definition of an investment property is classified as investment property on a property-by-property basis and, if classified as investment property, is accounted for as if held under a finance lease (see note 1(i)); and

– land held for own use under an operating lease, the fair value of which cannot be measured separately from the fair value of a building situated thereon at the inception of the lease, is accounted for as being held under a finance lease, unless the building is also clearly held under an operating lease. For these purposes, the inception of the lease is the time that the lease was first entered into by the Group, or taken over from the previous lessee.

(ii) Assets acquired under finance leases

Where the Group acquires the use of assets under finance leases, the amounts representing the fair value of the leased asset, or, if lower, the present value of the minimum lease payments, of such assets are recognised as property, plant and equipment and the corresponding liabilities, net of finance charges, are recorded as obligations under finance leases. Depreciation is provided at rates which write off the cost or valuation of the assets over the term of the relevant lease or, where it is likely the Group will obtain ownership of the asset, the life of the asset, as set out in note 1(j). Impairment losses are accounted for in accordance with the accounting policy as set out in note 1(m). Finance charges implicit in the lease payments are charged to profit or loss over the period of the leases so as to produce an approximately constant periodic rate of charge on the remaining balance of the obligations for each accounting period. Contingent rentals are charged to profit or loss in the accounting period in which they are incurred.

1 SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

(l) Leased assets (continued)

(iii) Operating lease charges

Where the Group has the use of assets held under operating leases, payments made under the leases are charged to profit or loss in equal instalments over the accounting periods covered by the lease term, except where an alternative basis is more representative of the pattern of benefits to be derived from the leased asset. Lease incentives received are recognised in profit or loss as an integral part of the aggregate net lease payments made. Contingent rentals are charged to profit or loss in the accounting period in which they are incurred.

The cost of acquiring land held under an operating lease is amortised on a straight-line basis over the period of the lease term except where the property is classified as an investment property (see note 1(i)).

(m) Credit losses and impairment of assets

(i) Credit losses from financial instruments, contract assets and lease receivables

(A) Policy applicable from 1 January 2018

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 associates);
- contract assets as defined in HKFRS 15; and
- lease receivables.

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

1 SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

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

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

(A) Policy applicable from 1 January 2018 (continued)

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, trade and other receivables and contract assets: effective interest rate determined at initial recognition or an approximation thereof;

– variable-rate financial assets: current effective interest rate; and

– 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.

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.

1 SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

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

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

(A) Policy applicable from 1 January 2018 (continued)

Significant increase 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.

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).

1 SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

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

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

(A) Policy applicable from 1 January 2018 (continued)

Basis of calculation of interest income

Interest income recognised in accordance with note 1(y)(v) 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 delinquency in interest or principal payments;

– 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.

Write-off policy

The gross carrying amount of a financial asset, lease receivable or contract asset 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.

(b) Policy applicable prior to 1 January 2018

Prior to 1 January 2018, an "incurred loss" model was used to measure impairment losses on financial assets not classified as at FVPL (e.g. trade and other receivables and available-for-sale investments). Under the "incurred loss" model, an impairment loss was recognised only when there was objective evidence of impairment. Objective evidence of impairment included:

1 SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

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

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

(B) Policy applicable prior to 1 January 2018 (continued)

– significant financial difficulties of the debtor;

– a breach of contract, such as a default or delinquency in interest or principal payments;

– it becoming probable that the debtor will enter bankruptcy or other financial reorganisation;

– significant changes in the technological, market, economic or legal environment that have an adverse effect on the debtor; and

– a significant or prolonged decline in the fair value of an investment in an equity instrument below its cost.

If any such evidence existed, an impairment loss was determined and recognised as follows:

– For trade and other receivables and other financial assets carried at amortised cost, impairment loss was measured as the difference between the asset's carrying amount and the present value of estimated future cash flows, discounted at the financial asset's original effective interest rate, where the effect of discounting was material. This assessment was made collectively where these financial assets shared similar risk characteristics, such as similar past due status, and had not been individually assessed as impaired. Future cash flows for financial assets which were assessed for impairment collectively were based on historical loss experience for assets with credit risk characteristics similar to the collective group.

  If in a subsequent period the amount of an impairment loss decreased and the decrease could be linked objectively to an event occurring after the impairment loss was recognised, the impairment loss was reversed through profit or loss. A reversal of an impairment loss was only recognised to the extent that it did not result in the asset's carrying amount exceeding that which would have been determined had no impairment loss been recognised in prior years.

  When the recovery of a trade debtor or other financial assets carried at amortised cost was considered doubtful but not remote, associated impairment losses were recorded using an allowance account. When the Group was satisfied that recovery was remote, the amount considered irrecoverable was written off against the gross carrying amount of those assets directly. Subsequent recoveries of amounts previously charged to the allowance account were reversed against the allowance account. Other changes in the allowance account and subsequent recoveries of amounts previously written off directly were recognised in profit or loss.

1 SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

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

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

(B) Policy applicable prior to 1 January 2018 (continued)

– For available-for-sale investments, the cumulative loss that had been recognised in the fair value reserve (recycling) was reclassified to profit or loss. The amount of the cumulative loss that was recognised in profit or loss was the difference between the acquisition cost (net of any principal repayment and amortisation) and current fair value, less any impairment loss on that asset previously recognised in profit or loss.

Impairment losses recognised in profit or loss in respect of available-for-sale equity securities were not reversed through profit or loss. Any subsequent increase in the fair value of such assets was recognised in other comprehensive income.

Impairment losses recognised in profit or loss in respect of available-for-sale debt securities were reversed if the subsequent increase in fair value could be objectively related to an event occurring after the impairment loss was recognised. Reversals of impairment losses in such circumstances were recognised in profit or loss.

(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 within "trade and other payables" 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.

(A) Policy applicable from 1 January 2018

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 amount carried in "trade and other payables" in respect of the guarantees (i.e. the amount initially recognised, less accumulated amortisation).

1 SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

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

(ii) Credit losses from financial guarantees issued (continued)

(A) Policy applicable from 1 January 2018 (continued)

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.

(B) Policy applicable prior to 1 January 2018

Prior to 1 January 2018, a provision would be recognised if and when it became probable that (i) the holder of the guarantee would call upon the Group under the guarantee and (ii) the amount of the claim on the Group was expected to exceed the amount carried in "trade and other payables" in respect of the guarantee.

(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 property;

– other property, plant and equipment;

– land use rights;

– intangible assets;

– goodwill;

– investments in associates and a joint venture; and

– investments in subsidiaries in the Company's statement of financial position.

1 SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

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

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

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).

– 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).

– 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 notes 1(m)(i) and 1(m)(ii)).

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.

1 SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

(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.

(o) Contract assets and contract liabilities

(A) Policy applicable from 1 January 2018

A contract asset is recognised when the Group recognises revenue (see note 1(y)) 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 consideration before the Group recognises the related revenue (see note 1(y)). A contract liability would also be recognised if the Group has an unconditional right to receive consideration before the Group recognises the related revenue. In such cases, a corresponding receivable would also be recognised (see note 1(p)).

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(y)).

1 SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

(o) Contract assets and contract liabilities (continued)

(B) Policy prior to 1 January 2018

In the comparative period, amounts received before the related revenue was recognised were presented as "advances received from customers" under "trade and other payables". These balances have been reclassified on 1 January 2018 (see note 1(c)(ii)).

(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)).

Receivables are stated at amortised cost using the effective interest method less allowance for credit losses (see note 1(m)(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. Cash and cash equivalents are assessed for ECLs in accordance with the policy set out in note 1(m)(i).

(r) Convertible notes issued

(i) Convertible notes issued that contain an equity component

Convertible notes that can be converted into ordinary shares at the option of the holder, where the number of shares to be issued is fixed, 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 notes is measured at 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 notes 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 recognised in the capital reserve until either the notes are converted or redeemed.

If the notes 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. If the notes are redeemed, the capital reserve is released directly to retained profits.

1 SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

(r) Convertible notes issued (continued)

(ii) Other convertible notes issued

Convertible notes which do not contain an equity component are accounted for as follows:

At initial recognition the derivative component of the convertible notes is measured at fair value and presented as part of derivative financial instruments (see note 1(h)). Any excess of proceeds over the amount initially recognised as the derivative component is recognised as the host liability component. Transaction costs that relate to the issue of the convertible note are allocated to the host liability and derivative components in proportion to the allocation of proceeds. The portion of the transaction costs relating to the host liability component is recognised initially as part of the liability. The portion relating to the derivative component is recognised immediately in profit or loss.

The derivative component is subsequently remeasured in accordance with note 1(h). The host liability component is subsequently carried at amortised cost. Interest expense recognised in profit or loss on the host liability component is calculated using the effective interest method.

If the notes are converted, the shares issued are measured at fair value and any difference between the fair value of shares issued and the carrying amounts of the derivative and liability components are recognised in profit or loss. If the notes are redeemed, any difference between the amount paid and the carrying amounts of both components is recognised in profit or loss.

(s) 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 expenses is recognised in accordance with the Group's accounting policy for borrowing costs (see note 1(aa)).

(t) 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. 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.

(u) Trade and other payables

Trade and other payables are initially recognised at fair value. Except for financial guarantee liabilities measured in accordance with note 1(m)(ii), trade and other payables are subsequently stated at amortised cost unless the effect of discounting would be immaterial, in which case they are stated at cost.

1 SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

(v) 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. When the benefits of a plan are changed, or when a plan is curtailed, 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. 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.

Remeasurements arising from defined benefit retirement plans are recognised in other comprehensive income. 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)).

(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 the binomial tree model, 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.

1 SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

(v) Employee benefits (continued)

(iii) Share-based payments (continued)

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).

The fair value of the amount payable to employees in respect of the long term incentive awards, which are settled in cash, is recognised as an expense with a corresponding increase in liabilities, over the period during which the employees become unconditionally entitled to payment. The liability is remeasured at grant date and at the end of each reporting date after taking into account all vesting and non-vesting conditions, including service conditions and non-market performance conditions.

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 financial position which is eliminated on consolidation.

(iv) 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.

(w) 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.

1 SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

(w) Income tax (continued)

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.

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.

1 SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

(x) Provisions and contingent liabilities

(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.

(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 termination the contract and the net cost of continuing with the contract.

(iii) Contingent liabilities assumed in business combinations

Contingent liabilities assumed in a business combination which are present obligations at the date of acquisition are initially recognised at fair value, provided the fair value can be reliably measured. After their initial recognition at fair value, such contingent liabilities are recognised at the higher of the amount initially recognised, less accumulated amortisation where appropriate, and the amount that would be determined in accordance with note 1(x)(i). Contingent liabilities assumed in a business combination that cannot be reliably fair valued or were not present obligations at the date of acquisition are disclosed in accordance with note 1(x)(i).

(y) 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 in the ordinary course of the Group's business.

Revenue is recognised when control over a product or service is transferred to the customer, or the lessee has the right to use the asset, at the amount of promised consideration to which the Group is expected to be entitled, excluding those amounts collected on behalf of third parties. Revenue excludes value added tax or other sales taxes and is after deduction of any trade discounts.

1 SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

(y) Revenue and other income (continued)

Where the contract contains a financing component which provides a significant financing benefit to the customer for more than 12 months, revenue is measured at the present value of the amount receivable, discounted using the discount rate that would be reflected in a separate financing transaction with the customer, and interest income is accrued separately under the effective interest method. Where the contract contains a financing component which provides a significant financing benefit to the Group, revenue recognised under that contract includes the interest expense accreted on the contract liability under the effective interest method. 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 if the period of financing is 12 months or less.

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

(i) Sale of medical devices

Revenue is recognised when the customer takes possession of and accepts the products. 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.

In the comparative period, revenue from sales of medical devices was recognised upon the transfer of risks and rewards of ownership. The change in accounting policy did not have a material impact on the opening balance of retained earnings as at 1 January 2018.

(ii) Revenue from post-sales services

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. 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 costs plus a margin approach to estimate the stand-alone selling price. Upon the sales of those implanted devices, which requires post-sales service, the Group defers revenue allocated to those unfulfilled performance obligations and recognises these services income over the service period when they are rendered, which is estimated as 7 to 11 years based on the expected product lives of different implanted devices.

1 SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

(y) Revenue and other income (continued)

(iii) 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. Contingent rentals are recognised as income in the accounting period in which they are earned.

(iv) 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.

(v) Interest income

Interest income is recognised as it accrues using the effective interest method.

(vi) 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.

1 SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

(z) 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.

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.

(aa) 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.

(bb) 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.

1 SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

(bb) Related parties (continued)

(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.

(cc) 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

Notes 5(b), 12, 27 and 31 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:

(a) 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.

(b) 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.

(c) 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.

(d) Allocation and recognition of post-sales services

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 for each post-sales service rendered, the average frequency for each sold implanted device 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

The Group derives revenue principally from the sales of medical devices through appointed distributors and direct force sales, as well as rendering of post-sales services primarily for CRM business acquired in 2018. Further details regarding the Group's principle activities are disclosed in note 3(b).

(i) Disaggregation of revenue

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

	2018 US$'000	2017 (Note) US$'000
Revenue from contracts with customers within the scope of HKFRS 15		
Sales of medical devices	**661,162**	443,738
Revenue from post-sales services	**7,868**	–
	669,030	443,738
Revenue from other sources		
Gross rentals from investment properties	**460**	452
	669,490	444,190

Note: The Group has initially applied HKFRS 15 using the cumulative effect method. Under this method, the comparative information is not restated and was prepared in accordance with HKAS 18.

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.

The Group's customer base is diversified. For the years ended 31 December 2018 and 2017, there was no customer with whom transactions have exceeded 10% of the Group's revenue. Details of concentrations of credit risk arising from the Group's largest customers are set out in note 31(a).

3 REVENUE AND SEGMENT REPORTING (CONTINUED)

(a) Revenue (continued)

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

As at 31 December 2018, the aggregated amount of the transaction price allocated to the remaining performance obligation under the Group's existing contracts is US$35,463,000. This amount represents revenue expected to be recognised in the future from rendering post-sales services. The Group will recognise the expected revenue in future when or as the service is rendered, which is expected to occur over the estimated product lives of different implanted devices.

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.

(b) Segment reporting

The Group manages its businesses by divisions, which are organised by a mixture of both lines of business lines 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 eight reportable segments (2017: seven). On 30 April 2018, the Group completed the acquisition of the CRM business from LivaNova PLC ("LivaNova") (note 29). The Group presented the CRM business segment as a reportable segment since 2018 which previously was included in the cardiovascular devices business segment. In addition, certain investments in debt and equity securities were excluded from reportable segment net profit/(loss) and segment assets in 2018 due to the change of the assessment by the Group's most senior executive management. The comparative information has also been re-presented to reflect such change. No operating segments have been aggregated to form the following reportable segments.

- Orthopedics devices business: sales, manufacture, research and development of orthopedics devices.
- Cardiovascular devices business: sales, manufacture, research and development of cardiovascular devices, such as drug eluting stents.
- CRM business: sales, manufacture, research and development of cardiac rhythm management devices.
- Endovascular devices business: sales, manufacture, research and development of endovascular devices.
- Electrophysiology devices business: sales, manufacture, research and development of electrophysiology devices.
- Neurovascular devices business: sales, manufacture, research and development of neurovascular devices.
- Surgical devices business: sales, manufacture, research and development of surgical devices.
- Diabetes and endocrinal devices business: sales, manufacture, research and development of devices related to diabetes mellitus.

3 REVENUE AND SEGMENT REPORTING (CONTINUED)

(b) Segment reporting (continued)

(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 tangible, intangible assets and current assets with the exception of corporate assets. Segment liabilities include trade and other payables and deferred income attributable to the activities of each individual segment and interest-bearing borrowings managed directly by the segments.

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. However, 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, 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, income tax, write-down of inventories, impairment losses of non-current assets and additions to non-current segment assets used by the segments in their operations.

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 2018 and 2017 is set out below.

3 REVENUE AND SEGMENT REPORTING (CONTINUED)

(b) Segment reporting (continued)

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

	2018								
	Orthopedics devices business US$'000	Cardiovascular devices business US$'000	CRM business US$'000	Endovascular devices business US$'000	Electrophysiology devices business US$'000	Neurovascular devices business US$'000	Surgical devices business US$'000	Diabetes and endocrinal devices business US$'000	Total US$'000
Disaggregated by timing of revenue recognition									
Point in time-sales of medical devices	236,279	202,487	150,508	34,975	12,691	18,297	5,925	-	661,162
Over time-post-sales services	-	-	7,868	-	-	-	-	-	7,868
Over time-rental income	-	330	-	-	-	130	-	-	460
	236,279	202,817	158,376	34,975	12,691	18,427	5,925	-	669,490
Reportable segment net (loss)/profit	(13,081)	70,959	(24,205)	13,521	57	4,100	(5,708)	(687)	44,956
Interest income from bank deposits	56	539	16	28	16	7	19	-	681
Interest expense	2,684	3	1,935	-	225	36	-	-	4,883
Depreciation and amortisation for the year	21,470	12,342	4,953	1,245	1,099	1,037	1,089	-	43,235
Income tax	1,132	11,039	(819)	2,898	-	232	63	-	14,545
Increase/(decrease) of inventory provision	2,411	554	3,565	260	(25)	152	213	-	7,130
Impairment losses of									
– Property, plant and equipment	-	900	-	-	-	-	-	-	900
– Intangible assets	754	-	-	-	-	-	1,683	-	2,437
– Trade and other receivables	325	800	-	10	(21)	-	371	-	1,485
Reportable segment assets	426,403	495,386	334,045	39,170	18,992	27,854	28,551	4,857	1,375,258
Additions to non-current segment assets during the year	43,614	62,044	7,300	3,751	1,250	4,902	523	-	123,384
Reportable segment liabilities	241,423	134,755	138,310	7,985	10,438	8,068	18,921	-	559,900

3 REVENUE AND SEGMENT REPORTING (CONTINUED)

(b) Segment reporting (continued)

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

	2017 (Re-presented)								
	Orthopedics devices business US$'000	Cardiovascular devices business US$'000	CRM business US$'000	Endovascular devices business US$'000	Electrophysiology devices business US$'000	Neurovascular devices business US$'000	Surgical devices business US$'000	Diabetes and endocrinal devices business US$'000	Total US$'000
Disaggregated by timing of revenue recognition									
Point in time-sales of medical devices	224,607	162,975	2,348	24,793	9,417	13,385	5,498	715	443,738
Over time-rental income	-	324	-	-	-	128	-	-	452
	224,607	163,299	2,348	24,793	9,417	13,513	5,498	715	444,190
Reportable segment net (loss)/profit	(21,341)	70,528	(4,993)	10,018	(2,018)	2,980	(2,820)	(1,121)	51,233
Interest income from bank deposits	8	1,041	-	22	8	5	40	-	1,124
Interest expense	1,170	327	-	-	176	-	-	-	1,673
Depreciation and amortisation for the year	21,180	9,563	-	785	997	716	1,282	45	34,568
Income tax	2,012	10,226	-	1,673	-	270	(64)	-	14,117
Increase of inventory provision	1,962	525	-	267	79	227	387	-	3,447
Impairment losses of									
– Intangible assets	-	-	-	-	-	-	152	-	152
Reportable segment assets	407,087	433,375	760	34,408	19,692	20,662	28,731	5,869	950,584
Additions to non-current segment assets during the year	29,197	33,191	-	4,275	965	2,737	527	2,967	73,859
Reportable segment liabilities	154,689	113,993	1,123	5,402	11,069	3,146	17,453	-	306,875

3 REVENUE AND SEGMENT REPORTING (CONTINUED)

(b) Segment reporting (continued)

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

	2018 US$'000	2017 US$'000
Profit or loss		
Reportable segment net profit	**44,956**	51,233
Share awards scheme	**(5,317)**	(4,451)
Other equity-settled share-based payment expenses	**(3,764)**	(4,285)
Unallocated exchange gain/(loss)	**9,467**	(6,246)
Gain on disposal of subsidiaries	**–**	6,531
Gain on deemed disposal of a joint venture	**4,133**	–
Unallocated expenses, net	**(31,094)**	(25,831)
Consolidated profit for the year	**18,381**	16,951
Assets		
Reportable segment assets	**1,375,258**	950,584
Elimination of inter-segment receivables	**(133,841)**	(96,013)
	1,241,417	854,571
Unallocated corporate assets:		
– Cash and cash equivalents	**13,364**	38,420
– Other receivables	**11,900**	-
– Investments in debt and equity securities	**6,804**	10,443
– Others	**962**	189
	33,030	49,052
Consolidated total assets	**1,274,447**	903,623
Liabilities		
Reportable segment liabilities	**559,900**	306,875
Elimination of inter-segment payables	**(133,841)**	(96,013)
Deferred tax liabilities (note 24(b))	**2,306**	1,969
Convertible bonds (note 26)	**90,405**	154,421
Derivative financial liabilities (note 29)	**10,640**	–
Interest-bearing borrowings	**138,637**	39,719
Other payables (note 21)	**73,449**	52,275
Unallocated corporate liabilities	**4,005**	4,925
Consolidated total liabilities	**745,501**	464,171

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 property, plant and equipment, land use rights, intangible assets, goodwill and investments in associates and a joint venture ("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 and land use rights, the location of the operation to which they are allocated, in case of intangible assets and goodwill, and the location of operations, in case of investments in associates and a joint venture.

Revenue from external customers

	2018 **US$'000**	2017 US$'000
The PRC (country of domicile)	**281,871**	218,740
North America	**109,536**	101,924
Europe	**192,652**	61,114
Asia (excluding the PRC)	**65,615**	43,109
South America	**11,648**	13,891
Others	**8,168**	5,412
	387,619	225,450
	669,490	444,190

The analysis above includes property rental income from external customers in the PRC of US$460,000 (2017: US$452,000).

Specified non-current assets

	2018 **US$'000**	2017 US$'000
The PRC (country of domicile)	**375,757**	311,950
North America	**120,705**	121,528
Europe	**146,756**	9,468
Asia (excluding the PRC)	**5,477**	5,192
South America	**5,659**	201
	278,597	136,389
	654,354	448,339

4 OTHER NET INCOME/(LOSS)

	2018 US$'000	2017 US$'000
Government grants (Note)	**10,085**	8,159
Interest income on bank deposits	**1,018**	1,171
Net loss on disposal of property, plant and equipment	**(727)**	(715)
Net foreign exchange gain/(loss)	**9,602**	(11,006)
Net realised and unrealised loss on financial assets and liabilities carried at FVPL	**(6,611)**	(3,162)
Impairment losses of the convertible bonds	**–**	(1,604)
Insurance compensation in respect of damage of property, plant and equipment	**–**	3,678
Others	**429**	939
	13,796	(2,540)

Note: Majority of the government grants are subsidies received from government for encouragement of research and development projects.

Government grants recognised in "other net income/(loss)" included unconditional grants of US$7,620,000 (2017: US$2,552,000) to compensate the Group for research expenses already incurred and conditional grants of US$2,465,000 (2017: US$5,602,000) transferred from deferred income as the conditions attaching to the grant were complied with during the year ended 31 December 2018 (note 25).

5 PROFIT BEFORE TAXATION

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

	2018 US$'000	2017 US$'000
(a) Finance costs		
Interest on the convertible bonds (note 26)	**8,985**	9,806
Interest on other interest-bearing borrowings	**9,593**	3,519
Others	**1,208**	275
Total interest expense on financial liabilities not at fair value through profit or loss	**19,786**	13,600
Interest accrued on advance payments from customers (note 22)	**1,676**	–
Less: Interest expense capitalised into properties under development*	**(442)**	(111)
	21,020	13,489

* During 2018, the borrowing costs have been capitalised at a rate of 4.7% (2017: 4.7%) per annum.

5 PROFIT BEFORE TAXATION (CONTINUED)

(b) Staff costs

	2018 US$'000	2017 US$'000
Contributions to defined contribution retirement plans	**15,541**	10,993
Expenses recognised in respect of defined benefit retirement plans	**245**	–
Equity-settled share-based payment expenses (note 27(e))	**9,890**	8,736
Cash-settled share-based payment expenses (note 27(f))	**3,917**	4,184
Salaries, wages and other benefits	**222,986**	128,760
	252,579	152,673

(i) Defined contribution retirement plans

The PRC

As stipulated by the labour regulations of the PRC, the Group also participates in various defined contribution retirement plans organised by municipal and provisional governments for its employees. The Group is required to make contributions to the retirement plans at approximately 20% of the eligible employees' salaries for the year ended 31 December 2018.

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 2% 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, Germany 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 risk, investment risks, currency and interest risk and inflation risk. 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 US$8,806,000 as at 31 December 2018, with actuarial gain of US$272,000 being recorded in other comprehensive income for the year ended 31 December 2018.

5 PROFIT BEFORE TAXATION (CONTINUED)

	2018 US$'000	2017 (Note) US$'000
(c) Other items		
Amortisation#		
– land use rights (note 10)	**372**	367
– intangible assets (note 11)	**8,178**	5,908
	8,550	6,275
Depreciation of investment properties and other property, plant and equipment# (note 10)	**34,875**	29,230
Less: Amounts capitalised as development costs	**(1,049)**	(937)
	33,826	28,293
Impairment losses		
– trade and other receivables	**1,485**	2,286
– property, plant and equipment	**900**	–
– intangible assets (note 11)	**2,437**	152
– convertible bonds (note 14)	**–**	1,604
	4,822	4,042
Operating lease charges: minimum lease payment	**12,936**	6,510
Rental income from investment properties	**460**	452
Cost of inventories# (note 18(b))	**211,148**	133,596
Research and development costs (other than amortisation costs of intangible assets)	**123,886**	72,988
Less: Costs capitalised into intangible assets	**(22,076)**	(17,535)
	101,810	55,453
Auditors' remuneration		
– audit services	**1,801**	1,076
– non-audit services	**3,704**	727
	5,505	1,803

Note: The Group has initially applied HKFRS 15 and HKFRS 9 at 1 January 2018. Under the transition methods chosen, comparative information is not restated. See note 1(c).

Cost of inventories includes US$72,471,000 (2017: US$41,371,000) relating to staff costs, depreciation and amortisation expenses, operating lease charges, 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:

	2018 US$'000	2017 US$'000
Current tax – PRC Corporate Income Tax ("CIT")		
Provision for the year	**14,957**	12,595
Over-provision in respect of prior years	**(326)**	(107)
	14,631	12,488
Current tax – other jurisdictions		
Provision for the year	**2,244**	1,613
Over-provision in respect of prior years	**(84)**	(44)
	2,160	1,569
	16,791	14,057
Deferred tax		
Origination and reversal of temporary differences (note 24(b))	**(2,243)**	(640)
	14,548	13,417

(i) Cayman Islands and British Virgin Islands tax

Pursuant to the rules and regulations of Cayman Islands and British Virgin Islands, the Company and its subsidiaries located in British Virgin Islands are not subject to any income tax in these jurisdictions.

(ii) Hong Kong profits tax

The Company's subsidiaries incorporated in Hong Kong are subject to Hong Kong profits tax at 16.5% (2017: 16.5%) of the estimated assessable profits.

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

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

(iii) PRC CIT

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 five entities entitled to a preferential income tax rate of 15% as they are certified as "advanced and new technology enterprise" ("ANTE"). According to Guoshuihan 2009 No. 203, if an entity is certified as an ANTE, it is entitled to a preferential income tax rate of 15% during the certified period.

The CIT law and its relevant regulations also impose a withholding tax at 10% on the foreign investors with respect to dividend distributions made out of the PRC entities from earnings accumulated from 1 January 2008, unless the foreign investors meet certain requirements specified in the relevant tax regulations in the PRC and accordingly are entitled to a preferential rate of 5%.

(iv) US corporate tax

The US Tax Cuts and Jobs Act ("Tax Act") was enacted on 22 December 2017 and introduces significant changes to US corporate tax law. Effective in 2018, the Tax Act reduces the federal corporate tax rate from 35% to 21% and creates new taxes on certain foreign-sourced earnings and certain related-party payments, which are referred to as the global intangible low-taxed income tax and the base erosion tax, respectively. In addition, the new law revised the net operating loss carry forward period from 20 years to indefinite. The mandatory repatriation tax (one-time transition tax) was not applicable to the Group as the US does not have any controlled foreign subsidiaries.

(v) France tax

The Company's subsidiaries incorporated in France applied the French progressive taxation schemes, with first EUR500,000 income being taxed at 28% and the incremental increases in income taxed at higher tax rates at 33.33% and 31%, respectively for 2018 and 2019. From year 2020 to 2022, the applicable French tax rates will be the flat statutory tax rates of 28%, 26.5% and 25%, respectively.

(iv) Taxation for other entities of the Group is charged at their respective applicable income tax rates ruling in the relevant jurisdictions.

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

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

	2018 US$'000	2017 US$'000
Profit before taxation	**32,929**	30,368
Notional tax on profit before taxation, calculated at the rates applicable to profit in the countries concerned	**16,267**	13,686
Effect of the PRC preferential tax rate	**(8,965)**	(7,556)
Effect of other non-deductible expenses	**5,562**	3,826
Effect of additional deduction on research and development expenses	**(3,646)**	(2,232)
Effect of tax losses not recognised	**7,676**	12,728
Effect of non-taxable revenue	**(962)**	–
Effect of deductible loss arising from intra-group restructuring	**(656)**	(5,783)
Withholding tax on profit distributions	**806**	162
Over-provision in respect of prior years	**(410)**	(151)
Others	**(1,124)**	(1,263)
Actual tax expenses	**14,548**	13,417

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:

	2018					
	Directors' fees US$'000	Salaries, allowances and benefits in kind US$'000	Discretionary bonuses US$'000	Retirement scheme contributions US$'000	Equity-settled share-based payment (note) US$'000	Total US$'000
Executive directors						
Zhaohua Chang	**–**	**96**	**100**	**–**	**1,699**	**1,895**
Non-executive directors						
Norithiro Ashida	**–**	**–**	**–**	**–**	**–**	**–**
Hiroshi Shirafuji	**–**	**–**	**–**	**–**	**–**	**–**
Weiwei Chen (resigned on 21 June 2018)	**–**	**–**	**–**		**–**	**–**
Hongliang Yu (appointed on 21 June 2018)	**–**	**–**	**–**	**–**	**–**	**–**
Janine Junyuan Feng (resigned on 20 November 2018)	**–**	**–**	**–**	**–**	**–**	**–**
Independent non-executive directors						
Jonathan Chou	**42**		**–**	**–**	**–**	**42**
Guoen Liu	**38**	**–**	**–**	**–**	**–**	**38**
Chunyang Shao	**38**	**–**	**–**	**–**	**–**	**38**
	118	**96**	**100**	**–**	**1,699**	**2,013**

7 DIRECTORS' EMOLUMENTS (CONTINUED)

	2017					
	Directors' fees US$'000	Salaries, allowances and benefits in kind US$'000	Discretionary bonuses US$'000	Retirement scheme contributions US$'000	Equity-settled share-based payment (note) US$'000	Total US$'000
Executive directors						
Zhaohua Chang	–	96	100	–	1,727	1,923
Non-executive directors						
Norithiro Ashida	–	–	–	–	–	–
Hiroshi Shirafuji	–	–	–	–	–	–
Weiwei Chen	–	–	–	–	–	–
Janine Junyuan Feng	–	–	–	–	–	–
Independent non-executive directors						
Jonathan Chou	42	–	–	–	–	42
Guoen Liu	37	–	–	–	–	37
Chunyang Shao	37	–	–	–	–	37
	116	96	100	–	1,727	2,039

Note: These represent the estimated value of share options granted to the directors under the Company's share option scheme. The value of these share options is measured according to the Group's accounting policies for share-based payment transactions as set out in note 1(v)(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 27.

8 INDIVIDUALS WITH HIGHEST EMOLUMENTS

Of the five individuals with the highest emoluments, one (2017: one) is director whose emoluments are disclosed in note 7. The aggregate of the emoluments in respect of the other four (2017: four) individual are as follows:

	2018 **US$'000**	2017 US$'000
Salaries and other benefits	**1,530**	1,136
Retirement scheme contributions	**24**	35
Discretionary bonuses	**1,329**	541
Equity-settled share-based payment	**707**	706
Cash-settled share-based payment	**720**	775
	4,310	3,193

The emoluments of the four (2017: four) individuals with the highest emoluments are within the following bands:

	2018 **Number of** **Individuals**	2017 Number of individuals
HK$3,500,001 to HK$4,500,000	**–**	1
HK$4,500,001 to HK$5,000,000	**–**	1
HK$5,000,001 to HK$5,500,000	**–**	1
HK$5,500,001 to HK$6,000,000	**2**	–
HK$6,000,001 to HK$7,000,000	**1**	–
HK$7,000,001 to HK$11,000,000	**–**	1
HK$11,000,000 to HK$15,000,000	**1**	–

9 EARNINGS PER SHARE

(a) Basic earnings per share

The calculation of basic earnings per share is based on the profit attributable to ordinary equity shareholders of the Company of US$23,913,000 (2017: US$18,823,000) and the weighted average number of ordinary shares of 1,468,985,000 shares (2017: 1,433,678,000 shares) in issue during the year, calculated as follows:

(i) Weighted average number of ordinary shares

	2018 **'000**	2017 '000
Issued ordinary shares at 1 January	**1,457,063**	1,439,481
Effect of issue of shares in lieu of cash dividends	**319**	603
Effect of share options exercised	**5,158**	5,818
Effect of shares under share award scheme	**(13,260)**	(12,224)
Effect of conversion of convertible notes	**19,705**	–
Weighted average number of ordinary shares at 31 December	**1,468,985**	1,433,678

(b) Diluted earnings per share

The calculation of diluted earnings per share is based on the profit attributable to ordinary equity shareholders of the Company of US$19,956,000 (2017: US$18,823,000) and the weighted average number of ordinary shares of 1,560,667,000 shares (2017: 1,474,699,000 shares) after adjusting the effects of dilutive potential ordinary shares under the Company's share option scheme and a put option that may be settled in ordinary shares of the Company or cash at the Company's option (note 29), calculated as follows.

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

	2018 **US$'000**	2017 US$'000
Profit attributable to ordinary equity shareholders	**23,913**	18,823
Effect of deemed exercise the put option in respect of share repurchase obligation	**(3,957)**	–
Profit attributable to ordinary equity shareholders (diluted)	**19,956**	18,823

9 EARNINGS PER SHARE (CONTINUED)

(b) Diluted earnings per share (continued)

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

	2018 **'000**	2017 '000
Weighted average number of ordinary shares at 31 December	**1,468,985**	1,433,678
Effect of deemed exercise the put option in respect of share repurchase obligation	**51,672**	–
Effect of deemed issue of shares under the Company's share option scheme	**40,010**	41,021
Weighted average number of ordinary shares (diluted) at 31 December	**1,560,667**	1,474,699

The calculation of diluted earnings per share amount for the year ended 31 December 2018 has not included the potential effect of the deemed conversion of the convertible notes (note 26) into ordinary shares during the year, as it has an anti-dilutive effect on the basic earnings per share amount for the year.

10 INVESTMENT PROPERTIES, OTHER PROPERTY, PLANT AND EQUIPMENT AND LAND USE RIGHTS

(a) Reconciliation of carrying amount

	Land and buildings held for own use US$'000	Leasehold improvements US$'000	Equipment and machinery US$'000	Office equipment, furniture and fixtures US$'000	Motor vehicles US$'000	Construction in progress US$'000	Sub-total US$'000	Investment properties US$'000	Land use rights US$'000	Total US$'000
Cost:										
At 1 January 2017	150,480	14,532	130,167	41,786	2,849	20,862	360,676	6,263	17,640	384,579
Exchange adjustments	7,881	891	4,669	1,214	178	2,714	17,547	386	1,087	19,020
Transfer from construction in progress	3,277	–	17,844	6,291	242	(27,654)	–	–	–	–
Additions	18	152	9,018	1,017	203	42,124	52,532	–	–	52,532
Disposals	(2,535)	(768)	(2,583)	(812)	(286)	–	(6,984)	–	–	(6,984)
At 31 December 2017 and 1 January 2018	**159,121**	**14,807**	**159,115**	**49,496**	**3,186**	**38,046**	**423,771**	**6,649**	**18,727**	**449,147**
Exchange adjustments	**(7,151)**	**(744)**	**(5,118)**	**(1,688)**	**(150)**	**(2,407)**	**(17,258)**	**(319)**	**(898)**	**(18,475)**
Transfer from construction in progress	**17,081**	**738**	**17,902**	**5,662**	**–**	**(41,383)**	**–**	**–**	**–**	**–**
Additions	**1,743**	**1,251**	**12,044**	**3,967**	**355**	**60,339**	**79,699**	**–**	**–**	**79,699**
Additions through acquisition (note 29)	**840**	**2**	**15,810**	**3,796**	**12**	**2,327**	**22,787**	**–**	**–**	**22,787**
Disposals	**(68)**	**(437)**	**(1,435)**	**(1,237)**	**(394)**	**–**	**(3,571)**	**–**	**–**	**(3,571)**
At 31 December 2018	**171,566**	**15,617**	**198,318**	**59,996**	**3,009**	**56,922**	**505,428**	**6,330**	**17,829**	**529,587**

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

(a) Reconciliation of carrying amount (continued)

	Land and buildings held for own use US$'000	Leasehold improvements US$'000	Equipment and machinery US$'000	Office equipment, furniture and fixtures US$'000	Motor vehicles US$'000	Construction in progress US$'000	Sub-total US$'000	Investment properties US$'000	Land use rights US$'000	Total US$'000
Accumulated depreciation, amortisation and impairment:										
At 1 January 2017	12,335	6,905	66,010	24,217	2,324	–	111,791	543	2,002	114,336
Exchange adjustments	641	500	2,302	927	137	–	4,507	40	134	4,681
Charge for the year	4,903	1,304	16,241	6,416	199	–	29,063	167	367	29,597
Written back on disposals	(457)	(697)	(1,718)	(727)	(271)	–	(3,870)	–	–	(3,870)
At 31 December 2017 and 1 January 2018	**17,422**	**8,012**	**82,835**	**30,833**	**2,389**	**–**	**141,491**	**750**	**2,503**	**144,744**
Exchange adjustments	**(791)**	**(288)**	**(3,179)**	**(313)**	**(107)**	**–**	**(4,678)**	**(42)**	**(133)**	**(4,853)**
Charge for the year	**5,205**	**1,849**	**20,986**	**7,334**	**230**	**–**	**35,604**	**171**	**372**	**36,147**
Written back on disposals	**(52)**	**(434)**	**(1,229)**	**(1,172)**	**(365)**	**–**	**(3,252)**	**–**	**–**	**(3,252)**
At 31 December 2018	**21,784**	**9,139**	**99,413**	**36,682**	**2,147**	**–**	**169,165**	**879**	**2,742**	**172,786**
Net book value:										
At 31 December 2018	**149,782**	**6,478**	**98,905**	**23,314**	**862**	**56,922**	**336,263**	**5,451**	**15,087**	**356,801**
At 31 December 2017	141,699	6,795	76,280	18,663	797	38,046	282,280	5,899	16,224	304,403

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

(b) The analysis of net book value of properties is as follows:

	2018 US$'000	2017 US$'000
Outside the PRC		
– medium-term leases	**14,782**	13,144
– freehold	**4,839**	4,839
	19,621	17,983
In the PRC		
– medium-term leases	**150,699**	145,839
	170,320	163,822
Representing:		
Investment properties, carried at cost	**5,451**	5,899
Land and buildings held for own use, carried at cost	**149,782**	141,699
Land use rights	**15,087**	16,224
	170,320	163,822

(c) As at 31 December 2018, land use rights and buildings held for own use with net book value of US$4,172,000 and US$55,288,000, respectively (2017: US$9,277,000 and US$114,313,000, respectively) have been pledged as security for certain banking facilities and borrowings (note 23).

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 2017	15,172	8,195	53,239	9,644	1,729	87,979
Exchange adjustments	72	505	3,823	150	–	4,550
Additions	–	–	17,535	–	598	18,133
At 31 December 2017 and 1 January 2018	15,244	8,700	74,597	9,794	2,327	110,662
Exchange adjustments	(276)	(504)	(4,534)	(754)	(333)	(6,401)
Additions	–	3,029	22,076	–	787	25,892
Additions through acquisition (note 29)	8,785	811	–	12,312	1,702	23,610
Write-off	(1,225)	(396)	–	–	–	(1,621)
At 31 December 2018	22,528	11,640	92,139	21,352	4,483	152,142
Accumulated amortisation and impairment:						
At 1 January 2017	5,372	3,990	5,279	4,986	200	19,827
Exchange adjustments	72	269	410	119	1	871
Amortisation charge for the year	1,400	624	2,651	1,129	104	5,908
Impairment charge for the year	–	152	–	–	–	152
At 31 December 2017 and 1 January 2018	6,844	5,035	8,340	6,234	305	26,758
Exchange adjustments	(18)	(313)	(650)	(118)	–	(1,099)
Amortisation charge for the year	1,952	854	2,992	1,703	677	8,178
Impairment charge for the year	–	2,036	–	401	–	2,437
Write-off	(1,225)	(396)	–	–	–	(1,621)
At 31 December 2018	7,553	7,216	10,682	8,220	982	34,653
Net book value:						
At 31 December 2018	14,975	4,424	81,457	13,132	3,501	117,489
At 31 December 2017	8,400	3,665	66,257	3,560	2,022	83,904

11 INTANGIBLE ASSETS (CONTINUED)

Capitalised development costs primarily related to cardiovascular, endovascular, electrophysiology and neurovascular devices business segments. Included in intangible assets were an amount of US$59,457,000 (2017: US$46,775,000) that are not yet available for use. These intangible assets were solely related to capitalised development costs.

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

	2018 US$'000	2017 US$'000
Cost of sales	**350**	–
Research and development costs	**3,755**	2,651
Distribution costs	**1,313**	656
Administrative expenses	**2,760**	2,601
	8,178	5,908

12 GOODWILL

	US$'000
Cost:	
At 1 January 2017	79,756
Exchange adjustments	1,559
At 31 December 2017 and 1 January 2018	81,315
Exchange adjustments	(7,797)
Addition through acquisition (note 29)	114,724
At 31 December 2018	188,242
Accumulated impairment losses:	
At 1 January 2017	25,298
Exchange adjustments	1,559
At 31 December 2017 and 1 January 2018	26,857
Exchange adjustments	(1,288)
At 31 December 2018	25,569
Carrying amount:	
At 31 December 2018	162,673
At 31 December 2017	54,458

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:

	2018 **US$'000**	2017 US$'000
OrthoRecon business	**54,458**	54,458
CRM business-overseas	**100,159**	–
CRM business-the PRC	**8,056**	–
	162,673	54,458

The recoverable amounts of the CGUs are determined based on value-in-use calculations. These calculations use cash flow projections based on financial budgets approved by the directors covering an eight-year period with the final year representing a steady state in the development of the business. Cash flows beyond the budget period are extrapolated using an estimated weighted average growth rate.

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:

	OrthoRecon business	**CRM business – overseas**	**CRM business – the PRC**
Annualised revenue growth rate during the budget period	3% - 12%	-10% - 7%	21% - 65%
Gross profit ratio	68% - 70%	57% - 63%	27% - 47%
Steady growth rate used in the extrapolation after budget period	3%	2%	3%
Pre-tax discount rate	15%	10%	15%

The recoverable amount of the CGU of OrthoRecon business, overseas CRM business and the PRC CRM business is estimated to exceed the carrying amount of the CGU at 31 December 2018 by US$57,622,000, US$26,407,000 and US$2,730,000, respectively. The recoverable amount of each CGU would equal its carrying amount if there were following changes in key assumptions as at 31 December 2018:

	OrthoRecon business	**CRM business – overseas**	**CRM business – the PRC**
Decrease in annualised revenue growth rate during the budget period	-0.5%	-0.1%	-0.1%
Decrease in gross profit ratio	-3.8%	-0.5%	-0.4%
Increase in pre-tax discount rate	1.7%	0.3%	0.2%

(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**	**Group's effective interest**	**Held by the Company**	**Held by subsidiaries**	**Principal activity**
Shanghai MicroPort Medical (Group) Co., Ltd. ("MP Shanghai") (上海微創醫療器械(集團)有限公司)	The PRC	US$350,000,000	100%	85.6%	14.4%	Manufacturing, distribution, research and development of medical devices
Shanghai MicroPort Orthopedics Co., Ltd. (上海微創骨科醫療科技有限公司)	The PRC	RMB1,918,030,000/ RMB1,995,000,000	100%	–	100%	Manufacturing, distribution, research and development of orthopedics devices
MicroPort NeuroTech (Shanghai) Co., Ltd. ("MP Neuro") (微創神通醫療科技(上海)有限公司)	The PRC	RMB53,500,000	83%	–	83%	Manufacturing, distribution, research and development of medical devices
Shanghai MicroPort EP MedTech Co., Ltd. ("MP EP") (上海微創電生理醫療科技股份有限公司)	The PRC	RMB70,031,250	81.93%	–	81.93%	Manufacturing, distribution, research and development of electrophysiology devices
Suzhou MicroPort Spine and Trauma Co., Ltd. (蘇州微創脊柱創傷醫療科技有限公司)	The PRC	RMB30,827,703	100%	–	100%	Manufacturing distribution, research and development of orthopedics devices
Suzhou MicroPort Orthopedics Scientific (Group) Co., Ltd. (蘇州微創骨科學(集團)有限公司)	The PRC	US$320,000,000	100%	–	100%	Manufacturing, 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股份有限公司)	The PRC	RMB53,978,147	61.79%	–	61.79%	Manufacturing, distribution, research and development of endovascular devices
Dongguan Kewei Medical Instrument Co., Ltd. ("Dongguan Kewei") (東莞科威醫療器械有限公司)	The PRC	RMB70,790,650/ RMB73,125,000	61.54%	–	61.54%	Manufacturing, distribution, research and development of surgical devices
MicroPort Urocare (Jiaxing) Co.,Ltd. ("Jiaxing Urocare ") (微創優通醫療科技(嘉興)有限公司)	The PRC	RMB28,555,000/ RMB32,500,000	60%	–	60%	Research and development 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: Group's effective interest	Held by the Company	Held by subsidiaries	Principal activity
MicroPort Medical (Jiaxing) Co., Ltd. (嘉興微創醫療科技有限公司)	The PRC	RMB200,000,000	100%	–	100%	Research and development of medical devices
AccuPath Medical (Jiaxing) Co., Ltd. (脈通醫療科技(嘉興)有限公司)	The PRC	RMB10,000,000	100%	–	100%	Manufacturing, distribution, research and development of medical devices
Suzhou MicroPort OrthoRecon Co., Ltd. (蘇州微創關節醫療科技有限公司)	The PRC	RMB20,000,000	100%	–	100%	Manufacturing, 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)	The PRC	RMB20,000,000	100%	–	100%	Manufacturing, distribution, research and development of orthopedics devices
Shanghai MicroPort CardioFlow Medtech Co., Ltd. ("MP CardioFlow Shanghai") (上海微創心通醫療科技有限公司)	The PRC	RMB13,410,316	64.72%	–	64.72%	Manufacturing, distribution, research and development of medical devices
MicroPort Sorin CRM (Shanghai) Co., Ltd. ("MicroPort Sorin CRM") (創領心律管理醫療器械(上海)有限公司)	The PRC	RMB249,537,287/ RMB267,254,970	59.76%	–	59.76%	Manufacturing, distribution, research and development of medical devices
MicroPort Scientific S.R.L	Italy	EUR2,000,000	100%	–	100%	Distribution of medical devices
MicroPort Orthopedics Japan K.K.	Japan	JPY100,000,000	100%	–	100%	Distribution of medical devices
MicroPort Orthopedics Ltd.	Canada	CAD6,514,941	100%	–	100%	Distribution of medical devices
MicroPort Scientific GmbH	Germany	EUR25,000	100%	–	100%	Distribution of medical devices
MicroPort Scientific SAS	France	EUR37,000	100%	–	100%	Distribution of medical devices
MicroPort Orthopedics NV	Belgium	EUR61,500	100%	–	100%	Distribution of medical devices
MicroPort Scientific Ltd.	United Kingdom	GBP1	100%	–	100%	Distribution of medical devices

13 INVESTMENTS IN SUBSIDIARIES (CONTINUED)

Name of company	Place of incorporation and business	Issued/ registered capital	Proportion of ownership interest: Group's effective interest	Held by the Company	Held by subsidiaries	Principal activity
MicroPort Orthopedics Global Supply Center Limited	Hong Kong	HK$100 & US$30,195,000	100%	–	100%	Distribution of medical devices
Sorin CRM SAS	France	EUR104,825,140	75%	–	75%	Manufacturing of cardiac rhythm management devices
Sorin Group DR, S.R.L	Dominican Republic	US$26,502.400	75%	–	75%	Manufacturing of cardiac rhythm management devices
MicroPort CRM S.R.L	Italy	EUR3,932,700	75%	–	75%	Manufacturing, distribution, research and development of cardiac rhythm management devices

14 INTEREST IN ASSOCIATES

	2018 US$'000	2017 US$'000
Investment in associates	**9,231**	5,377
Investment in convertible bonds issued by an associate (Note)	**–**	5,365
Amounts due from associates (note 34(b))	**3,060**	3,256
	12,291	13,998

14 INTEREST IN ASSOCIATES (CONTINUED)

Note: The Group previously invested in Lombard Medical, Inc. ("Lombard") by way of (i) the 8,064,516 ordinary shares of Lombard (the "Lombard Cayman Shares") at a consideration of US$5,000,000; and (ii) the convertible bonds in an aggregate principal amount of US$10,000,000, with a term of five years (the "Lombard Convertible Bonds"). In prior years, the Lombard Cayman Shares was accounted for as an investment in an associate. The conversion option embedded in the Lombard Convertible Bonds was considered as a derivative financial asset which was separated from the host contract under HKAS 39. The excess of payments to acquire the Lombard Convertible Bonds over the amount initially recognised as the derivative component was recognised as the debt component and classified as interest in associates.

In 2017, the Group's share of losses of Lombard exceeded the Group's investment in the Lombard Cayman Shares. A loss of US$5,000,000 was recognised in profit or loss during 2017, which reduced the carrying amount of the Lombard Cayman Shares to zero. In addition, the Group considered that there was objective evidence of impairment on the Lombard Convertible Bonds and reassessed the recoverable amount of the Lombard Convertible Bonds as at 31 December 2017. An impairment loss of US$1,604,000 and the decrease in fair value of the conversion option embedded in the Lombard Convertible Bonds of US$3,185,000 were also charged to profit or loss directly in 2017. As a result of the adoption of HKFRS 9 as disclosed in note 1(c)(i) above, the Lombard Convertible Bonds, including the debt component and derivative component, were both classified as financial assets carried at FVPL as at 1 January 2018 (note 16).

In 2018, Lombard commenced an official liquidation proceeding under the laws of the Cayman Islands and implemented a restructuring. As a result, the Group determined that the fair value of the Lombard Convertible Bonds would be inconsequential and reduced its fair value to zero with a change in fair value of US$5,679,000 recognised in profit or loss for the year ended 31 December 2018. Pursuant to the restructuring plan, Lombard transferred its operation business in United Kingdom and Germany to Endovascular Technology Corp. ("ETC").

As at 31 December 2018, the Group had invested US$2,000,000 in ETC, representing approximately 12% equity interest in ETC and did not have any seats in ETC's board of directors. Accordingly, the investment in ETC was recognised as a financial asset at FVPL. In addition, the Company also issued a guarantee to Oxford Finance LLC in respect of the senior debts of ETC's subsidiary with a principal amount of US$13,000,000. The senior debts bear no interest and will be matured in April 2023. As at 31 December 2018, the provision under this financial guarantee amounting to US$2,106,000 was included in "Trade and other payables".

The Group had investments in several associates as at 31 December 2018. The directors are of the view that none of them is material to the Group. All of the Group's investments in associates are accounted for using the equity method in the consolidated financial statements, all of which are unlisted corporation entities whose quoted market price is not available.

15 INTEREST IN A JOINT VENTURE

The following list contains the particulars of a joint venture, which is unlisted corporate entities whose quoted market price is not available:

				Proportion of ownership interest			
Name of joint venture	**Form of business structure**	**Place of incorporation**	**Particulars of issued and paid up capital**	**Group's effective interest**	**Held by the Company**	**Held by a subsidiary**	**Principal Activity**
Rose Emblem Ltd. ("Rose")	Incorporated	British Virgin Islands	US$1.00	51%	–	51%	Investment holding

In 2018, the Group invested US$5,100,000 in Rose. The shareholders of Rose only comprise the Group and a third party with effective interests of 51% and 49%, respectively. As the approval of the resolutions of Rose shall require both approvals from the Group and the third party, the directors determined that the investment in Rose is a joint venture, which is accounted for under the equity method.

Summarised financial information of Rose and a reconciliation to the carrying amount in the consolidated financial statements, are disclosed below:

	2018 US$'000
Gross amount of Rose	
Non-current assets	**10,000**
Equity	**10,000**
Reconciled to the Group interest in Rose	
Gross amounts of Rose's net assets	**10,000**
Group's effective interest	**51%**
Group's share of Rose's net assets and carrying amount of the Group's interest	**5,100**

16 OTHER NON-CURRENT FINANCIAL ASSETS

	2018 US$'000	2017 US$'000
Financial assets measured at FVPL (Note)		
– Unlisted equity securities outside Hong Kong	**11,910**	–
Available-for-sale financial assets (Note)		
– Unlisted equity securities outside Hong Kong	**–**	5,000

Note: Available-for-sale financial assets were reclassified to financial assets measured at FVPL upon the initial application of HKFRS 9 at 1 January 2018. See note 1(c)(i).

17 OTHER NON-CURRENT ASSETS

	2018	2017
	US$'000	US$'000
Security deposits to a related party	**17,177**	–
Income tax recoverable (note 24(a))	**11,200**	–
Others	**3,602**	3,883
	31,979	3,883

In order to secure future leasing of certain buildings from Shanghai Weichuang Investment Management Co., Ltd. ("Shanghai Weichuang Investment", a related party of the Company), the Group entered into an agreement (the "Lease Security Agreement") with Shanghai Weichuang Investment in December 2017. The Group plans to use those buildings for research and development, production and office functions in connection with the Group's expansion plan.

Pursuant to the Lease Security Agreement, Shanghai Weichuang Investment agreed to lease out certain buildings for five years starting from 1 May 2020 (the "Lease") when it has completed the constructions of those buildings. The annual rental charges for those buildings are preliminarily agreed as RMB56.4 million, subject to further adjustment based on the prevailing property market condition when the Lease commence on 1 May 2020. Both parties also agree to enter into a lease agreement (the "Future Lease Agreement") setting out the final annual rental charges, guarantee deposit amount and lease period prior to the commencement of the Lease. To secure the Lease, the Group paid a security deposit totalling RMB112.8 million (the "Security Deposit"), representing two years' lease rental, to Shanghai Weichuang Investment during the year ended 31 December 2018. Pursuant to the Lease Security Agreement, the payment of the guarantee deposits and final annual rental charges, those amounts of which are yet to be agreed in the Future Lease Agreement, could be firstly deducted from the Security Deposit. The Group is liable for a compensation in the amount of 20% of the Security Deposit if the Group cancels the Lease without obtaining consent from Shanghai Weichuang Investment. The Group is entitled to a fee (the "Fee Income") from Shanghai Weichuang Investment during the period from the payment date of the Security Deposit through the commencement of the Lease. The Fee Income is calculated as the amount of Security Deposits multiplied by bank borrowing rate plus 10% in that period and could be used to offset the Group's payment obligation of final annual rental charges under the Lease.

As the Security Deposit is placed in advance of the commencement of the Lease and earns Fee Income calculated with reference to the prevailing bank borrowing rate, the Group has included the Security Deposit paid of RMB112,800,000 (equivalent to approximately US$17,733,000) under investing activities in the consolidated cash flow statements and recorded the Security Deposits under "Other non-current assets" on the consolidated financial position.

18 INVENTORIES

(a) Inventories in the consolidated statement of financial position comprise:

	2018	2017
	US$'000	US$'000
Raw materials	**32,612**	14,287
Work in progress	**36,687**	17,262
Finished goods	**106,658**	74,611
	175,957	106,160

18 INVENTORIES (CONTINUED)

(b) The analysis of the amount of inventories recognised as an expense and included in profit or loss is as follows:

	2018 **US$'000**	2017 US$'000
Carrying amount of inventories sold	**192,344**	122,346
Increase of inventory provision	**7,130**	3,447
Cost of inventories sold	**199,474**	125,793
Cost of inventories directly recognised as research and development costs and distribution costs	**11,674**	7,803
	211,148	133,596

19 TRADE AND OTHER RECEIVABLES

	31 December 2018 **US$'000**	1 January 2018 (Note 1) US$'000	31 December 2017 US$'000
Trade debtors due from:			
– third party customers	**189,140**	126,401	126,401
– related parties	**1,133**	837	837
	190,273	127,238	127,238
Less: Allowance for doubtful debts (note 31(a))	**(10,607)**	(10,420)	(6,099)
	179,666	116,818	121,139
Amounts due from a joint venture	**–**	6,897	6,897
Amounts due from the holders of non-controlling interests in relation to the capital contributions	**5,744**	9,642	9,642
Advances to a third party (Note 2)	**11,900**	–	–
Other debtors	**25,707**	12,849	12,849
Income tax recoverable (note 24(a))	**9,911**	–	–
Deposits and prepayments	**12,215**	11,715	11,715
	245,143	157,921	162,242

19 TRADE AND OTHER RECEIVABLES (CONTINUED)

Note 1: Upon the adoption of HKFRS 9, an opening adjustment as at 1 January 2018 was made to recognise additional ECLs on trade debtors. See note 1(c)(i).

Note 2: The Company made advances of US$11,900,000 to a third party, which also made investments into two entities in which the Group has equity interests. The receivables are expected to be settled within one year from the date of the advances. Subsequent to 31 December 2018, settlement of US$8,050,000 has been received by the Company.

All of the 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 based on the invoice date (or date of revenue recognition, if earlier) and net of allowance, is as follows:

	2018 **US$'000**	2017 US$'000
Within 1 month	**78,445**	42,899
1 to 3 months	**67,487**	52,694
3 to 12 months	**22,480**	23,167
More than 12 months	**11,254**	2,379
	179,666	121,139

Trade debtors are due within 30 to 360 days from the date of billing. Further details of the Group's credit policy are set out in note 31(a).

20 CASH AND CASH EQUIVALENTS AND OTHER CASH FLOW INFORMATION

(a) Cash and cash equivalents

Cash and cash equivalents comprise cash at bank and on hand. As at 31 December 2018, cash and cash equivalents of the Group held in banks and financial institutions in the PRC amounted to US$86,438,000 (2017: US$97,228,000). The remittance of funds out of the PRC is subject to the relevant rules and regulations of foreign exchange control promulgated by the PRC government.

20 CASH AND CASH EQUIVALENTS AND OTHER CASH FLOW INFORMATION (CONTINUED)

(b) Reconciliation of profit before taxation to cash generated from operations:

	Note	**2018 US$'000**	2017 US$'000
Profit before taxation		**32,929**	30,368
Adjustments for:			
Amortisation of land use rights	*5(c)*	**372**	367
Amortisation of intangible assets	*5(c)*	**8,178**	5,908
Depreciation	*5(c)*	**33,826**	28,293
Impairment loss on investment in convertible bonds	*5(c)*	**–**	1,604
Impairment loss on intangible assets	*5(c)*	**2,437**	152
Impairment loss on property, plant and equipment	*5(c)*	**900**	–
Finance costs	*5(a)*	**18,136**	13,214
Interest income on bank deposits	*4*	**(1,018)**	(1,171)
Interest income on convertible bonds		**–**	(537)
Insurance compensation in respect of damage of property, plant and equipment	*4*	**–**	(3,678)
Gain on disposal of subsidiaries		**–**	(6,531)
Gain on deemed disposal of a joint venture	*29*	**(4,133)**	–
Changes in fair value of financial assets and liabilities carried at FVPL	*4*	**6,611**	3,162
Net loss on disposal of property, plant and equipment	*4*	**727**	715
Share of losses of a joint venture		**202**	5,042
Share of losses of associates	*14*	**2,036**	5,493
Equity-settled share-based payment and share award scheme expenses	*5(b)*	**9,890**	8,736
Changes in working capital:			
Increase in inventories		**(7,237)**	(3,522)
Increase in trade and other receivables		**(33,062)**	(15,702)
Increase in trade and other payables		**31,572**	37,780
Decrease in contract liabilities		**(290)**	–
Decrease in deferred income		**(1,748)**	(2,256)
Cash generated from operations		**100,328**	107,437

20 CASH AND CASH EQUIVALENTS AND OTHER CASH FLOW INFORMATION (CONTINUED)

(c) 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 $'000 (note 23)	Convertible notes $'000 (note 26)	Total $'000
At 1 January 2018	97,054	154,421	251,475
Changes from financing cash flows:			
Proceeds from interest-bearing borrowings, net of transaction costs	194,013	–	194,013
Repayments of interest-bearing borrowings	(61,541)	–	(61,541)
Interest paid for interest-bearing borrowings	(9,107)	–	(9,107)
Interest paid for the convertible bonds (note 26)	–	(5,599)	(5,599)
Total changes from financing cash flows	123,365	(5,599)	117,766
Exchange adjustments	(1,651)	–	(1,651)
Other changes:			
Interest charge (note 5(a))	9,593	8,985	18,578
Additions through acquisition (note 29)	10,369	–	10,369
Conversion of convertible bonds (note 26)	–	(67,402)	(67,402)
Total other changes	19,962	(58,417)	(38,455)
At 31 December 2018	238,730	90,405	329,135

20 CASH AND CASH EQUIVALENTS AND OTHER CASH FLOW INFORMATION (CONTINUED)

(c) Reconciliation of liabilities arising from financing activities (continued)

	Interest-bearing borrowings $'000 (note 23)	Convertible notes $'000 (note 26)	Total $'000
At 1 January 2017	148,541	147,769	296,310
Changes from financing cash flows:			
Proceeds from interest-bearing borrowings, net of transaction costs	6,943	–	6,943
Repayments of interest-bearing borrowings	(58,335)	–	(58,335)
Interest paid for interest-bearing borrowings	(4,224)	–	(4,224)
Interest paid for the convertible bonds (note 26)	–	(3,154)	(3,154)
Total changes from financing cash flows	(55,616)	(3,154)	(58,770)
Exchange adjustments	610	–	610
Other changes:			
Interest charge (note 5(a))	3,519	9,806	13,325
Total other changes	3,519	9,806	13,325
At 31 December 2017	97,054	154,421	251,475

21 TRADE AND OTHER PAYABLES

	31 December 2018 US$'000	1 January 2018 (Note 1) US$'000	31 December 2017 US$'000
Current			
Trade payables due to			
– third party suppliers	**105,016**	51,142	51,142
– a joint venture	**–**	1,009	1,009
	105,016	52,151	52,151
Advances received from customers	**–**	–	2,779
Dividends payable to ordinary shareholders	**89**	89	89
Advances received in relation to a proposed disposal of partial interests in a subsidiary	**6,358**	–	–
Other payables and accrued charges	**125,350**	70,066	70,066
	236,813	122,306	125,085
Non-current			
Share repurchase obligations (Note 2)	**73,449**	52,275	52,275
Defined benefit retirement obligation (note 5(b)(ii))	**8,806**	–	–
Provision for financial guarantees issued	**2,106**	–	–
Other payables	**9,264**	2,521	2,521
	93,625	54,796	54,796

Note 1: As a result of the adoption of HKFRS 15, advances received from customers are included in contract liabilities. See note 1(c)(ii).

Note 2: As disclosed in note 30(a), in 2017, the Group wrote put options (the "CardioFlow Series B Put Options") to certain third party investors (the "CardioFlow Series B Investors"), being the holders of non-controlling interests of MP CardioFlow Shanghai, in connection with the deemed disposal of partial equity interests in MP CardioFlow Shanghai. The CardioFlow Series B Put Options give the investors the rights to require the Group to re-acquire the redeemable shares held by them under certain conditions which are not under the control of the Group, at the consideration specified under the agreements.

The Group recorded the present value of the redemption price of the CardioFlow Series B Put Option as a payable with the corresponding value decrease in capital reserve. The CardioFlow Series B Put Option are stated at amortised cost. During the year ended 31 December 2018, the change in amortised cost of such share repurchase obligations of US$5,129,000 (2017: US$1,132,000) has been recognised directly in equity.

All of the above balances classified as current liabilities are expected to be settled within one year.

21 TRADE AND OTHER PAYABLES (CONTINUED)

As of the end of the reporting period, the ageing analysis of the trade payables based on invoice date is as follows:

	2018 US$'000	2017 US$'000
Within 1 month	**43,514**	21,881
Over 1 month but within 3 months	**28,750**	10,714
Over 3 months but within 6 months	**757**	479
Over 6 months but within 1 year	**1,098**	273
Over 1 year	**30,897**	18,804
	105,016	52,151

22 CONTRACT LIABILITIES

	31 December 2018 US$'000	1 January 2018 (Note 1) US$'000	31 December 2017 US$'000
Current			
Unfulfilled performance obligations (Note 2)	**7,818**	–	–
Advanced receipts from customers for sales of medical devices	**2,242**	2,779	–
	10,060	2,779	–
Non-current contract liabilities			
Unfulfilled performance obligations (Note 2)	**27,645**	–	–
Extended warranty	**121**	–	–
	27,766	–	–

Note 1: The Group has initially applied HKFRS 15 using the cumulative effect method and adjusted the opening balance at 1 January 2018. As a result of the adoption of HKFRS 15, advances received from customers are reclassified from trade and other payables to contract liabilities. See note 1(c)(ii).

Note2: The Group provided non-contractual post-implant services for its CRM devices sold, which represents a future performance obligation. The Group recognised contract liabilities in respect of the unfulfilled performance obligation when the Group has an obligation to provide the post-implant services and payments from customers are received in advance of the services being rendered.

22 CONTRACT LIABILITIES (CONTINUED)

Movements in contract liabilities

	2018 US$'000
At 1 January	2,779
Exchange adjustments	(118)
Decrease in contract liabilities as a result of recognising revenue during the year that was included in the contract liabilities as at 1 January	(2,410)
Net increase in contract liabilities as a result of receiving advance payments and recognising revenue during the year (Note)	35,899
Increase in contract liabilities as a result of accruing interest expense on advances	1,676
At 31 December	37,826

Note: The amount includes the addition of contract liabilities through the acquisition of CRM business (note 29).

23 INTEREST-BEARING BORROWINGS

As of the end of the reporting period, the interest-bearing borrowings were repayable as follows:

	2018 US$'000	2017 US$'000
Within 1 year or on demand	100,901	68,819
After 1 year but within 2 years	8,810	25,827
After 2 years but within 5 years	129,019	2,408
	137,829	28,235
	238,730	97,054

23 INTEREST-BEARING BORROWINGS (CONTINUED)

As of the end of the reporting period, the interest-bearing borrowings were secured as follows:

	2018 **US$'000**	2017 US$'000
Bank loans		
– secured	**118,080**	46,871
– unsecured	**120,650**	50,000
	238,730	96,871
Secured other borrowings	**–**	183
	238,730	97,054

At 31 December 2018, the bank facilities drawn down by the Group of US$29,295,000 (31 December 2017: US$46,871,000) were secured by pledged deposits, land use rights and buildings held for own use with net book value of US$2,841,000, US$4,172,000 and US$55,288,000, respectively (31 December 2017: nil, US$8,725,000 and US$110,750,000, respectively).

At 31 December 2018, a bank loan of the Company amounting to US$88,785,000 in connection with the acquisition of the CRM business was secured by the equity interests of the Company's four subsidiaries, namely MP Shanghai, MicroPort International Corp. Limited, MicroPort International Corp. and MicroPort Cardiac Rhythm B.V. and guaranteed by MP Shanghai. The bank loan bears an interest rate of LIBOR plus 3.5% per annum and shall be repaid by instalments within five years since 30 April 2018.

24 INCOME TAX IN THE CONSOLIDATED STATEMENT OF FINANCIAL POSITION

(a) Current taxation in the consolidated statement of financial position represents:

	2018 US$'000	2017 US$'000
Provision for the year	**17,201**	14,208
Provisional tax paid	**(13,615)**	(10,045)
Exchange adjustments	**(168)**	(13)
	3,418	4,150
Income tax recoverable acquired through acquisition	**(17,701)**	–
Balance of profits tax provision relating to prior years	**(1,046)**	839
	(15,329)	4,989

	2018 US$'000	2017 US$'000
Represented by:		
Current income tax recoverable	**(9,911)**	–
Non-current income tax recoverable	**(11,200)**	–
Income tax payable	**5,782**	4,989
	(15,329)	4,989

Income tax recoverable primarily represents to a tax credit of US$15,700,000 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 2018, the France CIR are classified as current and non-current receivables amounting US$4,500,000 and US$11,200,000, respectively.

24 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:

Deferred tax arising from:	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
At 1 January 2017	(3,935)	1,855	1,172	(548)	(1,456)
Exchange adjustments	(237)	114	22	148	47
(Credited)/charged to profit or loss (note 6(a))	(804)	–	(137)	301	(640)
At 31 December 2017 and 1 January 2018	(4,976)	1,969	1,057	(99)	(2,049)
Exchange adjustments	**298**	**136**	**(141)**	**15**	**308**
Additions through acquisition (note 29)	**(971)**	**–**	**1,607**	**(4,168)**	**(3,532)**
(Credited)/charged to profit or loss (note 6(a))	**(1,244)**	**201**	**745**	**(1,945)**	**(2,243)**
At 31 December 2018	**(6,893)**	**2,306**	**3,268**	**(6,197)**	**(7,516)**

Reconciliation to the consolidated statement of financial position:

	2018 US$'000	2017 US$'000
Net deferred tax assets recognised in the consolidated statement of financial position	**(15,291)**	(5,584)
Net deferred tax liabilities recognised in the consolidated statement of financial position	**7,775**	3,535
	(7,516)	(2,049)

24 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(w), the Group has not recognised deferred tax assets in respect of cumulative tax losses attributable to certain subsidiaries of US$407,823,000 at 31 December 2018 (2017: US$156,344,000), 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$3,284,000, US$10,648,000, US$17,401,000, US$33,680,000 and US$31,923,000 will expire in 2019, 2020, 2021, 2022 and 2023 respectively. The tax losses of US$310,887,000 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 2018, temporary differences relating to the undistributed profits of PRC subsidiaries amounted to US$87,789,000 (2017: US$320,244,000). Deferred tax liabilities of US$8,779,000 (2017: US$32,024,000) 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.

25 DEFERRED INCOME

	Note	Government subsidies for research and development projects US$'000	Others US$'000	Total US$'000
At 1 January 2017		24,229	5	24,234
Additions		4,439	–	4,439
Government grant recognised as other income	4	(5,602)	(5)	(5,607)
Exchange adjustments		1,225	–	1,225
At 31 December 2017 and 1 January 2018		**24,291**	**–**	**24,291**
Additions		**3,270**	**–**	**3,270**
Government grant recognised as other income	4	**(2,465)**	**–**	**(2,465)**
Exchange adjustments		**(1,191)**	**–**	**(1,191)**
At 31 December 2018		**23,905**	**–**	**23,905**

26 CONVERTIBLE BONDS

In May 2014, the Company issued the convertible bonds in an aggregate principal amount of US$100,000,000, with a maturity date of 11 May 2019 (the "2014 Convertible Bonds"). The 2014 Convertible Bonds bear interest at LIBOR plus 1% on the outstanding balances. Pursuant to the terms of the 2014 Convertible Bonds, the bond holders could convert part of or the entire outstanding bond balances at the holder's option into fully paid ordinary shares of the Company at an initial conversion price of HK$6.84 per share, subject to adjustments under certain terms and conditions of the 2014 Convertible Bonds.

In January 2016, the Company issued the convertible bonds in an aggregate principal amount of US$65,000,000, with a maturity date of 13 January 2021 (the "2016 Convertible Bonds"). The 2016 Convertible Bonds bear interest at LIBOR plus 1% on the outstanding balances. Pursuant to the terms of the 2016 Convertible Bonds, the bond holders could convert part of or the entire outstanding bond balances at the holder's option into fully paid ordinary shares of the Company at an initial conversion price of HK$3.85 per share, subject to adjustments under certain terms and conditions of the 2016 Convertible Bonds.

Based on the terms of the 2014 Convertible Bonds and the 2016 Convertible Bonds, these convertible bonds will be settled by exchange of a fixed amount of cash in US$ with a fixed number of the Company's equity instruments. In accordance with the Group's accounting policy set out in note 1(r)(i), these convertible bonds are accounted for as compound financial instruments which contain both a liability component and an equity component.

In November 2018, the Company received conversion notices from the holders of the convertible bonds issued by the Company in relation to the exercise of their conversion rights to convert the 2016 Convertible Bonds with a principal amount of US$60,200,000 at the conversion price of HK$3.85 per share and to convert the 2014 Convertible Bonds with a principal amount of US$14,109,000 at the conversion price of HK$6.84. A total of 137,218,922 new ordinary shares of the Company were allotted to these bond holders.

As at 31 December 2018, the principal of the outstanding 2014 Convertible Bonds and 2016 Convertible Bonds were US$85,891,000 and US$4,800,000, respectively.

26 CONVERTIBLE BONDS (CONTINUED)

The movement of the liability component and the equity component of the convertible bonds is set out below:

	Liability component	**Equity component**	**Total**
	US$'000	US$'000	US$'000
As at 1 January 2018	154,421	28,059	182,480
Interest charged during the year (note 5(a))	8,985	–	8,985
Interest paid during the year	(5,599)	–	(5,599)
Conversion of convertible bonds	(67,402)	(17,686)	(85,088)
As at 31 December 2018	90,405	10,373	100,778
Representing			
Current portion (the 2014 Convertible Bonds)	86,834	9,082	95,916
Non-current portion (the 2016 Convertible Bonds)	3,571	1,291	4,862
	90,405	10,373	100,778

Both the 2014 Convertible Bonds and the 2016 Convertible Bonds are subject to the fulfilment of covenants relating to certain specific performance requirements on the Group. If the Group were to breach the covenant, these convertible bonds would become payable on demand. The Group regularly monitors its compliance with the covenants. As at 31 December 2018, none of the covenants relating to the 2014 Convertible Bonds and the 2016 Convertible Bonds had been breached.

27 SHARE-BASED PAYMENT TRANSACTIONS

(a) The 2006 and 2010 share option plans (equity-settled)

On 3 September 2010, the Company approved a 10-for-1 share split (the "Share Split") of the Company's ordinary shares conditional on the completion of IPO. The 10-for-1 split also applies to the Company's share option plans. Accordingly, the number of share options and exercise price information presented below in respect of the share option plans have been adjusted retrospectively to reflect the 10-for-1 share split effect as if the Share Split had occurred at the beginning of the years presented.

On 26 August 2006, the Company adopted a share incentive plan (the "2006 Option Plan"), pursuant to which, the board of directors may authorise, at their discretion, the issuance of share options to the executives, employees and external consultants of the Group. Each option gives the holder the right to subscribe for one ordinary share of the Company.

On 3 September 2010, the Company adopted a share option plan (the "2010 Option Plan"), pursuant to which, the board of directors may authorise, at their discretion, the issuance of share options to the directors, employees or business associates of the Group. Each option gives the holder the right to subscribe for one ordinary share of the Company.

On 9 March 2010, the Board approved a modification to the 2006 Option Plan, to reduce the exercise price from US$0.425 to US$0.3062 for the share options granted on 17 May 2007, 14 June 2007, 25 July 2008 and 1 December 2008. The reduction of exercise prices of the above share options resulted in an incremental fair value of US$316,000 at the modification date. The incremental fair value is being recognised as equity-settled share-based payment expenses over the remaining vesting period.

27 SHARE-BASED PAYMENT TRANSACTIONS (CONTINUED)

(a) The 2006 and 2010 share option plans (equity-settled) (continued)

(i) The terms, conditions and fair values at the grant date of the grants are as follows:

	Number of options	Fair value	Weighted average fair value per share option	Weighted average exercise price
		US$'000	US$	US$
Options granted to executives and directors on:				
21 October 2009	6,000,000	1,207	0.20	0.31
9 July 2010	28,648,730	7,838	0.27	0.31
9 August 2010	5,000,000	1,608	0.32	0.31
7 September 2012	500,000	73	0.15	0.43
22 October 2012	500,000	84	0.17	0.54
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	0.50
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	0.72
30 March 2017	3,277,472	950	0.29	0.74
25 August 2017	2,000,000	559	0.28	0.95
29 March 2018	2,451,474	1,100	0.45	1.08
24 December 2018	30,739,346	8,419	0.27	0.98
	178,127,022	41,357		

27 SHARE-BASED PAYMENT TRANSACTIONS (CONTINUED)

(a) The 2006 and 2010 share option plans (equity-settled) (continued)

(i) The terms, conditions and fair values at the grant date of the grants are as follows (continued):

The above share options are vested in instalments over an explicit vesting period of two to six years. Each instalment is accounted for as a separate share-based compensation arrangement. The contractual life of the options is ten years.

	Number of options	Fair value	Weighted average fair value per share option	Weighted average exercise price
		US$'000	US$	US$
Options granted to employees on:				
6 February 2009	250,000	34	0.14	0.43
8 July 2010	1,230,940	363	0.30	0.31
17 October 2011	500,000	136	0.27	0.62
1 November 2011	750,000	185	0.25	0.58
28 August 2012	10,000,000	1,354	0.14	0.43
10 December 2012	13,300,000	2,354	0.18	0.59
	26,030,940	4,426		

The above share options are vested in instalments over an explicit vesting period of four to seven years. The vesting schedule of each employee is different and is determined based on the date of employment. Each instalment is accounted for as a separate share-based compensation arrangement. The contractual life of the options is ten years.

	Number of options	Fair value	Weighted average fair value per share option	Weighted average exercise price
		US$'000	US$	US$
Options granted to consultants on:				
1 September 2016	750,000	199	0.27	0.64
8 October 2018	500,000	280	0.49	1.28
	205,407,962	46,262		

The above share options are vested in instalments over an explicit vesting period of one to five years. Each instalment is accounted for as a separate share-based compensation arrangement. The contractual life of the options is ten years.

(Expressed in United States dollars unless otherwise indicated)

27 SHARE-BASED PAYMENT TRANSACTIONS (CONTINUED)

(a) The 2006 and 2010 share option plans (equity-settled) (continued)

(ii) The number and weighted average exercise prices of share options are as follows:

	2018		2017	
	Weighted average exercise price US$	**Number of options**	Weighted average exercise price US$	Number of options
Outstanding at the beginning of the year	**0.52**	**110,475,604**	0.43	102,927,530
Granted during the year	**0.99**	**33,690,820**	0.74	28,617,472
Exercised during the year	**0.41**	**(7,200,000)**	0.35	(15,986,140)
Forfeited during the year	**0.55**	**(1,054,555)**	0.47	(5,083,258)
Outstanding at the end of the year	**0.64**	**135,911,869**	0.52	110,475,604
Exercisable at the end of the year	**0.43**	**18,071,000**	0.39	16,351,000

All the share options granted are exercisable by the grantees upon vesting and will expire in a period from January 2019 through December 2028. As at 31 December 2018, the weighted average remaining contractual life for the share options granted under the 2006 and 2010 share option plans was 7.39 years (2017: 5.80 years).

(Expressed in United States dollars unless otherwise indicated)

27 SHARE-BASED PAYMENT TRANSACTIONS (CONTINUED)

(a) The 2006 and 2010 share option plans (equity-settled) (continued)

(ii) The number and weighted average exercise prices of share options are as follows: (continued)

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	**2018**	2017
Fair value at measurement dates	**HK$1.79 to HK$4.00**	HK$1.75 to HK$2.62
Share price	**HK$7.15 to HK$9.54**	HK$5.19 to HK$9.10
Exercise price	**HK$7.69 to HK$9.99**	HK$5.63 to HK$7.42
Expected volatility (expressed as a weighted average volatility used in the modelling under binomial tree model)	**37% to 40.73%**	39.55% to 40.10%
Option life	**10 years**	10 years
Suboptimal exercise factor	**1.5 to 2.21**	1.35 to 1.71
Expected dividend yield	**0.32% to 0.49%**	0.33%
Average risk-free interest rate	**1.91% to 2.49%**	1.54% to 1.73%
Forfeiture rate	**0% to 8.3%**	0% to 4.83%

The expected volatility is determined by reference to the average implied volatility of comparable companies that manufacture similar products as the Group. 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 2018 and 2017, 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.

(b) Share award scheme (equity-settled)

Pursuant to a share award scheme approved by the Board in 2011, 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 2018, the Company granted 5,486,816 shares (2017: 7,118,378) to the Group's executives with a fair value of US$5,820,000 (2017: US$4,918,000) and purchased 6,191,000 shares (2017: 10,535,000 shares) at cash consideration of US$6,237,000 (2017: US$9,617,000).

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.

27 SHARE-BASED PAYMENT TRANSACTIONS (CONTINUED)

(c) Employee share purchase plans ("ESPP") (equity-settled)

Since 2014, the Group adopted several ESPPs, pursuant to which, the Group agreed to transfer partial equity interests in its subsidiaries to the partnership firms, whose limited partners consisted of employees of the Group. All participants of above ESPPs have purchased equity interests in respective partnership firms at amounts specified in the respective partnership agreements. The ESPPs all contain a service condition. Employees participating in the plan have to transfer out their equity interests if their employments with the Group or the Group's associates 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 transferred shall be spread over the vesting period and recognised as staff costs in the profit or loss.

In 2018, partnership firms subscribed for newly issued share capital of Shanghai Yuanxin Medtech Co., Ltd. ("Yuanxin"), Shanghai MicroPort Jiehao New Material Co., Ltd. ("Jiehao") and MicroPort Sorin CRM and held approximately 60%, 65% and 32% of equity interests in Yuanxin, Jiehao and MicroPort Sorin CRM, respectively (note 30(b)). No expenses were recognised for the year ended 31 December 2018 in relation to the foresaid ESPPs as the transfer considerations approximated to the fair value of the equity interests transferred.

(d) Subsidiary share option scheme (equity-settled)

In September 2017, MP EP adopted a subsidiary share option scheme (the "EP Option Scheme"). The EP Option Scheme provides the managements and employees of MP EP with the options to acquire proprietary interests in MP EP. Each option gives the holder the right to subscribe for one ordinary share of MP EP.

In September 2018 and April 2018, MP EP granted 2,100,000 and 700,000 share options to employee of MP EP under the EP Option Scheme at an exercise price of RMB5.93 per share of MP EP.

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 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. Key assumptions include share price of MP EP and expected volatility, etc.

27 SHARE-BASED PAYMENT TRANSACTIONS (CONTINUED)

(e) Equity-settled share-based payment expenses recognised in the consolidated statement of profit or loss during the current and prior years:

	2018 US$'000	2017 US$'000
Research and development costs	**1,890**	1,401
Distribution costs	**3,610**	2,014
Administrative expenses	**4,390**	5,321
	9,890	8,736

The compensation expenses resulting from those schemes disclosed in 27(a) to 27(d) above were reflected as equity-settled share-based payment expenses in the consolidated statement of profit or loss with a corresponding increase in the capital reserve within the equity of the Group.

(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.

During the year ended 31 December 2018, cash-settled share-based payments of US$3,917,000 (2017: US$4,184,000) were recognised in consolidated statement of profit or loss.

During the year ended 31 December 2018, 2,390,157 (2017: 2,080,196) and 3,226,628 (2017: 2,467,785) LTI awards were granted and exercised, respectively, and 2,581,492 (2017: 689,006) LTI awards were forfeited prior to the vesting as a result of the resignation of employees.

As at 31 December 2018, the number of outstanding and exercisable LTI awards was 6,396,965 and nil, respectively (2017: 9,814,928 and nil). The liabilities arising from the LTI awards was US$2,797,000 (2017: US$4,271,000), which were included in the trade and other payables.

28 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$'000	**Retained earnings** US$'000	**Total** US$'000
Balance at 1 January 2017		14	248,431	30,071	202,913	481,429
Changes in equity for 2017:						
Total comprehensive income		–	–	–	5,815	5,815
Equity-settled share-based transactions		–	–	3,990	–	3,990
Shares issued under share option scheme	*28(c)(iii)*	–	8,836	(3,358)	–	5,478
Shares purchased under share award scheme	*27(b)*	–	–	(9,617)	–	(9,617)
Shares granted under share award scheme	*27(b)*	–	–	4,918	–	4,918
Dividends approved in respect of the previous year	*28(b)*	–	1,215	–	(3,510)	(2,295)
Balance at 31 December 2017 and 1 January 2018		14	258,482	26,004	205,218	489,718
Changes in equity for 2018:						
Total comprehensive income		**–**	**–**	**–**	**32,583**	**32,583**
Equity-settled share-based transactions		**–**	**–**	**4,090**	**–**	**4,090**
Shares issued under share option scheme	*28(c)(iii)*	**1**	**4,445**	**(1,492)**	**–**	**2,954**
Shares purchased under share award scheme	*27(b)*	**–**	**–**	**(6,237)**	**–**	**(6,237)**
Shares granted under share award scheme	*27(b)*	**–**	**–**	**5,820**	**–**	**5,820**
Dividends approved in respect of the previous year	*28(b)*	**–**	**1,075**	**–**	**(4,657)**	**(3,582)**
Conversion of convertible notes	*26*	**1**	**85,087**	**(17,686)**	**–**	**67,402**
Balance at 31 December 2018		**16**	**349,089**	**10,499**	**233,144**	**592,748**

28 CAPITAL, RESERVES AND DIVIDENDS (CONTINUED)

(b) Dividends

At the meeting of the board directors held on 27 March 2018, the board of directors recommended the payment of a final dividend of HK2.5 cents (2017: HK1.9 cents) per ordinary share of the Company for the year ended 31 December 2017 (the "2017 Final Dividend") by way of cash, with an option to elect to receive new fully paid shares of the Company in lieu of cash. The 2017 Final Dividend totaling US$4,657,000 was approved at the annual general meeting of the Company held on 14 May 2018 and is payable to shareholders of the Company whose names appeared on the register of members of the Company on 23 May 2018.

The Company paid cash dividends to shareholders of the Company totalling US$3,582,000 (2017: US$2,295,000) and issued 843,571 ordinary shares (2017: 1,596,103 ordinary shares) of the Company at an issue price of HK$9.994 per share (2017 HK$5.958) as the 2017 Final Dividend. Accordingly, US$1,075,000 (2017: US$1,215,000) was credited to share premium.

After the period end, the directors of the Company proposed a final dividend for the year ended 31 December 2018 of HK$2.9 cents per ordinary share, which has not been recognised as a liability at 31 December 2018.

(c) Share capital

(i) Ordinary shares

	2018 Number of shares '000	2018 Amount US$'000	2017 Number of shares '000	2017 Amount US$'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	**1,457,063**	**14**	1,439,481	14
Shares issued under share option plans (note 28(c)(iii))	**7,200**	**1**	15,986	–
Shares issued in lieu of cash dividends (note 28(b))	**844**	**–**	1,596	–
Shares issued in respect of conversion of convertible notes (note 26)	**137,219**	**1**	–	–
At 31 December	**1,602,326**	**16**	1,457,063	14

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.

28 CAPITAL, RESERVES AND DIVIDENDS (CONTINUED)

(c) Share capital (continued)

(ii) Purchase of own shares

During the year, the Company purchased its own ordinary shares on The Stock Exchange of Hong Kong Limited under the share award scheme (note 27(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
January 2018	802,000	1.03	0.97	795
October 2018	98,000	1.15	1.15	113
November 2018	1,947,000	1.15	1.07	2,147
December 2018	3,344,000	1.09	0.90	3,182
	6,191,000			6,237

Repurchased shares held at the end of reporting period are classified as treasury shares and are presented as a decrease in the capital reserve.

28 CAPITAL, RESERVES AND DIVIDENDS (CONTINUED)

(c) Share capital (continued)

(iii) Shares issued under the share option plans

During the year ended 31 December 2018, 7,200,000 (2017: 15,986,140) share options were exercised to subscribe for 7,200,000 (2017: 15,986,140) ordinary shares in the Company at a total consideration of US$2,954,000 (2017: US$5,478,000), of which US$1,000 (2017: nil) and US$2,953,000 (2017: US$5,478,000) was credited to share capital and share premium, respectively. In addition, an amount of US$1,492,000 (2017: US$3,358,000) was transferred from the capital reserve to the share premium account in accordance with policies set out in note 2(v)(iii).

(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(z).

28 CAPITAL, RESERVES AND DIVIDENDS (CONTINUED)

(d) Nature and purpose of reserves (continued)

(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 in accordance with the accounting policy adopted for share-based payments in note 1(v)(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 27(b));

– the amount allocated to the unexercised equity component of convertible notes (note 1(r)(i)).

– 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));

– initial recognition on share repurchase obligations and changes in amortised costs of share repurchase obligations (note 21); and

– remeasurement gain/loss arising from defined benefit retirement 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.

(e) Distributability of reserves

At 31 December 2018, the aggregate amount of reserves available for distribution to equity shareholders of the Company, was US$582,233,000 (2017: US$463,700,000).

28 CAPITAL, RESERVES AND DIVIDENDS (CONTINUED)

(f) 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, obligations under finance leases, 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 2018. On this basis, the amount of capital employed at 31 December 2018 was US$839,708,000 (2017: US$687,859,000).

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 and convertible bonds based on the Group's financial ratios relating to capital requirements. The Group complied with the imposed loan covenants for the year ended 31 December 2018. Except for the above, neither the Company nor any its subsidiaries are subject to externally imposed capital requirements.

29 ACQUISITION OF SUBSIDIARIES

On 8 March 2018, the Company, MicroPort Cardiac Rhythm B.V. (the "Purchaser", a subsidiary of the Company incorporated in the Netherlands) and LivaNova entered into a stock and asset purchase agreement (the "Stock and Asset Purchase Agreement"), pursuant to which, the Purchaser conditionally agreed to acquire, and LivaNova conditionally agreed to sell, the CRM business of LivaNova (the "CRM Acquisition") for an initial consideration of US$190 million, subject to working capital and other customary adjustments (collectively referred to the "Adjustment Amount"). The CRM business primarily operates in various countries in Europe, as well as in the US, Canada and parts of Asia. The Group believes the CRM Acquisition is in line with the development strategies and will bring long-term and strategic benefits to the Group.

On 30 April 2018, the Company, the Purchaser and LivaNova entered into a side letter to the Stock and Asset Purchase Agreement (the "Side Letter"), pursuant to which, the closing of the CRM Acquisition for certain countries specified in the Side Letter (the "Initial Closing Countries") was completed on 30 April 2018 (the "Initial Closing"), while for certain other countries specified in the Side Letter (the "Deferred Closing Countries"), closing took place through deferred closings (the "Deferred Closings") in the six months following the Initial Closing. From the date of the Initial Closing until the applicable Deferred Closings, LivaNova conducted the CRM business in the applicable Deferred Closing Countries at the direction of the Group and the CRM business in Deferred Closing Countries was held for the Group's benefit and account. Pursuant to the Stock and Asset Purchase Agreement together with the Side Letter, the board of directors of the Company determined that the Group completed the CRM Acquisition on 30 April 2018 and has controlled the CRM business since then. The Deferred Closings were all completed as at 31 December 2018.

29 ACQUISITION OF SUBSIDIARIES (CONTINUED)

On the date of the Initial Closing, the Group paid US$195,800,000 in cash to LivaNova in respect of the purchase price consideration based on an estimated Adjustment Amount provided by LivaNova. Under the terms of the Stock and Asset Purchase Agreement, the purchase price consideration is subject to an adjustment after the Initial Closing corresponding to the difference between the Adjustment Amount (as finally determined in accordance with the terms of the Stock and Asset Purchase Agreement) and the estimated Adjustment Amount initially provided by LivaNova. Based on the Group's calculation of the Adjustment Amount, Directors of the Group are demanding that LivaNova refund part of the consideration already paid. As at the date of this report, the Group and LivaNova are in the process of finalising the Adjustment Amount pursuant to the Stock and Asset Purchase Agreement.

The CRM Acquisition was financed by way of (i) a new bank loan of US$88,785,000 (note 23); and (ii) the contribution totalling US$50,000,000 to the Purchaser by Sino Rhythm Limited ("SRL"), a third party investor.

Pursuant to the contribution and shareholder agreement entered into between the Purchaser, SRL and MicroPort International Corp. Limited ("MP HK", a subsidiary of the Company), in February 2018, SRL contributed capital of US$50,000,000 to the Purchaser for the CRM Acquisition and therefore held 25% equity interests in the Purchaser. In addition, in the event that an initial public offering or a trade sale of the CRM business has not occurred on or prior to the fifth anniversary of the closing of the CRM Acquisition, SRL has the right to require the Company to purchase any or all of the equity interests in the Purchaser held by SRL at a price equal to the original investment plus an annual internal return of 8% (the "SRL Put Option"). 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 2018, the fair value of the SRL Put Option was US$10,640,000. Accordingly, the change in fair value was charged to the consolidated profit or loss during the year ended 31 December 2018. Valuation techniques and significant assumptions for determining the fair value of the SRL Put Option was set out in note 31(e).

29 ACQUISITION OF SUBSIDIARIES (CONTINUED)

Details of the provisional fair value of net identifiable assets acquired are as follows:

	Provisional fair value of net identifiable assets acquired at the acquisition date US$'000
Cash and cash equivalents	11,775
Property, plant and equipment	22,787
Intangible assets	23,610
Trade and other receivables	86,770
Inventories	66,317
Other non-current assets	1,191
Deferred tax assets	23,749
Interest-bearing borrowings	(10,369)
Trade and other payables	(63,565)
Contract liabilities	(35,111)
Income tax payables	(4,765)
Other non-current liabilities	(16,963)
Deferred tax liabilities	(20,217)
Net identifiable assets	85,209
Goodwill	114,724
Fair value of considerations	199,933
Considerations including:	
Fair value of the existing equity interests in a joint venture (Note)	4,133
Cash considerations paid in 2018	195,800
	199,933
Cash considerations paid in 2018	(195,800)
Cash and cash equivalents acquired on 30 April 2018	11,775
Net cash outflow arising from the acquisition in 2018	(184,025)

Note: MicroPort Sorin CRM was previously jointly controlled by the Group and LivaNova. After the completion of the CRM Acquisition, MicroPort Sorin CRM became a subsidiary of the Company with its assets and liabilities consolidated into the Company's consolidated financial statements. Accordingly, the acquisition-date fair value of the existing equity interests in MicroPort Sorin CRM owned by the Group forms part of the consideration in determining the amount of goodwill. A gain on deemed disposal of interests in a joint venture of US$4,133,000 was recognised in the consolidated profit or loss for the year ended 31 December 2018, which was determined as the excess of the fair value of the existing equity interests in MicroPort Sorin CRM of US$4,133,000, over the nil carrying value of investment in the joint venture.

29 ACQUISITION OF SUBSIDIARIES (CONTINUED)

The fair values are determined provisionally based on information available up to the date of this report. The directors are in the process of finalising the valuation of the net identifiable assets acquired. If new information obtained within one year from the acquisition date about facts and circumstances that existed at the acquisition date identifies adjustments to the above amounts, or any additional provisions that existed at the acquisition date, then the acquisition accounting will be revised.

For the period from 30 April 2018 to 31 December 2018, the CRM devices business contributed revenue of US$157,936,000 and loss of US$24,555,000 to the Group's results. Had the CRM Acquisition occurred on 1 January 2018, management estimates that consolidated revenue would have been US$745,693,000 and consolidated profit for the year ended 31 December 2018 would have been US$1,947,000. In determining these amounts, management has assumed that the fair value adjustments, determined provisionally, that arose on the date of acquisition would have been the same if the acquisition had occurred on 1 January 2018.

30 DISPOSAL OF EQUITY INTERESTS IN SUBSIDIARIES

(a) MP CardioFlow Shanghai

On 22 August 2017 and 20 October 2017, the original shareholders of MP CardioFlow Shanghai entered into the share transfer and capital increase agreements and the shareholders' agreements (collectively the "CardioFlow Series B Agreements"), with the CardioFlow Series B Investors. Pursuant to the CardioFlow Agreements, the CardioFlow Series B Investors conditionally agreed to subscribe for certain interests to be newly issued in the enlarged share capital of MP CardioFlow Shanghai at an aggregated cash consideration of RMB277,262,683 and acquire certain equity interests from the original shareholders of MP CardioFlow Shanghai other than the Group. The transactions will be carried out through following three steps.

Step I — one of the original shareholders of MP CardioFlow Shanghai ("Chenxue Investment") agreed to transferred 4.49% equity interests in MP CardioFlow Shanghai held by it to the CardioFlow Investors at a cash consideration of RMB59,090,910. Chenxue Investment is a partnership firm whose partners consisted of employees of the Group. The CardioFlow Investors also agreed to subscribe in cash for 12.22% newly issued in the enlarged share capital of MP CardioFlow Shanghai at a consideration of RMB180,909,090;

Step II — another original shareholder of MP CardioFlow Shanghai ("Jianyi Xinhe") agreed to transferred 7.98% equity interests in the enlarged share capital of MP CardioFlow Shanghai held by it to the CardioFlow Investors at a cash consideration of RMB143,646,407; and

Step III — The CardioFlow Investors agreed to subscribe in cash for 4.54% newly issued in the enlarged share capital of MP CardioFlow Shanghai at a consideration of RMB96,353,593.

30 DISPOSAL OF EQUITY INTERESTS IN SUBSIDIARIES (CONTINUED)

(a) MP CardioFlow Shanghai (continued)

The CardioFlow Series B Investors are entitled to make payments for each step upon the completion of the terms and conditions for the respective steps as set out in the CardioFlow Series B Agreements. Above issuances of new share capital under Step I and Step III are deemed as partial disposal of equity interest in MP CardioFlow Shanghai by the Group, while the transfers of equity interest by Chenxue Investment and Jianyi Xinhe to the CardioFlow Series B Investors are not transactions of the Group.

As disclosed in note 21, in connection with the deemed sale of shares, the Group also wrote CardioFlow Series B Put Options to the CardioFlow Series B Investors. The CardioFlow Series B Put Options give the CardioFlow Series B Investors the rights to require the Group to re-acquire the redeemable shares held by them under certain conditions at the consideration specified under the CardioFlow Series B Agreements. These conditions include (i) MP CardioFlow Shanghai fails to be listed on a stock exchange within six years after the completion of Step I; (ii) MP CardioFlow Shanghai fails to obtain the required approval from regulatory for one of its products before 31 December 2019 and (iii) the four to six years after the completion of Step I. The CardioFlow Series B Put Options are recognised as an obligation of the Group to repurchase own equity and are presented as other payables in the consolidated statement of financial position.

The Step II and Step III of the transactions were completed during the year ended 31 December 2018. The Group's effective interests in MP CardioFlow Shanghai were diluted to approximately 64.72%. The amount of US$10,399,000, being the difference between (A) the sum of (i) carrying amount of the CardioFlow Series B Put Options recognised as part of the transaction of; and (ii) the share of net assets of MP CardioFlow Shanghai disposed of, and (B) the consideration for the deemed disposal of the partial interests in MP CardioFlow Shanghai, has been debited to capital reserves within equity.

No gain or loss on deemed partial disposal was recognised in the consolidated statement of profit or loss since the Company retained control over MP CardioFlow Shanghai before and after the transaction. Such disposal was treated as a transaction within the shareholders of MP CardioFlow in their capacity as equity holders.

(b) MicroPort Sorin CRM

As disclosed in note 27(c), in 2018, MicroPort Sorin CRM issued 32% of enlarged share capital at a consideration of US$21,109,000 to certain partnership. The Group remained control over MicroPort Sorin CRM after the transaction. The amount of US$16,034,000, being the difference between the total considerations and the carrying amount of net assets in proportion of the deemed disposed equity interests in MicroPort Sorin CRM as at the date of disposal, was credit to capital reserve of the Group.

31 FINANCIAL RISK MANAGEMENT AND FAIR VALUES

Exposure to credit, liquidity, interest rate and currency risks arises in the normal course of the Group's business. 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 and other receivables. The Group's exposure to credit risk arising from cash and cash equivalents is limited because the counterparties are banks and financial institutions for which the Group considers to have low credit risk. Management has a credit policy in place and the exposure to credit risk is monitored on an ongoing basis.

Except for the guarantee issued by the Group as set out in note 14, 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 14.

(i) Trade and other receivables

At the end of the reporting period, 4% (2017: 6%) and 16% (2017: 18%) of the total trade and other receivables was due from the Group's largest customer and the five largest customers respectively.

Individual credit evaluations are performed on all customers requiring credit over a certain amount. These evaluations focus on the customer's past history of making payments when due and current ability to pay, and take into account information specific to the customer as well as pertaining to the economic environment in which the customer operates. The Group requires certain customers to pay deposits upfront and the remaining trade receivables are due within 30 to 360 days from the date of billing. Debtors with balances past due are requested to settle all outstanding balances before any further credit is granted. Normally, the Group does not obtain collateral from customers.

The Group measures loss allowances for trade receivables at an amount equal to lifetime ECLs, which is calculated using a provision matrix. For the purpose of determining ECLs, the Group has analysed the trade receivables based on different segments and countries.

31 FINANCIAL RISK MANAGEMENT AND FAIR VALUES (CONTINUED)

(a) Credit risk (continued)

(i) Trade and other receivables (continued)

The following table provides information about the Group's exposure to credit risk and ECLs for trade receivables as at 31 December 2018:

	Weighted average expected loss rate	Gross carrying amount	Loss allowance
	%	US$'000	US$'000
Current and less than 1 year past due	2.5	149,542	3,769
1- 3 years past due	14.8	26,787	3,957
More than 3 years past due	20.7	13,944	2,881
		190,273	10,607

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.

(ii) Comparative information under HKAS 39

Prior to 1 January 2018, an impairment loss was recognised only when there was objective evidence of impairment (see note 1(m)(i) – policy applicable prior to 1 January 2018). At 31 December 2017, trade receivables of $6,099,000 was determined to be impaired. The aging analysis of trade debtors that were not considered to be impaired was as follows:

	2017
	US$'000
Neither past due nor impaired	92,706
Less than 1 month past due	14,968
1 to 3 months past due	6,854
More than 3 months past due	6,611
	28,433
	121,139

31 FINANCIAL RISK MANAGEMENT AND FAIR VALUES (CONTINUED)

(a) Credit risk (continued)

(ii) Comparative information under HKAS 39 (continued)

Receivables that were neither past due nor impaired related to a wide range of customers for whom there was no recent history of default.

Receivables that were past due but not impaired related to a number of independent customers that had a good track record with the Group. Based on past experience, management believed that no impairment allowance was necessary in respect of these balances as there had been no significant change in credit quality and the balances were still considered fully recoverable.

Movement in the loss allowance account in respect of trade receivables during the year is as follows:

	2018 US$'000	2017 US$'000
Balance at 31 December under HKAS 39	6,099	5,385
Impact on initial application of HKFRS 9 (note 1(c)(i))	4,321	–
Adjusted balance at 1 January	10,420	5,385
Amounts written off during the year	(210)	(2,305)
Impairment losses recognised during the year	1,389	2,255
Exchange adjustments	(992)	764
Balance at 31 December	10,607	6,099

31 FINANCIAL RISK MANAGEMENT AND FAIR VALUES (CONTINUED)

(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.

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:

	2018 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	102,360	9,283	135,736	–	247,379	238,730
Convertible bonds	87,133	5,666	–	–	92,799	90,405
Trade and other payables	236,700	10,062	117,569	9,497	373,828	330,438
	426,193	25,011	253,305	9,497	714,006	659,573
Financial guarantee issued:						
Maximum amount guaranteed (note 14)	–	–	13,000	–	13,000	2,106

31 FINANCIAL RISK MANAGEMENT AND FAIR VALUES (CONTINUED)

(b) Liquidity risk (continued)

	2017 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	71,792	27,640	2,520	–	101,952	97,054
Convertible bonds	5,759	103,413	66,876	–	176,048	154,421
Trade and other payables	122,306	1,167	414	92,030	215,917	177,085
	199,857	132,220	69,810	92,030	493,917	428,560

(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 profile as monitored by management is set out in (i) below.

31 FINANCIAL RISK MANAGEMENT AND FAIR VALUES (CONTINUED)

(c) Interest rate risk (continued)

(i) Interest rate profile

The following table details the interest rate profile of the Group's total borrowings, cash at banks and deposits with banks at the end of the reporting period:

	2018		2017	
	Effective interest rate	**Amount US$'000**	Effective interest rate	Amount US$'000
Net fixed rate instruments:				
Deposits with banks	**0.30%**	**410**	0.30%-2.90%	538
Interest-bearing borrowings	**4.39%-4.79%**	**(8,597)**	–	–
Other payables	**2.13%-9.9%**	**(77,317)**	2.21%-9.29%	(52,306)
		(85,504)		(51,768)
Net variable rate instruments:				
Cash at banks	**0%-2.00%**	**129,644**	0%-2.00%	159,793
Deposits with banks	**0.30%-1.75%**	**3,537**	0.30%-1.75%	658
Investment in convertible bonds	**–**	**–**	24.51%	5,365
Interest-bearing borrowings	**2.58%-6.18%**	**(230,133)**	2.49%-7.66%	(97,054)
Convertible bonds	**5.24%-9.52%**	**(90,405)**	5.24%-9.52%	(154,421)
		(187,357)		(85,659)
		(272,861)		(137,427)

31 FINANCIAL RISK MANAGEMENT AND FAIR VALUES (CONTINUED)

(c) Interest rate risk (continued)

(ii) Sensitivity analysis

At 31 December 2018, 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 profit for the year and retained profits by approximately US$2,200,000 and US$2,200,000, respectively (2017: decreased/increased the Group's profit for the year and retained profits by approximately US$1,032,000 and US$1,032,000, respectively).

The sensitivity analysis above indicates the instantaneous change in the Group's profit after tax (and retained profits) 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 profit after tax (and retained profits) 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 for 2017.

(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 (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$)

	2018			2017		
	Euros US$'000	**US$ US$'000**	**RMB US$'000**	Euros US$'000	US$ US$'000	RMB US$'000
Trade and other receivables	**8,471**	**5,780**	**–**	3,722	2,714	746
Cash and cash equivalents	**1,362**	**2,761**	**356**	650	3,011	215
Trade and other payables	**(2,070)**	**(4,634)**	**–**	(1,246)	(237)	–
Amounts due (to)/from group companies	**(2,907)**	**(3,045)**	**(4,385)**	(5,274)	21,189	(118,762)
Amounts due from/(to) related parties	**–**	**3,287**	**360**	3,571	790	(367)
Net exposure arising from recognised assets and liabilities	**4,856**	**4,149**	**(3,669)**	1,423	27,467	(118,168)

31 FINANCIAL RISK MANAGEMENT AND FAIR VALUES (CONTINUED)

(d) Currency risk (continued)

(ii) Sensitivity analysis

The following table indicates the instantaneous change in the Group's profit after tax (and retained profits) 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.

	2018		2017	
	Increase/ (decrease) in foreign exchange rates	**Effect on profit after tax and retained profits US$'000**	Increase/ (decrease) in foreign exchange rates	Effect on profit after tax and retained profits US$'000
RMB (against US$)	**3%**	**(225)**	3%	(4,303)
	(3)%	**225**	(3)%	4,341
Euros (against US$)	**3%**	**146**	3%	226
	(3)%	**(146)**	(3)%	(226)

Results of the analysis as presented in the above table represent an aggregation of the instantaneous effects on each of the Group entities' profit 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 2017.

31 FINANCIAL RISK MANAGEMENT AND FAIR VALUES (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 engaged an external valuer to perform valuations for the financial instruments, including the SRL Put Option. A valuation report with analysis of changes in fair value measurement is prepared by the external valuer at each interim and annual reporting date, and is reviewed and approved by the Group's management.

		Fair value measurements as at 31 December 2018 categorised into		
	Fair value at 31 December 2018 US$'000	**Level 1 US$'000**	**Level 2 US$'000**	**Level 3 US$'000**
Recurring fair value measurement				
Financial assets:				
Unlisted equity security (note 16)	**11,910**	–	–	**11,910**
Financial liabilities:				
Derivative financial liabilities				
– SRL Put Option (note 29)	**(10,640)**	–	–	**(10,640)**

31 FINANCIAL RISK MANAGEMENT AND FAIR VALUES (CONTINUED)

(e) Fair value measurement (continued)

(i) Financial assets and liabilities measured at fair value (continued)

Fair value hierarchy (continued)

	Fair value at 31 December 2017 US$'000	Fair value measurements as at 31 December 2017 categorised into Level 1 US$'000	Level 2 US$'000	Level 3 US$'000
Recurring fair value measurement				
Financial assets:				
Unlisted equity securities (note 16)	5,000	–	–	5,000
Convertible bonds issued by an associate (note 14)	5,679	–	–	5,679

During the years ended 31 December 2018 and 2017, there were no transfers between Level 1 and Level 2, or transfers into or out of Level 3. 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.

Information about Level 3 fair value measurements

	Valuation techniques	**Significant unobservable inputs**
Unlisted equity securities	Recent transaction price	N/A
SRL Put Option	Binomial lattice model	Expected probability of event of 50% (Note a) Expected volatility of 24.64%, taking into account the historical volatility of the comparable companies (Note b)

Note a: As at 31 December 2018, it is estimated that with all other variables held constant, an increase/decrease in the expected probability of event by 5% would have decreased/increased the Group's profit by US$1,064,000/US$1,064,000.

Note b: As at 31 December 2018, 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 profit by US$1,017,000/US$921,000.

31 FINANCIAL RISK MANAGEMENT AND FAIR VALUES (CONTINUED)

(e) Fair value measurement (continued)

(i) Financial assets and liabilities measured at fair value (continued)

Information about Level 3 fair value measurements (continued)

The movements during the period in the balance of these Level 3 fair value measurements are as follows:

	Financial assets US$'000	Financial liabilities US$'000
At 1 January 2018	10,679	–
Initial recognitions	8,556	(9,708)
Transferred to interests in associates	(2,000)	–
Fair value change during the period	(5,679)	(932)
Others	354	–
At 31 December 2018	11,910	(10,640)

(ii) Fair value of financial assets and liabilities carried at other than fair value

The carrying amounts of the Group's financial instruments carried at cost or amortised cost were not materially different from their fair values as at 31 December 2018 and 2017.

32 COMMITMENTS

(a) Capital commitments in respect of property, plant and equipment and intangible assets outstanding at 31 December 2018 not provided for in the financial statements were as follows:

	2018 **US$'000**	2017 US$'000
Contracted for	**18,041**	34,746
Authorised but not contracted for	**136,904**	71,461
	154,945	106,207

(b) At 31 December 2018, the total future minimum lease payments in respect of property, plant and equipment under non-cancellable operating leases are payable as follows:

	2018 **US$'000**	2017 US$'000
Within 1 year	**11,348**	6,954
After 1 year but within 5 years	**25,734**	2,424
After 5 years	**18,376**	1,086
At 31 December	**55,458**	10,464

The Group leases a number of properties and plants under operating leases. The leases typically run for an initial period of one to ten years with an option to renew the lease when all terms are renegotiated. None of the leases includes contingent rentals.

33 CONTINGENT LIABILITIES

The Group was informed by LivaNova that, on 19 April 2018, an investigation has been initiated by a regional antitrust authority in France into the French cardiac rhythm management market, and a subsidiary of the CRM business operating the business in France is one of the companies being investigated. In connection with the CRM Acquisition, LivaNova agreed to provide a limited indemnity to the Group of generally up to EUR16,500,000 relating to such investigation.

In February 2019, the Group has received the official confirmation from the regional antitrust authority in France that the investigation has been formally closed. The Group is not subject to any fine. Accordingly, no provision has been made as at 31 December 2018.

34 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:

	2018 **US$'000**	2017 US$'000
Salaries and other benefits	**2,879**	2,468
Discretionary bonuses	**2,325**	1,458
Retirement scheme contributions	**73**	57
Equity-settled share-based payment expenses	**3,093**	3,017
Cash-settled share-based payment expenses	**1,107**	775
	9,477	7,775

Total remuneration was included in staff costs (note 5(b)).

(b) Financing arrangement

As at 31 December 2018, amounts due from Shanghai MicroPort Lifesciences Co., Ltd., an associate of the Group, was US$3,060,000 which bear an interest at 4.75% p.a. and was presented within interest in associates.

(c) Sales to related parties

For the year ended 31 December 2018 and 2017, 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
JIMRO Co., Ltd.	Subsidiary of Otsuka Holdings
KISCO Co., Ltd.	Subsidiary of Otsuka Holdings

34 MATERIAL RELATED PARTY TRANSACTIONS (CONTINUED)

(c) Sales to related parties (continued)

Particulars of the Group's sales transactions with these parties are as follows:

	2018 US$'000	2017 US$'000
Sale of goods to:		
Thai Otsuka	**875**	1,064
Otsuka Philippines	**894**	820
Otsuka Indonesia	**773**	673
Otsuka Pakistan	**804**	1,065
JIMRO Co., Ltd.	**122**	–
KISCO Co., Ltd.	**553**	–
	4,021	3,622

Amounts due from related parties are unsecured, interest-free and expected to be recovered within one year.

(d) Other transactions with related parties

Particulars of the Group's other transactions with related parties are as follows:

Name of party	**Relationship**
MicroPort Sorin CRM	Joint venture of the Group (from 1 January 2018 to 30 April 2018)
Maxwell Maxcare Science Foundation Limited ("Maxwell Maxcare")	Controlling party of a substantial shareholder of the Company
Zhangjiang Science & Technology Venture Capital Co., Ltd. ("ZJ Sci-Tech Venture")	Subsidiary of substantial shareholder of the Company
Shanghai Weichuang Investment	Legal representative and chairman of the board of directors of Shanghai Weichuang Investment is a director of the Company

34 MATERIAL RELATED PARTY TRANSACTIONS (CONTINUED)

(d) Other transactions with related parties (continued)

	2018 **US$'000**	2017 US$'000
Purchase of goods from MicroPort Sorin CRM	**–**	1,963
Service fee charged by Maxwell Maxcare	**565**	1,075
Payment on behalf of Maxwell Maxcare	**–**	378
Disposal of partial equity interests in MP Endo to ZJ Sci-Tech Venture	**–**	5,291
Placement of the Security Deposit to Shanghai Weichuang Investment (note 17)	**17,733**	–
Fee income from the Security Deposit	**763**	–
Loans to MicroPort Sorin CRM	**4,736**	8,320
Loans repaid by MicroPort Sorin CRM	**9,315**	1,486

(e) Applicability of the Listing Rules relating to connected transactions

Except for the related party transactions entered into with MicroPort Sorin CRM and Shanghai Weichuang Investment, the other related party transactions in respect of the above 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.

35 COMPANY-LEVEL STATEMENT OF FINANCIAL POSITION

	Note	2018 US$'000	2017 US$'000
Non-current assets			
Investments in subsidiaries		**760,632**	782,248
Interest in associates		**4,805**	2,764
Available-for-sale securities		**–**	2,000
		765,437	787,012
Current assets			
Other receivables		**66,321**	46,687
Cash and cash equivalents		**12,197**	37,632
		78,518	84,319
Current liabilities			
Amounts due to group companies		**4,600**	182,501
Other payables		**4,819**	4,972
Interest-bearing borrowings		**14,735**	18,000
Convertible bonds		**86,834**	–
		110,988	205,473
Net current liabilities		**(32,470)**	(121,154)
Total assets less current liabilities		**732,967**	665,858
Non-current liabilities			
Interest-bearing borrowings		**123,902**	21,719
Convertible bonds		**3,571**	154,421
Other payables		**2,106**	–
Derivative financial liabilities		**10,640**	–
		140,219	176,140
NET ASSETS		**592,748**	489,718
CAPITAL AND RESERVES	28(a)		
Share capital		**16**	14
Reserves		**592,732**	489,704
TOTAL EQUITY		**592,748**	489,718

36 NON-ADJUSTING EVENTS AFTER THE REPORTING PERIOD

(a) In February 2019, MP EP and the original shareholders of MP EP entered into a capital increase and share transfer agreement and a shareholder agreement with Jiaxing Huajie I Equity Investment Limited Partners (Limited Partnership) ("Jiaxing Huajie"), an independent third party of the Company, pursuant to which, Jiaxin Huajie agreed to (i) subscribe for 16,477,942 newly issued share capital of MP EP at a cash consideration of RMB200,000,000; and (ii) acquire 18,362,194 ordinary shares of MP EP from the Group at a cash consideration of RMB222,870,000. Upon the completion of the above transactions, the Group's equity interest in MP EP will be decreased from 81.93% as at 31 December 2018 to 45.10%.

(b) On 22 March 2019, the Group, the other original shareholders of MP CardioFlow Shanghai and Qianyi Investment I L.P. (the "CardioFlow Series C Investor") entered into a framework agreement in relation to the restructuring of shareholding of MP CardioFlow Shanghai (the "Restructuring"). Upon the completion of the Restructuring (without consideration of the Series C Investor): (i) MicroPort CardioFlow Medtech Corporation (the "MP CardioFlow Cayman", a subsidiary of the Group) will indirectly hold the entire equity interest in MP CardioFlow Shanghai; and (ii) the original shareholders of MP CardioFlow Shanghai will, directly or indirectly, hold shares of MP CardioFlow Cayman in the same proportion to their shareholdings in MP CardioFlow Shanghai before the Restructuring.

On 22 March 2019, the Group, the other original shareholders of MP CardioFlow Shanghai and the CardioFlow Series C Investor also entered into a share purchase agreement (the "CardioFlow Series C SPA"), pursuant to which, the CardioFlow Series C Investor agreed to subscribe for, and MP CardioFlow Cayman agreed to sell and issue 12,500,000 preferred shares of MP CardioFlow Cayman to the CardioFlow Series C Investor at a price of US$50,000,000. The CardioFlow Series C Investor will hold 12.5% of enlarged share capital (including ordinary shares and preferred shares) of MP CardioFlow Cayman and Group's effective interest in MP CardioFlow Shanghai will decrease from 64.72% as at 31 December 2018 to 56.63% upon the completion of the Restructuring and the CardioFlow Series C SPA.

In connection with the above transactions, MP CardioFlow Cayman also wrote put options to the CardioFlow Series C Investor. The put options give the CardioFlow Series C Investor the rights to require MP CardioFlow Cayman to re-acquire the redeemable preferred shares from the CardioFlow Series C Investor under certain conditions at a consideration specified under the restated Memorandum and Association of MP CardioFlow Cayman.

Further details of the Restructuring and the CardioFlow Series C SPA were set out in the Company's announcement dated 22 March 2019.

37 COMPARATIVE FIGURES

The Group has initially applied HKFRS 15 and HKFRS 9 at 1 January 2018. Under the transition methods chosen, comparative information is not restated. Further details of the changes in accounting policies are disclosed in note 1(c).

(Expressed in United States dollars unless otherwise indicated)

38 POSSIBLE IMPACT OF AMENDMENTS, NEW STANDARDS AND INTERPRETATIONS ISSUED BUT NOT YET EFFECTIVE FOR THE YEAR ENDED 31 DECEMBER 2018

Up to the date of issue of these financial statements, the HKICPA has issued a number of amendments and new standards which are not yet effective for the year ended 31 December 2018 and which have not been adopted in these financial statements. These include the following which may be relevant to the Group.

	Effective for accounting periods beginning on or after
HKFRS 16, *Leases*	1 January 2019
HK(IFRIC) Interpretation 23, *Uncertainty over income tax treatments*	1 January 2019
Annual Improvement to HKFRSs 2015-2017 Cycle	1 January 2019
Amendments to HKAS 28, *Long-term interest in associates and joints ventures*	1 January 2019

The Group is in the process of making an assessment of what the impact of these amendments, new standards and interpretations is expected to be in the period of initial application. So far the Group has identified some aspects of HKFRS 16 which may have a significant impact on the consolidated financial statements. Further details of the expected impacts are discussed below. While the assessment has been substantially completed for HKFRS 16, the actual impact upon the initial adoption of this standard may differ as the assessment completed to date is based on the information currently available to the Group, and further impacts may be identified before the standard is initially applied in the Group's interim financial report for the six months ended 30 June 2019. The Group may also change its accounting policy elections, including the transition options, until the standard is initially applied in that financial report.

38 POSSIBLE IMPACT OF AMENDMENTS, NEW STANDARDS AND INTERPRETATIONS ISSUED BUT NOT YET EFFECTIVE FOR THE YEAR ENDED 31 DECEMBER 2018 (CONTINUED)

HKFRS 16, *Leases*

As disclosed in note 1(l), currently the Group classifies leases into finance leases and operating leases and accounts for the lease arrangements differently, depending on the classification of the lease. The Group enters into some leases as the lessor and others as the lessee.

HKFRS 16 is not expected to impact significantly on the way that lessors account for their rights and obligations under a lease. However, once HKFRS 16 is adopted, lessees will no longer distinguish between finance leases and operating leases. Instead, subject to practical expedients, lessees will account for all leases in a similar way to current finance lease accounting, i.e. at the commencement date of the lease the lessee will recognise and measure a lease liability at the present value of the minimum future lease payments and will recognise a corresponding "right-of-use" asset. After initial recognition of this asset and liability, the lessee will recognise interest expense accrued on the outstanding balance of the lease liability, and the depreciation of the right-of-use asset, instead of the current policy of recognising rental expenses incurred under operating leases on a systematic basis over the lease term. As a practical expedient, the lessee can elect not to apply this accounting model to short-term leases (i.e. where the lease term is 12 months or less) and to leases of low-value assets, in which case the rental expenses would continue to be recognised on a systematic basis over the lease term.

HKFRS 16 will primarily affect the Group's accounting as a lessee of leases for properties, plant and equipment which are currently classified as operating leases. The application of the new accounting model is expected to lead to an increase in both assets and liabilities and to impact on the timing of the expense recognition in the statement of profit or loss over the period of the lease.

HKFRS 16 is effective for annual periods beginning on or after 1 January 2019. As allowed by HKFRS 16, the Group plans to use the practical expedient to grandfather the previous assessment of which existing arrangements are, or contain, leases. The Group will therefore apply the new definition of a lease in HKFRS 16 only to contracts that are entered into on or after the date of initial application. In addition, the Group plans to elect the practical expedient for not applying the new accounting model to short-term leases and leases of low-value assets.

The Group plans to elect to use the modified retrospective approach for the adoption of HKFRS 16 and will recognise the cumulative effect of initial application as an adjustment to the opening balance of equity at 1 January 2019 and will not restate the comparative information. As disclosed in note 32(b), at 31 December 2018 the Group's future minimum lease payments under non-cancellable operating leases amount to US$55,458,000 for properties and other assets, the majority of which is payable either between 1 and 5 years after the reporting date or in more than 5 years. Upon the initial adoption of HKFRS 16, the opening balances of lease liabilities and the corresponding right-of-use assets will be adjusted to US$59,390,000 and US$58,644,000, respectively, after taking account the effects of discounting, as at 1 January 2019.

Other than the recognition of lease liabilities and right-of-use assets, the Group expects that the transition adjustments to be made upon the initial adoption of HKFRS 16 will not be material. However, the expected changes in accounting policies as described above could have a material impact on the Group's financial statement from 2019 onwards.

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