MicroPort Scientific Corporation

微創醫療科學有限公司*

(Incorporated in the Cayman Islands with limited liability)

(Stock code: 00853)

ANNOUNCEMENT OF ANNUAL RESULTS FOR THE YEAR ENDED 31 DECEMBER 2021

FINANCIAL HIGHLIGHTS

	Year ended 31 December		
	2021	2020	Change
	US$'000	*US$'000*	*%*
Revenue	**778,639**	648,732	20.0%
Gross profit	**491,773**	436,032	12.8%
Loss for the year	**(351,295)**	(223,348)	N/A
Loss attributable to equity shareholders of the Company	**(276,484)**	(191,252)	N/A
Loss per share –			
Basic (in cents)	**(15.29)**	(10.97)	N/A
Diluted (in cents)	**(16.54)**	(11.11)	N/A

For the year ended 31 December 2021 ("the Reporting Period"), MicroPort Scientific Corporation (the "Company", or "MicroPort") and its subsidiaries (collectively, the "Group") recorded revenue of US$778.6 million, representing an increase of 20.0% (in US$) or 15.0% (excluding the foreign exchange impact) as compared to 2020. The CRM business and the orthopedics devices business recorded revenue growth of 18.8% and 5.1% respectively, excluding the foreign exchange impact, mainly attributable to the increase in the number of elective surgeries from the easing of the COVID-19 pandemic. Benefited from rapid market penetration and new product launches, the heart valve business, the neurovascular devices business and the endovascular and peripheral vascular devices business continued to maintain rapid growth and recorded increases of 93.2%, 72.5% and 45.6%, respectively in revenue (excluding the foreign exchange impact).

The Group recorded a loss of US$351.3 million (loss attributable to equity shareholders of the Company: US$276.5 million) for the year ended 31 December 2021, as compared with a loss of US$223.3 million (loss attributable to equity shareholders of the Company: US$191.3 million) for the year ended 31 December 2020. Such change was principally attributable to (i) the significant increase in expenses incurred by the surgical robot business and heart valve business and other business to actively promote research and development, registration and commercialisation with the aid of independent financing channels; (ii) the increase in investment in overseas market development and product promotion; (iii) the increase in costs recognised for the granting of incentive shares to certain employees under the Group's share incentive scheme during the Reporting Period; (iv) the impact of centralized procurement policy for coronary stents in the PRC; (v) accrued interest for the newly issued convertible bond; and (vi) expenses incurred for the IPO of the heart valve, surgical robot and neurovascular devices businesses.

* *For identification purpose only*

CONSOLIDATED STATEMENT OF PROFIT OR LOSS

for the year ended 31 December 2021
(Expressed in United States dollars)

	Note	**2021**	2020
		US$'000	*US$'000*
Revenue	*4*	**778,639**	648,732
Cost of sales		**(286,866)**	(212,700)
Gross profit		**491,773**	436,032
Other net income	*5*	**76,475**	32,924
Research and development costs		**(297,778)**	(192,629)
Distribution costs		**(297,532)**	(254,105)
Administrative expenses		**(250,010)**	(170,105)
Other operating costs	*6(c)*	**(16,547)**	(19,678)
Loss from operations		**(293,619)**	(167,561)
Finance costs	*6(a)*	**(47,883)**	(39,712)
Gain on disposal of subsidiaries	*15(a)*	**8,218**	–
Gain on disposal of interests in equity-accounted investees		**9,215**	1,062
Share of profits less losses of equity-accounted investees		**(13,255)**	(6,730)
Loss before taxation	*6*	**(337,324)**	(212,941)
Income tax	*7(a)*	**(13,971)**	(10,407)
Loss for the year		**(351,295)**	(223,348)
Attributable to:			
Equity shareholders of the Company		**(276,484)**	(191,252)
Non-controlling interests		**(74,811)**	(32,096)
Loss for the year		**(351,295)**	(223,348)
Loss per share	*8*		
Basic (in cents)		**(15.29)**	(10.97)
Diluted (in cents)		**(16.54)**	(11.11)

CONSOLIDATED STATEMENT OF PROFIT OR LOSS AND OTHER COMPREHENSIVE INCOME

for the year ended 31 December 2021
(Expressed in United States dollars)

	2021	2020
	US$'000	*US$'000*
Loss for the year	**(351,295)**	(223,348)
Other comprehensive income for the year, net of tax		
Item that will not be reclassified to profit or loss:		
Remeasurement of net defined benefit liabilities	**(325)**	(592)
Items that may be reclassified subsequently to profit or loss:		
Exchange differences on translation of financial statements of foreign subsidiaries, net of nil tax	**8,815**	117,657
Share of other comprehensive income of equity-accounted investees	**113**	–
Other comprehensive income for the year	**8,603**	117,065
Total comprehensive income for the year	**(342,692)**	(106,283)
Attributable to:		
Equity shareholders of the Company	**(285,097)**	(90,973)
Non-controlling interests	**(57,595)**	(15,310)
Total comprehensive income for the year	**(342,692)**	(106,283)

CONSOLIDATED STATEMENT OF FINANCIAL POSITION

(Expressed in United States dollars)

	Note	**31 December 2021**	31 December 2020
		US$'000	*US$'000*
Non-current assets			
Investment properties		**7,407**	5,284
Property, plant and equipment		**922,874**	481,203
		930,281	486,487
Intangible assets		**256,609**	138,397
Goodwill		**290,565**	159,483
Equity-accounted investees		**363,103**	87,063
Financial assets measured at fair value through profit or loss		**25,221**	19,605
Derivative financial instruments		**4,963**	–
Deferred tax assets		**20,368**	15,502
Other non-current assets		**102,652**	82,733
		1,993,762	989,270
Current assets			
Derivative financial instruments		**1,406**	–
Inventories		**289,931**	240,187
Trade and other receivables	*9*	**308,126**	236,976
Pledged deposits and time deposits		**32,890**	623
Cash and cash equivalents		**1,754,414**	1,002,077
		2,386,767	1,479,863
Current liabilities			
Trade and other payables	*10*	**358,792**	372,472
Contract liabilities		**23,590**	62,008
Interest-bearing borrowings	*11*	**94,746**	10,891
Lease liabilities		**50,505**	12,074
Income tax payable		**19,124**	52,682
Derivative financial instruments		**–**	9,252
		546,757	519,379
Net current assets		**1,840,010**	960,484
Total assets less current liabilities		**3,833,772**	1,949,754

	Note	31 December 2021 *US$'000*	31 December 2020 *US$'000*
Non-current liabilities			
Interest-bearing borrowings	*11*	**269,637**	181,988
Lease liabilities		**168,437**	42,774
Deferred income		**35,098**	37,844
Contract liabilities		**26,243**	29,855
Convertible bonds		**660,369**	48,583
Other payables	*10*	**425,914**	203,023
Deferred tax liabilities		**27,692**	4,122
Derivative financial instruments		**2,890**	13,619
		1,616,280	561,808
NET ASSETS		**2,217,492**	1,387,946
CAPITAL AND RESERVES			
Share capital	*13(i)*	**18**	18
Reserves		**1,490,732**	1,127,945
Total equity attributable to equity shareholders of the Company		**1,490,750**	1,127,963
Non-controlling interests		**726,742**	259,983
TOTAL EQUITY		**2,217,492**	1,387,946

1 Statement of compliance

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

The HKICPA has issued certain amendments to HKFRSs that are first effective or available for early adoption for the current accounting period of the Group. Note 3 provides information on any changes in accounting policies resulting from initial application of these developments to the extent that they are relevant to the Group for the current accounting period reflected in these financial statements.

2 Basis of preparation of the financial statements

The consolidated financial statements for the year ended 31 December 2021 comprise the Company and its subsidiaries (together referred to as the "Group") and the Group's interest in equity-accounted investees.

The measurement basis used in the preparation of the financial statements is the historical cost basis except that the following assets and liabilities are stated at their fair value:

– investments in debt and equity securities; and

– derivative financial instruments.

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.

3 Changes in accounting policies

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

- Amendment to HKFRS 16, Covid-19-related rent concessions beyond 30 June 2021
- Amendments to HKFRS 9, HKAS 39, HKFRS 7, HKFRS 4 and HKFRS 16, Interest rate benchmark reform – phase 2

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

4 Revenue and segment reporting

(a) Revenue

The Group derives revenue principally from the sales of medical devices through appointed distributors and direct sales force, as well as rendering of post-sales services primarily for CRM business. Further details regarding the Group's principal activities are disclosed in note 4(b).

(i) Disaggregation of revenue

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

	2021	2020
	US$'000	*US$'000*
Revenue from contracts with customers within the scope of HKFRS 15		
– Sales of medical devices	**761,699**	636,092
– Revenue from post-sales services	**10,949**	12,132
– Others	**3,660**	–
	776,308	648,224
Revenue from other sources		
– Gross rentals under operating leases	**2,331**	508
	778,639	648,732

Disaggregation of revenue from contracts with customers by the timing of revenue recognition and by geographic markets is disclosed in notes 4(b)(i) and 4(b)(iii) respectively.

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

	2021	2020
	US$'000	*US$'000*
Customer A	**99,656**	N/A*

* Less than 10% of the Group's revenue in the respective years.

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

As at 31 December 2021, the aggregated amount of the transaction price allocated to the remaining performance obligation under the Group's existing contracts was US$51,734,000 (2020: US$54,776,000). 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 (products and services) and geography. In a manner consistent with the way in which information is reported internally to the Group's most senior executive management for the purposes of resource allocation and performance assessment, the Group has identified a number of reportable segments. No operating segments have been aggregated to form the following reportable segments.

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

(i) Segment results, assets and liabilities

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

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

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

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

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

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 2021 and 2020 is set out below.

	2021									
	Cardiovascular devices business	Orthopedics devices business	CRM business	Endovascular and peripheral vascular devices business	Neurovascular devices business	Heart valve business	Surgical robot business	Surgical devices business	Others*	Total
	US$'000	*US$'000*	*US$'000*	*US$'000*	*US$'000*	*US$'000*	*US$'000*	*US$'000*	*US$'000*	*US$'000*
Disaggregated by timing of revenue recognition										
Point in time – sales of medical devices	135,020	215,343	209,472	106,028	59,013	31,324	329	4,727	443	761,699
Over time – post-sales services	–	–	10,949	–	–	–	–	–	–	10,949
Over time – rental income	861	271	–	–	40	–	–	–	1,159	2,331
Others	3,660	–	–	–	–	–	–	–	–	3,660
	139,541	215,614	220,421	106,028	59,053	31,324	329	4,727	1,602	778,639
Reportable segment net profit/(loss)	9,425	(26,223)	(84,889)	47,755	3,560	(28,502)	(97,720)	(11,481)	(56,136)	(244,211)
Interest income from bank deposits	2,730	45	–	2,137	535	3,756	3,424	14	392	13,033
Interest expense	877	3,247	15,451	275	7,011	2,999	821	330	1,062	32,073
Depreciation and amortisation for the year	15,629	25,410	18,094	3,685	5,000	4,820	4,973	2,163	2,711	82,485
Income tax	(1,965)	1,475	2,986	8,286	1,230	95	–	–	(93)	12,014
(Decrease)/increase of inventory provision	(286)	1,430	4,616	(407)	247	10	–	282	193	6,085
Provision for/(reversal of) impairment of:										
– Property, plant and equipment	162	89	–	–	–	–	–	–	–	251
– Intangible assets	–	150	–	–	–	–	–	–	–	150
– Trade and other receivables	344	884	–	11	–	–	–	(79)	–	1,160
Reportable segment assets	611,181	490,510	435,891	275,451	210,226	524,108	436,895	210,071	446,013	3,640,346
Additions to non-current segment assets during the year	214,120	46,460	31,135	17,643	55,308	65,575	61,302	176,181	126,436	794,160
Reportable segment liabilities	195,723	240,742	329,785	38,683	237,683	40,233	59,314	93,448	83,849	1,319,266

	2020									
	Cardiovascular devices business *US$'000*	Orthopedics devices business *US$'000*	CRM business *US$'000*	Endovascular and peripheral vascular devices business *US$'000*	Neurovascular devices business *US$'000*	Heart valve business *US$'000*	Surgical robot business *US$'000*	Surgical devices business *US$'000*	Others* *US$'000*	Total *US$'000*
Disaggregated by timing of revenue recognition										
Point in time – sales of medical devices	144,655	201,348	168,167	68,487	32,790	15,204	–	3,939	1,502	636,092
Over time – post-sales services	–	–	12,132	–	–	–	–	–	–	12,132
Over time – rental income	105	260	–	–	143	–	–	–	–	508
	144,760	201,608	180,299	68,487	32,933	15,204	–	3,939	1,502	648,732
Reportable segment net profit/ (loss)	18,857	(61,433)	(47,245)	30,766	5,037	(57,867)	(25,328)	(3,349)	(18,463)	(159,025)
Interest income from bank deposits	578	–	–	1,261	31	758	1,167	6	16	3,817
Interest expense	900	5,018	6,414	174	563	20,821	11	–	–	33,901
Depreciation and amortisation for the year	20,763	27,754	12,181	2,964	2,587	3,110	361	897	201	70,818
Income tax	(767)	1,760	1,739	5,890	555	–	–	1	–	9,178
Increase/(decrease) of inventory provision	1,800	2,472	(2,899)	(299)	276	563	–	(4)	19	1,928
Provision for/(reversal of) impairment of:										
– Property, plant and equipment	–	114	–	–	–	–	–	–	–	114
– Trade and other receivables	75	1,052	–	112	3	–	–	(401)	–	841
– Intangible assets	–	1,835	–	–	–	–	–	–	–	1,835
Reportable segment assets	749,809	449,729	393,256	213,536	123,957	169,152	262,223	23,787	80,010	2,465,459
Additions to non-current segment assets during the year	48,015	26,559	9,925	3,672	7,557	7,149	19,477	2,010	10,966	135,330
Reportable segment liabilities	137,905	245,525	239,745	25,680	63,121	221,945	31,848	9,200	3,043	978,012

* Revenues and results from segments below the quantitative thresholds are mainly attributable to electrophysiology devices business, diagnostic imaging devices business, etc. None of those segments individually met any of the quantitative thresholds for reportable segments.

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

	2021	2020
	US$'000	*US$'000*
Profit or loss		
Reportable segment net loss	**(244,211)**	(159,025)
Share awards scheme *(Note)*	**(6,905)**	(35,285)
Other equity-settled share-based payment expenses *(Note)*	**(54,776)**	(5,409)
Interest expenses on convertible bonds issued by the Company	**(8,827)**	(94)
Unallocated exchange loss	**(2,435)**	(509)
Gain on disposal of subsidiaries, net of tax	**8,218**	–
Unallocated expenses, net	**(42,359)**	(23,026)
Consolidated loss for the year	**(351,295)**	(223,348)
Assets		
Reportable segment assets	**3,724,957**	2,465,459
Elimination of inter-segment assets	**(178,489)**	(74,469)
Unallocated corporate assets:		
– Cash and cash equivalents	**530,036**	44,782
– Equity-accounted investees	**77,791**	3,613
– Property, plant and equipment	**166,270**	–
– Loans to a related party *(note 16)*	**–**	26,700
– Others	**59,964**	3,048
Consolidated total assets	**4,380,529**	2,469,133
Liabilities		
Reportable segment liabilities	**1,319,266**	978,012
Elimination of inter-segment liabilities	**(93,878)**	(74,469)
Derivative financial liabilities	**1,651**	11,116
Convertible bonds	**660,369**	–
Interest-bearing borrowings	**165,514**	–
Lease liabilities	**36,187**	–
Share repurchase obligations	**–**	98,020
Income tax payable arising from partial disposal of equity interests in a subsidiary	**11,231**	57,419
Unallocated corporate liabilities	**62,697**	11,089
Consolidated total liabilities	**2,163,037**	1,081,187

Note: The amount of share award scheme and other equity-settled shared-based payment expenses during the year ended 31 December 2021 includes the impact of restricted shares and share options granted to the chairman amounting to US$48,735,000 (2020: US$36,553,000).

(iii) Geographic information

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

Revenue from external customers

	2021	2020
	US$'000	*US$'000*
The PRC (country of domicile)	**356,977**	289,403
North America	**94,980**	87,800
Europe	**241,799**	206,510
Asia (excluding the PRC)	**64,357**	57,196
South America	**9,698**	5,748
Others	**10,828**	2,075
	421,662	359,329
	778,639	648,732

Specified non-current assets

	2021	2020
	US$'000	*US$'000*
The PRC (country of domicile)	**1,320,483**	539,576
North America	**178,937**	107,041
Europe	**271,298**	202,554
Asia (excluding the PRC)	**66,235**	27,346
South America	**3,270**	2,241
Others	**335**	396
	520,075	339,578
	1,840,558	879,154

5 Other net income

	2021	2020
	US$'000	*US$'000*
Government grants *(i)*	**27,546**	28,412
Interest income on financial assets measured at amortised cost	**15,825**	6,265
Net loss on disposal of property, plant and equipment	**(412)**	(570)
Net foreign exchange (loss)/gain	**(5,716)**	2,019
Net realised and unrealised gain/(losses) on financial instruments carried at FVPL	**25,707**	(13,246)
Gain in relation to a settlement agreement *(ii)*	**10,735**	–
Refund from an arbitration in relation to an acquisition in previous year	**–**	16,420
Others	**2,790**	(6,376)
	76,475	32,924

Notes:

(i) Majority of the government grants are subsidies received from government for encouragement of research and development projects.

(ii) In July 2021, the Group entered into an agreement with Medacta USA, Inc. and Medacta International SA (collectively, the "Medacta") to settle a lawsuit in relation to patent infringement and tortious interference with contact (the "Settlement Agreement"). The Settlement Agreement also resolved the Group's claims against a former distributor. Pursuant to the Settlement Agreement, Medacta paid US$7 million to the Group in 2021 and will pay a sum of US$5 million over a term of seven years (collectively, the "Total Settlement Amount").

In connection with the Settlement Agreement, for the year ended 31 December 2021, the Group recognised a gain of US$10,735,000, being the present value of the Total Settlement Amount.

6 Loss before taxation

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

(a) Finance costs

	2021	2020
	US$'000	*US$'000*
Interest on the convertible bonds	**12,375**	439
Interest on interest-bearing borrowings	**6,433**	10,120
Interest on preferred shares issued by subsidiaries	**18,111**	24,303
Interest on lease liabilities	**5,791**	2,455
Total interest expense on financial liabilities not at fair value through profit or loss	**42,710**	37,317
Others	**5,173**	2,395
	47,883	39,712

(b) Staff costs

	2021	2020
	US$'000	*US$'000*
Contributions to defined contribution retirement plans	**24,478**	10,411
Expenses recognised in respect of defined benefit retirement plans	**564**	617
Equity-settled share-based payment expenses	**91,345**	55,665
Cash-settled share-based payment expenses	**3,268**	3,828
Other long-term employee benefits	**561**	–
Salaries, wages and other benefits	**360,016**	311,844
	480,232	382,365

(i) Defined contribution retirement plans

The PRC

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

The United States (the "US")

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

(ii) Defined benefit retirement plans

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

The defined benefit plans expose the Group to various demographic and economic risks such as longevity 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 approximately US$10,477,000 as at 31 December 2021 (31 December 2020: US$11,420,000), with actuarial gain of US$256,000 being recorded in other comprehensive income for the year ended 31 December 2021 (31 December 2020: loss of US$592,000).

(iii) Long-term defined benefit plans

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

The plan exposes the Group to interest rate risk, investment risk and equity price risk. The Group recorded the present value of funded obligation of approximately US$641,000 as at 31 December 2021 (31 December 2020: US$996,000), with actuarial loss of US$581,000 being recorded in other comprehensive income for the year ended 31 December 2021 (31 December 2020: nil)

(c) Other operating costs

	2021	2020
	US$'000	*US$'000*
Legal and profession fee	**12,945**	14,413
Impairment loss of non-current assets	**239**	1,949
Donations	**3,057**	1,953
Redundancy cost	**9**	1,029
Others	**297**	334
	16,547	19,678

(d) Other items

	2021	2020
	US$'000	*US$'000*
Amortisation of intangible assets*	**15,729**	12,000
Depreciation charge*		
– owned property, plant and equipment	**50,662**	44,785
– right-of-use assets	**27,891**	12,320
Less: Amounts capitalised as development costs	**(803)**	(352)
	93,479	68,753
Provision for impairment of:		
– trade and other receivables	**1,160**	841
– property, plant and equipment	**251**	114
– intangible assets	**150**	1,835
	1,561	2,790
Research and development expenditure	**323,685**	208,207
Less: Amortisation of capitalised development costs	**(6,450)**	(5,674)
Costs capitalised into intangible assets	**(25,907)**	(15,578)
	291,328	186,955
Cost of inventories*	**321,610**	246,721
Auditors' remuneration		
– audit services	**3,266**	2,234
– non-audit services	**721**	417
	3,987	2,651

* Cost of inventories includes US$103,102,000 (2020: US$83,776,000) relating to staff costs and depreciation and amortisation expenses, which amount is also included in the respective total amounts disclosed separately above or in note 6(b) for each of these types of expenses.

7 Income tax in the consolidated statement of profit or loss

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

	2021	2020
	US$'000	*US$'000*
Current tax – PRC Corporate Income Tax ("CIT")		
Provision for the year	**12,893**	9,104
Over-provision in respect of prior years	**(18)**	(524)
	12,875	8,580
Current tax – other jurisdictions		
Provision for the year	**4,594**	1,543
Under/(over)-provision in respect of prior years	**323**	(6)
	4,917	1,537
	17,792	10,117
Deferred tax		
Origination and reversal of temporary differences	**(3,821)**	290
	13,971	10,407

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 11 entities entitled to a preferential income tax rate of 15% as they are certified as "High and New Technology Enterprise" ("HNTE"). According to Guoshuihan 2009 No. 203, if an entity is certified as an HNTE, it is entitled to a preferential income tax rate of 15% during the certified period.

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

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

	2021	2020
	US$'000	*US$'000*
Loss before taxation	**(337,324)**	(212,941)
Notional tax on loss before taxation, calculated at the rates applicable to profit in the countries concerned	**(63,929)**	(26,847)
Effect of the PRC preferential tax rate	**(691)**	(1,007)
Effect of other non-deductible expenses	**5,917**	3,599
Effect of additional deduction on research and development expenses	**(21,026)**	(9,195)
Effect of tax losses not recognised	**101,855**	51,604
Effect of non-taxable income	**(6,428)**	(1,257)
Withholding tax on profit distributions	**818**	846
Under/(over)-provision in respect of prior years	**305**	(530)
Others	**(2,850)**	(6,806)
Actual tax expenses	**13,971**	10,407

8 Loss per share

(a) Basic loss per share

The calculation of basic loss per share is based on the loss attributable to ordinary equity shareholders of the Company of US$276,484,000 (2020: US$191,252,000) and the weighted average number of ordinary shares of 1,808,295,000 shares (2020: 1,742,736,000 shares) in issue during the year, calculated as follows:

(i) Weighted average number of ordinary shares

	2021	2020
	'000	*'000*
Issued ordinary shares at 1 January	**1,809,540**	1,622,778
Effect of issue of shares in lieu of cash dividends	**188**	683
Effect of issue of shares upon a placing	**–**	32,889
Effect of share options exercised	**7,256**	15,242
Effect of treasury shares held	**(8,689)**	(10,347)
Effect of the conversion of the convertible bonds issued by the Company	**–**	81,491
Weighted average number of ordinary shares at 31 December	**1,808,295**	1,742,736

(b) Diluted loss per share

The calculation of diluted loss per share is based on the loss attributable to ordinary equity shareholders of the Company of US$299,794,000 (2020: US$199,623,000) and the weighted average number of ordinary shares of 1,812,922,000 shares (2020: 1,796,441,000 shares) after adjusting the effects of dilutive potential issuable ordinary shares under a put option granted to Sino Rhythm Limited ("SRL") that may be settled in ordinary shares of the Company and effect of deemed exercise of restricted share units granted to the employees of a subsidiary, calculated as follows.

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

	2021	2020
	US$'000	*US$'000*
Loss attributable to ordinary equity shareholders	**(276,484)**	(191,252)
Effect of deemed exercise of put option granted to SRL in respect of share repurchase obligation	**(23,235)**	(8,371)
Effect of deemed exercise of restricted share units granted to the employees of a subsidiary	**(75)**	–
Loss attributable to ordinary equity shareholders (diluted)	**(299,794)**	(199,623)

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

	2021	2020
	'000	*'000*
Weighted average number of ordinary shares at 31 December	**1,808,295**	1,742,736
Effect of deemed exercise of put option granted to SRL in respect of share repurchase obligation	**4,627**	53,705
Weighted average number of ordinary shares (diluted) at 31 December	**1,812,922**	1,796,441

Except for a restricted share unit plan adopted by a subsidiary in the year ended 31 December 2021, the calculation of diluted loss per share amount for the year ended 31 December 2021 and 2020 has not included the potential effects of the deemed issue of shares under the share option schemes adopted by the Company and the deemed conversion of the convertible bonds issued by the Company into ordinary shares during the year and neither included the effects of potential ordinary shares in or issued by subsidiaries of the Group, as they had anti-dilutive effects on the basic loss per share amount for the respective year.

9 Trade and other receivables

	31 December 2021	31 December 2020
	US$'000	*US$'000*
Trade debtors and bills receivable due from:		
– third party customers	**192,958**	168,068
– related parties	**4,060**	2,448
	197,018	170,516
Less: Loss allowance	**(11,222)**	(9,699)
	185,796	160,817
Other debtors	**41,780**	31,939
Amounts due from investors in connection of the restructuring of neurovascular devices business	**10,457**	–
Income tax recoverable	**4,575**	8,373
Deposits and prepayments	**65,518**	35,847
	308,126	236,976

All of the trade and other debtors 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 and bills receivable (which are included in trade and other receivables), based on the invoice date and net of loss allowance, is as follows:

	2021	2020
	US$'000	*US$'000*
Within 1 month	**121,960**	59,803
1 to 3 months	**31,253**	72,606
3 to 12 months	**30,878**	26,212
More than 12 months	**1,705**	2,196
	185,796	160,817

10 Trade and other payables

	31 December 2021	31 December 2020
	US$'000	*US$'000*
Current		
Trade payables due to:		
– third party suppliers	**120,251**	60,363
– a related party	**10,803**	25
Total trade payables (i)	**131,054**	60,388
Dividends payable to ordinary shareholders	**62**	95
Consideration payables in connection with the acquisition of subsidiaries	**16,081**	–
Share repurchase obligations (ii)	**–**	195,875
Other payables and accrued charges	**211,595**	116,114
	358,792	372,472
Non-current		
Share repurchase obligations (ii)	**365,903**	167,082
Contingent consideration in connection with the acquisition of a subsidiary	**32,179**	–
Net defined benefit obligation *(note 6(b))*	**11,118**	11,420
Other payables (iii)	**16,714**	24,521
	425,914	203,023

All current trade and other payables are expected to be settled within one year or are repayable on demand.

Notes:

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

	2021	2020
	US$'000	*US$'000*
Within 1 month	**110,136**	41,340
Over 1 month but within 3 months	**8,662**	9,613
Over 3 months but within 6 months	**6,985**	1,730
Over 6 months but within 1 year	**1,241**	1,237
Over 1 year	**4,030**	6,468
	131,054	60,388

(ii) Share repurchase obligations

MicroPort CardioFlow Medtech Corporation ("MP CardioFlow"), MicroPort Cardiac Rhythm Management Limited ("CRM Cayman") and MicroPort NeuroTech Limited ("MP NeuroTech") issued preferred shares to certain investors in connection with their separate financings. These preferred shares include liquidation preference right, redemption right and conversion right, etc., granted to the investors.

As these preferred shares can be converted into ordinary shares of respective subsidiary where the number of shares to be issued is fixed, the conversion right is recognised as equity component. The redemption obligations embedded in these preferred shares, which are settled by cash, give rise to financial liabilities, which are measured at the highest of those amounts that could be payable, and on a present value basis. If the redemption obligations are undertaken by the issuer itself, the subsequent changes of liabilities under amortised costs are recognised in profit or loss directly. If the redemption obligations are undertaken by the parent of the issuer, in the consolidated financial statements of the Group, management recognise the subsequent changes of such liabilities in equity.

Movements of the share repurchase obligations arising from these preferred shares are as follows:

	Series B preferred shares issued by MP CardioFlow *US$'000*	**Series C and series D preferred shares issued by MP CardioFlow** *US$'000*	**Preferred shares issued by CRM Cayman** *US$'000*	**Preferred shares issued by MP NeuroTech** *US$'000*	**Total** *US$'000*
As at 1 January 2021	**98,020**	**195,875**	**69,062**	**–**	**362,957**
Issuance during the year, net of transaction costs (a)	**–**	**–**	**90,174**	**27,200**	**117,374**
Reclassification and re-designation of preferred shares from ordinary shares of a subsidiary (a)	**–**	**–**	**–**	**103,112**	**103,112**
Exercise of the Series D Adjustment	**–**	**9,445**	**–**	**–**	**9,445**
Conversion of the preferred shares into ordinary shares of a subsidiary (b)	**(98,855)**	**(207,888)**	**–**	**–**	**(306,743)**
Exchange of the convertible bonds and the preferred shares issued by a subsidiary (a)	**–**	**–**	**–**	**60,812**	**60,812**
Charge to equity	**835**	**–**	**–**	**–**	**835**
Charge to finance costs	**–**	**2,568**	**12,494**	**3,049**	**18,111**
As at 31 December 2021 (c)	**–**	**–**	**171,730**	**194,173**	**365,903**
Representing					
Non-current portion	**–**	**–**	**171,730**	**194,173**	**365,903**

(a) In July 2021, CRM Cayman issued 13,424,211 voting redeemable series C preferred shares (the "CRM Series C Preferred Shares") to certain third-party investors at cash consideration of US$103,000,000.

In November 2021, MP NeuroTech completed its series A financing and issued (i) 11,759,125 series A-1 preferred shares upon the exchange of convertible bonds issued by a MP NeuroTech, (ii) 2,032,495 series A-2 preferred shares at a cash consideration of US$31,260,000 and (iii) 7,720,432 series A-2 preferred shares upon the reclassification and redesignation from the ordinary shares of MP NeuroTech.

(b) The series B, series C and series D preferred shares issued by MP CardioFlow was recognised as liabilities of the Group as at 31 December 2020. Following the completion of the CardioFlow Listing, in February 2021, the series B, series C and series D preferred shares issued by MP CardioFlow were automatically converted into ordinary shares of MP CardioFlow. Accordingly, the series B, series C and series D preferred shares issued by MP CardioFlow were reclassified from liabilities to equity.

(c) As at 31 December 2021, the balance of share repurchase obligations represented the redemption obligations arising from (i) series B preferred shares and series C preferred shares issued by CRM Cayman; and (ii) series A-1 and series A-2 preferred shares issued by MP NeuroTech.

(iii) The Group provided a financial guarantee to Oxford Finance LLC in respect of the senior debts of an investee that was disposed in 2020. As at 31 December 2021, the balance of expected credit losses arising from the guarantee is US$13,000,000 (2020: US$13,000,000).

11 Interest-bearing borrowings

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

	2021	2020
	US$'000	*US$'000*
Within 1 year or on demand	**94,746**	10,891
After 1 year but within 2 years	**33,545**	73,526
After 2 years but within 5 years	**155,714**	75,092
After 5 years	**80,378**	33,370
	269,637	181,988
	364,383	192,879

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

	2021	2020
	US$'000	*US$'000*
Bank loans		
– secured	**131,176**	98,982
– unsecured	**233,207**	93,897
	364,383	192,879

At 31 December 2021, the bank facilities drawn down by the Group of US$71,283,000 (2020: US$98,982,000) were secured by right-of-use assets and buildings held for own use with net book value of US$9,173,000 and US$91,984,000, respectively (2020: right-of-use assets and buildings held for own use with net book value of US$4,187,000 and US$50,239,000, respectively).

At 31 December 2021, bank loans amounting to US$10,352,000 and US$34,249,000 in connection with the acquisition of Kerui Pharma and Suzhou Argus note 14 were secured by the equity interests in Kerui Pharma and Suzhou Argus held by the Group, respectively.

At 31 December 2021, a bank loan amounting to US$15,292,000 in connection with the capital contribution to MicroPort Vision Power MedTech (Shanghai) Co., Ltd. ("MP Vision", a subsidiary of the Group) were secured by the equity interests in MP Vision held by the Group.

Part of the Group's banking facilities are subject to the fulfilment of covenants relating to certain of the Group's financial ratios, as are commonly found in lending arrangements with financial institutions. If the Group were to breach the covenants the drawn down facilities would become payable on demand. As at 31 December 2021 and 2020, none of the covenants relating to drawn down facilities had been breached.

12 Dividends

At the meeting of the board of directors held on 30 March 2021, the board of directors recommended the payment of a final dividend of HK4.3 cents (2020: HK5.3 cents) per ordinary share of the Company for the year ended 31 December 2020 (the "2020 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 2020 Final Dividend totalling US$10,064,000 was approved at the annual general meeting of the Company held on 24 June 2021 and is payable to shareholders of the Company whose names appeared on the register of members of the Company on 5 July 2021.

13 Share capital

(i) Ordinary shares

	2021		2020	
	Number of shares	**Amount**	Number of shares	Amount
	'000	***US$'000***	*'000*	*US$'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	**1,809,540**	**18**	1,622,778	16
Share issued upon a placing	**–**	**–**	65,958	1
Shares issued under share option plans	**10,702**	**–**	23,021	–
Shares issued in lieu of cash dividends	**509**	**–**	1,834	–
Shares issued in respect of conversion of convertible bonds	**–**	**–**	95,949	1
At 31 December	**1,820,751**	**18**	1,809,540	18

The holders of ordinary shares are entitled to receive dividends as declared from time to time and are entitled to one vote per share at meetings of the Company. All ordinary shares rank equally with regard to the Company's residual assets.

(ii) Purchase of own shares

During the year ended 31 December 2021, the Company purchased its own ordinary shares on The Stock Exchange of Hong Kong Limited under the share award scheme follows:

Month/year	No. of shares repurchased	Highest price paid per share *US$*	Lowest price paid per share *US$'000*	Aggregate considerations paid *US$'000*
April 2021	4,195,000	6.22	6.20	26,035
September 2021	2,070,800	6.40	6.00	12,817
	6,265,800			38,852

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

During the year ended 31 December 2021, the trustee under a long-term benefit plan (note 6(b)) purchased 172,000 ordinary shares of the Company at a cash consideration of US$1,527,000. These shares are treated as plan assets and carried at fair value with reference to the share price of ordinary shares of the Company, which are presented as a deduction of non-current defined benefit obligation.

(iii) Shares issued under the share option plans

During the year ended 31 December 2021, 10,702,263 (2020: 23,021,310) share options were exercised to subscribe for 10,702,263 (2020: 23,021,310) ordinary shares in the Company at a total consideration of US$7,455,000 (2020: US$10,976,000), of which nil (2020: nil) and US$7,455,000 (2020: US$10,976,000) was credited to share capital and share premium, respectively. In addition, an amount of US$2,116,000 (2020: US$3,841,000) was transferred from the capital reserve to the share premium account.

14 Acquisition of subsidiaries

(a) Hemovent GmbH ("Hemovent")

In August 2021, the Company, MicroPort Surgical B.V. ("Surgical BV", a subsidiary of the Company incorporated in the Netherlands) and the original shareholders of Hemovent entered into an agreement on the sale and transfer of shares in Hemovent (the "Hemovent SPA"), pursuant to which, Surgical BV conditionally agreed to acquire the entire issued share capital of Hemovent from the original shareholders of Hemovent at the initial cash consideration of EUR88 million and contingent consideration of EUR35 million upon Hemovent reaching certain milestones and conditions within 5 years from the closing date. Hemovent is a Germany-based medical device company engaged in innovative extracorporeal life support system. The Group believe that the acquisition of Hemovent can leverage the strengths of both parties in terms of industry resources, industry experience and product development to accelerate the research and development, production and commercialisation of relevant products.

On 12 October 2021, Surgical BV and the original shareholders of Hemovent signed the closing confirmation letter, pursuant to which, the acquisition was completed on that day and Surgical BV acquired the entire shares in Hemovent, granting it control over Hemovent thereon.

The Group has included EUR35 million (equivalent to US$40,429,000) as contingent consideration related to the additional consideration, which represents its fair value at the date of the acquisition based on the management expectation of Hemovent achieving the milestones and conditions. The contingent consideration is subsequently measured at fair value with changes charged into profit or loss. As at 31 December 2021, the fair value of the contingent consideration is US$39,633,000.

(b) Fujian Kerui Pharmaceutical Co., Ltd. ("Kerui Pharma")

In September 2021, Shanghai MicroPort entered into a share transfer agreement (the "Kerui Agreement") with 618 Equity Investment and Fujian Tendering and Procurement Group Co., Ltd. (together, the "Kerui Vendors"), pursuant to which, Shanghai MicroPort agreed to acquire and the Kerui Vendors agree to sell 45% equity interests in Kerui Pharma held by the Kerui Vendors to Shanghai MicroPort at the cash consideration approximately RMB111 million. Meanwhile, Shanghai MicroPort, through the Kerui Concert Agreement, obtained the control of the daily operation of Kerui Phara. The acquisition of Kerui Pharma was completed on 1 November 2021.

Kerui Pharma is a national high-tech enterprise engaged in the research and development, production and sales of fermentation-based APIs. The directors believe that the acquisition of Kerui Pharma will help to achieve alliance with Kerui Pharma and is foundational to build drug-device combination technology platform under the Group.

(c) Suzhou MicroPort Argus Medtech Co., Ltd. ("Suzhou Argus")

On 29 October 2021, MicroPort Sinica Co., Ltd. ("MP Sinica"), a wholly-owned subsidiary of the Company, entered into an equity transfer and capital increase agreement with Suzhou Argus and its existing shareholders (the "Argus Agreement"), pursuant to which, MP Sinica (i) acquired 38.33% equity interest in Suzhou Argus held by certain of its existing shareholders (the "Argus Sellers") and (ii) make additional contribution to the registered capital of Suzhou Argus for a total consideration of RMB372.3 million.

Upon the completion of the above transaction on 30 December 2021, the Group held 51% equity interests in Suzhou Argus and therefore obtained the control of Suzhou Argus. Suzhou Argus is principally engaged in the business of design, development and sale of solutions for intravascular optical coherence tomography systems. The acquisition of Suzhou Argus will further improve the Group's integrated precision diagnosis and treatment solutions relating to coronary vascular diseases.

As at 31 December 2021, the Group has outstanding consideration payables of RMB5,000,000 (equivalent to US$784,000) due to one of the Argus Sellers, which, in accordance with the Argus Agreement, is expected to be settled before 1 July 2022.

Pursuant to the Argus Agreement, MP Sinica has been granted a call option (the "Argus Call Option") to acquire entire or part of equity interests in Suzhou Argus held by the non-controlling shareholders of Suzhou Argus at the exercise price based on the predetermined formula linked to the status of Suzhou Argus' achievement of the milestones specified in the Argus Agreement (the "Option Milestones") and other factors. The Argus Call Option can be exercised on or before 30 June 2025 and upon the exercise of the Argus Call Option, MP Sinica shall pay its consideration in cash or with the unanimous approval from MP Sinica and person designated by the non-controlling shareholders of Suzhou Argus, in combination with shares of a designated subsidiary of the Group.

The Argus Call Option is considered to be classified as a derivative financial asset which was measured at fair value on initial recognition. The initial fair value of the Argus Call Option amounting to US$4,963,000 forms parts of consideration paid in the acquisition of Suzhou Argus.

(d) Identifiable assets acquired and liabilities assumed

Details of the provisional fair value of identifiable assets acquired and liabilities assumed at each date of acquisition are summary as follows:

	Hemovent	Kerui Pharma	Suzhou Argus	Total
	US$'000	*US$'000*	*US$'000*	*US$'000*
Provisional fair value of net identifiable assets				
Property, plant and equipment	1,320	4,597	257	6,174
Intangible assets	48,976	9,202	45,448	103,626
Inventories	1,045	1,675	3,491	6,211
Trade and other receivables	201	471	1,489	2,161
Cash and cash equivalents	305	9,660	22,463	32,428
Trade and other payables	(724)	(743)	(1,453)	(2,920)
Time deposits	–	6,259	–	6,259
Income tax payable	–	–	–	–
Deferred tax liabilities	(14,679)	(1,647)	(6,817)	(23,143)
Total identifiable net assets acquired	36,444	29,474	64,878	130,796
Goodwill	105,634	4,108	20,339	130,081
	142,078	33,582	85,217	260,877
Consideration including:				
Cash considerations	101,649	17,371	58,394	177,414
Fair value of contingent consideration	40,429	–	40,429	47,997
Less: Argus call option acquired	–	–	(4,963)	(4,963)
Total consideration of acquisition of subsidiaries	142,078	17,371	53,431	212,880
Add: Non-controlling interest	–	16,211	31,786	47,997
	142,078	33,582	85,217	260,877
Reconciliation of cash outflow				
Cash considerations	101,649	17,371	58,394	177,414
Less: cash and cash equivalent acquired	(305)	(9,660)	(22,463)	(32,428)
Less: unpaid balances *(note 14(c))*	–	–	(784)	(784)
Net cash outflow arising from the acquisitions of subsidiaries	101,344	7,711	35,147	144,202

The valuation techniques used for measuring the fair value of material assets were as follows:

Assets acquired	Valuation technique
Property, plant and equipment	*Market comparison technique:* The valuation model considers market prices for similar items.
Intangible assets	*Relief-from-royalty method and multi-period excess earnings method:* The relief-from-royalty method considers the discounted estimated royalty payments that are expected to be avoided as a result of the patents being owned. The multi-period excess earnings method considers the present value of net cash flows expected to be generated by the underlying intangible assets, by excluding any cash flows related to contributory assets.

The fair value of identifiable net assets, which primarily include technology and customer relationships, has been measured provisionally, pending completion of an independent valuation. If new information obtained within one year of the respective date of acquisition about the facts and circumstances that existed at the respective date of acquisition identifies adjustments to the above amounts, or any additional provisions that existed at the respective date of acquisition, then the accounting for these acquisitions may be revised.

(e) Post-combination financial information

For the period from the respective dates of the acquisitions to 31 December 2021, Hemovent, Kerui Pharma and Suzhou Argus aggregately contributed revenue of US$1,474,000 and loss of US$1,927,000 to the Group's results. Had these acquisitions occurred on 1 January 2021, management estimates that consolidated revenue would have been US$784,162,000 and consolidated loss for the year ended 31 December 2021 would have been US$360,241,000. In determining these amounts, management has assumed that the fair value adjustments, determined provisionally, that arose on the respective date of acquisition would have been the same if these acquisitions had occurred on 1 January 2021.

15 Disposal/dilution of interests in subsidiaries

(a) AccuPath Medical (Jiaxing) Co., Ltd. ("AccuPath")

In January 2021, AccuPath, a wholly-owned subsidiary of the Group, together with its original shareholders entered into a capital increase agreement with Hopeway Biotech and certain partnership firms whose limited partners consisted of employees of the Group, pursuant to which, Hopeway Biotech and these partnership firms agreed to subscribe for 27.89% and 24.74% of enlarged share capital of AccuPath at a cash consideration of RMB53 million and RMB47 million, respectively (the "AccuPath Disposal").

The Group's equity interest in AccuPath decreased from 100.00% as at 31 December 2020 to 47.37% upon the completion of the AccuPath Disposal.

The transaction was accounted for as a deemed disposal of AccuPath with a gain of US$8,218,000 recognised in profit or loss for the year ended 31 December 2021 and the Group's remaining interests in AccuPath were recognised as an investment in equity-accounted investee. A reconciliation of such gain of disposal of AccuPath is set out below:

	As at the date of the disposal *US$'000*
Fair value of remaining equity interests in AccuPath	13,908
Less: Net assets of AccuPath	(5,690)
Gain on disposal of AccuPath	8,218

(b) MP CardioFlow

In February 2021, MP CardioFlow was listed on the Main Board of the Stock Exchange of Hong Kong Limited (the "HKEx Main Board") and issued a total of 236,463,000 ordinary shares (including the exercise of over-allotment options) at the price of HK$12.2 per share.

The Group's equity interest in MP CardioFlow decreased from 63.59% as at 31 December 2020 to 44.92% upon the completion of the CardioFlow Listing.

The management believe the Group retains its control over MP CardioFlow. Accordingly, the amount of US$264,776,000, being the difference between (i) the sum of the net proceeds received from the CardioFlow Listing and CardioFlow Over-allotment of US$357,069,000 and the carrying amount of share repurchase obligation of US$207,888,000, and (ii) the carrying amount of net assets in the proportion of the deemed disposed equity interests in MP CardioFlow as at the date of disposal was credited to capital reserve of the Group.

(c) MP MedBot

In November 2021, MP MedBot was listed on the HKEx Main Board and issued a total of 41,630,000 H shares (including the exercise of over-allotment options) at the price of HK$43.2 per share (the "MedBot Listing").

The Group's equity interest in MP MedBot decreased from 53.75% to 50.47% upon the completion of the MedBot Listing in 2021.

The amount of US$108,305,000, being the difference between (i) the sum of the net proceeds received from the MedBot Listing and MedBot Over-allotment of US$221,777,000 and (ii) the carrying amount of net assets in the proportion of the deemed disposed equity interests in MP MedBot as at the date of disposal was credited to capital reserve of the Group.

(d) MP NeuroTech

In November 2021, MP NeuroTech and several investors (the "NeuroTech Investors") entered into a share subscription and purchase agreement, pursuant to which, (i) the NeuroTech Investors subscribed for an aggregate of 2,032,495 newly issued series A-2 preferred shares of MP NeuroTech (the "NT Series A-2 Shares") at an aggregated consideration of approximately US$31,256,000; and (ii) MicroPort Scientific Investment LTD, a wholly-owned subsidiary of the Company, transferred 7,720,432 ordinary shares of MP NeuroTech it held to the NeuroTech Investors at a consideration of approximately US$118,740,000, whereby the transferred shares were reclassified and re-designated as NT Series A-2 Shares.

Upon the completion of the above transactions and the Bond Exchange, the Group's voting right in MP NeuroTech were diluted to approximately 54.64% and the Group retained the control over MP NeuroTech.

Such disposal of partial equity interest in MP NeuroTech was treated as a transaction within its shareholders in their capacity as equity holders. Hence, the amount of US$22,623,000, being the gains on the disposal of equity interests in MP NeuroTech and net of the direct tax effects relating to the disposal equity interests in MP NeuroTech of US$11,354,000, was credited to capital reserve of the Group.

BUSINESS OVERVIEW

OVERVIEW

In 2021, as the COVID-19 pandemic continued to spread worldwide and kept evolving with more infectious variants, the global economy struggled to recover in an imbalance condition. In China, with the epidemic prevention and control entering the stage of normalisation and precision, the economy has gradually recovered while maintaining an overall growth, and outpatient visits and surgeries in medical institutions have also recovered to near pre-pandemic levels.

In China, with the focus on "Linkage of Three Medical Systems" regarding medical treatment, medical insurance and medicines, the medical system reform continued to proceed and deepen, aiming to achieve the "high-quality development". While the reform is redefining the industrial layout and operating environment, medical device companies are encouraged to increase their ability of continuous innovation and quality & brand construction. The successively issued *14th Five-Year Plan for National Medical Insurance* (《「十四五」全民醫療保障規劃》) and *14th Five-Year Plan for the Development of Medical Equipment Industry* (《「十四五」醫療裝備產業發展規劃》) are focused on improving the ability of providing medical and health service to the society with the large aging population, and accelerating the breakthrough of original and leading medical equipment in key areas such as treatment equipment, monitoring and life support equipment, health care and rehabilitation equipment and active intervention equipment. The above-mentioned plans also emphasize on improving the review and approval mechanism of innovative medical devices, in order to build a brand new and all-round life cycle medical equipment development system for the whole population. During the Reporting Period, the Regulations on the Supervision and Administration of Medical Devices (《醫療器械監督管理條例》) revised by the State Council was officially implemented, which would effectively strengthen the quality management of medical devices in the whole life cycle. During the Reporting Period, the first national volume-based procurement ("**VBP**") of coronary stents was implemented, followed by the issuance of the national VBP policy of artificial joints, marking the normalisation and institutionalisation of the VBP reform. The procurement rules and supporting policies of the VBP continued to be optimized, in order to advance the market-oriented pricing mechanism. Meanwhile, the reform of medical service prices has been steadily pushed forward, with the purpose of optimising the allocation of medical resources, promoting the refinement and standardized management of medical services, and driving the medical industry into the track of the high-quality development. The establishment of various policies aim to guide Chinese medical device companies to improve their capacity to apply the technology innovations and realize the large-scale and intelligent production, successfully developing real "intelligently made-in-China" brands in subdivided fields.

In the overseas market, the international trade situation has become more complex and ever-changing under the impact of the epidemic. The market entry barriers in most areas, especially the developed countries and regions, are becoming stricter, and the requirements for the technical parameters and clinical evidence of medical devices are more and more stringent. As such, only those enterprises equipped with innovative research and development ("R&D") capability, long-term clinical records, diversified product portfolio and mature sales channels, are able to build their brand recognition globally amongst the increasingly fierce competition, and to establish a solid presence in the international market by providing universal access to high-quality medical solutions in multiple disease areas.

In terms of reportable segments based on financial reporting, the Group has eight major business segments: cardiovascular devices, orthopedics devices, CRM, endovascular and peripheral vascular devices, neurovascular devices, heart valve, surgical robot and surgical devices. At the end of the Reporting Period, the Group (also through its associated companies) held more than 6,800 patents (including applications) around the world, covering over 20,000 hospitals in more than 80 countries and regions. The Group also offered nearly 300 medical solutions to patients around the world, covering the circulatory system, nervous system, exercise system, endocrine system, urinary system and reproductive system. As the world's leading innovative high-end medical device enterprise, the Group continues to promote the rapid development of global business and spare no effort to invest in research and development. During the Reporting Period, multiple innovative products were approved for marketing in the domestic and overseas markets, providing steady driving forces for the high-quality and sustainable growth of future business.

During the Reporting Period, the Group achieved a revenue of US$778.6 million, representing an increase of 15.0% (excluding the foreign exchange impact) as compared to last year, of which, the revenue from international (non-China) business was US$421.6 million, representing an improvement of 15.1% (excluding the foreign exchange impact) as compared to last year. Particularly, the revenue in South America, European, Middle East and Africa (collectively, the "EMEA"), and North America recorded growth of 29.9%、16.8% and 6.7% (excluding the foreign exchange impact) as compared to last year, respectively. Excluding the contribution from the orthopedics and the CRM business, the international (non-China) business recorded a revenue growth of 25.8% (excluding the foreign exchange impact) as compared to last year.

It is encouraging that the heart valve business, the neurovascular devices business and the endovascular and peripheral vascular devices business of the Group all recorded rapid growth in revenue, representing an increase of 93.2%, 72.5% and 45.6% (excluding the foreign exchange impact) respectively as compared to last year. The Group recorded a net loss for the Reporting Period of US$351.3 million (loss attributable to equity shareholders of the Group: US$276.5 million).

During the Reporting Period, the Group raised approximately US$689 million from the issuance of convertible bonds, and approximately US$579 million in total from the spin-off listings of the heart valve business and the surgical robot business. In addition, the CRM business and the neurovascular devices business raised accumulative US$300 million from equity financing. The above financing will enable the Group to accelerate the R&D and commercialisation progress of its innovative products to satisfy the urgent clinical demand of physicians and patients globally.

MicroPort CardioFlow Medtech Corporation ("CardioFlow") (stock code: 02160) was successfully listed on the Main Board of the Stock Exchange of Hong Kong Limited ("Hong Kong Stock Exchange") on 4 February 2021 and became the second subsidiary of the Group to accomplish a spin-off listing.

Shanghai MicroPort MedBot (Group) Co., Ltd. (上海微創醫療機器人(集團)股份有限公司) ("MicroPort MedBot") (stock code: 02252) was successfully listed on the Main Board of the Hong Kong Stock Exchange on 2 November 2021 and became the third subsidiary of the Group to accomplish a spin-off listing.

MicroPort NeuroTech Limited (微創腦科學有限公司) ("MicroPort NeuroTech", a 54.64%-owned subsidiary of the Company as of the date of this announcement) is seeking a proposed listing on the Main Board of the Hong Kong Stock Exchange. The listing application of MicroPort NeuroTech was submitted to the Hong Kong Stock Exchange on 28 December 2021.

Shanghai MicroPort EP MedTech Co., Ltd. (上海微創電生理醫療科技股份有限公司) ("EP", a 38.49%-owned associated company of the Company as of the date of this announcement) is seeking a proposed listing on the Sci-Tech Innovation Board of the Shanghai Stock Exchange. The listing application of EP was accepted by the Shanghai Stock Exchange on 30 June 2021.

Cardiovascular Devices Business

The cardiovascular devices business is committed to offering products and services for the treatment of coronary artery-related diseases, as well as developing, manufacturing and commercializing industry leading coronary stents and the related delivery systems, along with balloon catheters and accessories, to provide integrated, precise and intelligent all-round coronary heart disease treatment solutions to doctors and patients around the world.

This business segment has four drug eluting stents and four balloon products on sale in over 36 countries and regions around the world, being a leader in the global coronary interventional precise treatment area. During the Reporting Period, the Group's cardiovascular devices business recorded a revenue of US$139.5 million, representing a decrease of 10.8% (excluding the foreign exchange impact) as compared to last year. This decrease is due to the decline in the price of coronary stents as a result of the VBP in the PRC. Balloon and accessories products achieved global sales revenue of US$24.5 million, representing a significant increase of 47.5% over the previous year.

With the expansion of the global aging population base, the incidence of cardiovascular disease is rising rapidly and has become a worldwide public health problem. The overall demand for coronary interventional therapy around the globe will maintain a steady growth trend. In terms of the number of surgeries, China is the world's largest market for percutaneous coronary interventional surgery (the "PCI surgery"). However, it still lags behind the developed countries such as European countries, the United States ("USA") and Japan in terms of PCI surgery penetration rate (number of surgeries per million population). Benefiting from the advancement of the construction of Chinese hierarchical medical system, primary hospitals continue to improve their medical technical capacity and quality in surgical treatment, further promoting the penetration of PCI surgeries in lower-tier regions. In addition, the development trend of PCI precision treatment, which is based on intracavity imaging technology, robot-assisted surgery and artificial intelligence, will also contribute to the constant market growth of coronary intervention treatment.

During the Reporting Period, the VBP of coronary stents was officially implemented, fully releasing the demand of the related clinical services. The global sales volume of the Group's coronary stents amounted to 1.22 million sets, representing an increase of 132.0% as compared to last year, with market share ranking to the world's top two and Chinese top one in terms of sales volume. With the support of the large-scale digitalised production and supply chain capacity, the Group had overfulfilled the sales of guaranteed purchase volume of the two bid-winning products ahead of schedule, namely Firebird2® Rapamycin Eluting Coronary CoCr Stent System ("Firebird2®") and Firekingfisher™ Rapamycin Eluting Coronary CoCr Stent System ("Firekingfisher™"). While fully undertaking our social responsibilities and satisfying patients' needs, we have also significantly expanded the market share and enhanced the penetration rate. During the Reporting Period, drug-eluting stent products newly penetrated about 610 hospitals, with a cumulative penetration of about 2,900 hospitals. Among which, Firehawk® ("Firehawk®") newly penetrated about 200 hospitals; balloon products newly penetrated about 455 hospitals, with a cumulative penetration of about 1,250 hospitals. The "Swallow Program", which focuses on serving the needs of patients in the primary markets, has penetrated over 1,400 county hospitals across the country, saving more than 100,000 patients during the Reporting Period, with a cumulative total of nearly 200,000 patients. Through independent R&D and external cooperation, the Group continues to strengthen the multiple layout of vascular interventional imaging products. After obtaining the registration certificate from the National Medical Products Administration ("NMPA") for our medical digital subtraction angiography ("DSA") system, a jointly developed China-made product with Siemens Medical, the Group strategically acquired the controlling interest of Suzhou Argus Medical Technology Corp., Ltd., a leader in intravascular Optical Coherence Tomography ("OCT") technology. We shall take advantage of the existing mature sales channels, services and clinical resources to promote the application of its OCT products and imaging technology in the global market, further complementing our integrated precision diagnosis and treatment solutions to pan-vascular diseases.

In the overseas markets, despite the significant decrease in the overall number of PCI surgeries due to the pandemic, with our constant cultivation of mature markets and exploration of emerging markets, the segment recorded revenue from overseas of approximately US$19.9 million during the Reporting Period, representing an increase of approximately 34.5% (excluding the foreign exchange impact) as compared to last year. In particular, the revenue in the EMEA and South America recorded year-on-year growth of 136.3% and 17.8% (excluding the foreign exchange impact), respectively. During the Reporting Period, the Group's drug-eluting stents obtained 14 initial registrations in 12 countries or regions, and have been approved for marketing in a total of 36 countries or regions. Balloon products obtained 13 initial registrations in 7 countries or regions, and have been approved for marketing in a total of 29 countries or regions and launched to the market for the first time in various overseas markets such as Singapore, Israel, Mexico, Columbia and Kazakhstan. In Turkey, benefited from the establishment of a new subsidiary with a localised marketing team, and the successive winning of government and hospital tenders, MicroPort® products have already penetrated into more than half of the local public and private hospitals. In the Indian market, which sees the third largest number of PCI cases in the globe, the Group has successfully launched Firehawk IN™ as its first locally manufactured coronary stent in overseas market, and realised the first batch of commercial sales. Leveraging on our high-quality product portfolio, combined with the strong local business channels and manufacturing expertise of the joint venture, we will further penetrate the Indian market. During the Reporting Period, the Group established

headquarters for the Americas in Southern California, USA, and commenced the construction of Southern California Innovation Center and Intelligent Manufacturing Base, which will further improve our global supply chain system and accelerate the clinical registration and commercialization processes of multiple innovative products in the North America, especially the new generation of rapamycin target eluting coronary stent system Firehawk Liberty®.

Orthopedics Devices Business

The orthopedics devices business offers an extensive range of orthopedics products that include reconstructive joints, spine and trauma, and other professional implants and instruments.

During the Reporting Period, the Group's global orthopedics devices business recorded a revenue of US$215.6 million, representing an increase of 5.1% (excluding the foreign exchange impact) as compared to the previous year. The Group continued to integrate its resources to facilitate the in-depth cooperation between the domestic and overseas R&D and supply chain teams to actively provide a diversified portfolio of orthopedics implants and instruments around the world, as well as to enhance efficiency and reduce costs. During the Reporting Period, the loss for the orthopedics devices business was substantially reduced by 57.3%.

During the Reporting Period, the international (non-China) orthopedics business recorded a revenue of US$193.3 million, representing an increase of 11.8% (excluding the foreign exchange impact) as compared to last year. Impacted by the pandemic, the overall demand of surgeries in the overseas markets has not yet returned to the pre-pandemic level, but some of the major markets have achieved significant increase in revenue. Regionally, the revenue in EMEA achieved a year-on-year increase of 27.6% (excluding the foreign exchange impact), while the revenue in USA recorded a year-on-year increase of 6.7% (excluding the foreign exchange impact). Japan, one of the direct sales markets, recorded a year-on-year increase in revenue of 6.7% (excluding the foreign exchange impact). During the Reporting Period, the Prime® 3D printed acetabular cup system, the first product developed with additive manufacturing (3D printing) technology, was approved for marketing and completed its first clinical implantation in USA. The unique microporous structure of this technology is similar to the trabecular structure of human's cancellous bone, as such it can enhance the friction of acetabular cup and effectively facilitate bone fusion. While improving the stability and comfort of the implants, the 3D printing technology can also significantly reduce the unit cost of production and therefore meet the needs of large-scale production. In addition, various new products, including the Procotyl® P revision multi-hole acetabular cup system and augments, the Dynasty® dual-mobility cup system and the Prime® multi-hole acetabular cup system were launched to the market during the Reporting Period, further enriching the orthopedics product portfolio and enhancing the competitiveness in the international market. As for decreasing cost and improving efficiency, the Group has fully integrated the global supply chain capacity of the orthopedics business and strengthened the cross border collaboration. We have also relocated part of overseas manufacturing processes and capacities to the PRC and initiated a number of cost control projects, and thereby highly improved the production efficiency.

During the Reporting Period, the orthopedics devices business in the PRC recorded a revenue of US$22.4 million, representing a decrease of 31.7% (excluding the foreign exchange impact) as compared to last year, mainly due to the decrease in relevant orders after the issuance of the VBP policy for artificial joints. For the joint reconstruction business, backed by the long-term and reliable clinical verification data and excellent quality, both of our hip and knee joint products won bids in the state-organised VBP, significantly increasing our market share and penetration rate. During the Reporting Period, products newly entered over 700 hospitals nationwide, bringing the total coverage to more than 1,400 hospitals. The number of our cooperative distributors also hit a record high. Relying on the industry-leading intelligent manufacturing and innovative design capabilities, the Group has actively expanded its production capacity to meet the needs of the VBP. Meanwhile, we consolidate the foundamental research capacities and technical platforms, so as to comprehensively enhance our product portfolio of joints, intelligent auxiliary instruments and other market segment products. Through carrying out medical education and product marketing activities, we are committed to providing more clinical needs-oriented accessible medical solutions for the precision diagnosis and treatment to the patients with osteoarticular diseases in China. During the Reporting Period, the Group was fully engaged in the 14th Five-Year Plan National Key R&D Projects related to total knee replacement, and served as the unit-in-charge of sub-projects. Moreover, the Group's originally-developed Advance® Medial-Pivot Knee System was assigned the highest rating of "15A" by the ODEP (Orthopedic Data Evaluation Panel), an authoritative rating agency in the global orthopedics industry, being the only PRC enterprise with such rating so far. In terms of spine and trauma business, the revenue recorded during the Reporting Period amounted to US$5.5 million, representing a significant increase of 47.4% (excluding the foreign exchange impact) as compared to last year. Our trauma products won the bids in the VBP of twelve provinces league, achieving a great breakthrough in the expansion of sales channels. Through the establishment of intelligent manufacturing and paperless circulation system, the production capacity of orthopedic instruments has been significantly improved, hence further strengthening the scale advantage and reducing the production cost.

CRM Business

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

During the Reporting Period, the CRM business recorded a revenue of US$220.4 million, representing an increase of 18.8% (excluding the foreign exchange impact) as compared to last year, mainly due to the rapid growth of sales volume of newly launched products.

During the Reporting Period, the international (non-China) CRM business recorded a revenue of US$206.8 million, representing an increase of 17.2% (excluding the foreign exchange impact) as compared to last year. As the COVID-19 pandemic continued to spread and remained volatile, the production and operation activities in most overseas countries and regions have not yet completely returned to normal. However, through the unremitting efforts of the business team, we have achieved a substantial year-on-year revenue growth of 127.2% in Japan, a high-margin market with direct-sales model, and a year-on-year revenue growth of 13.3% (excluding the foreign exchange impact) in EMEA. As for the products commercialisation, implantable pacemakers Alizea™ and Borea™, and SmartView Connect™ home monitor, all equipped with Bluetooth® technology, have obtained the CE Markings and launched to the European market. The Alizea™ Bluetooth® pacemaker was also approved for marketing in Japan in early 2022. With their convenient remote monitoring functions, these products will effectively relieve the burden of the local medical system amid the epidemic. The Group's self-developed Ulys™, Edis™ and Gali™ defibrillators obtained CE Markings and were launched to the European market during the Reporting Period, and their MRI-compatible versions have submitted the application for CE Markings. Meanwhile, NAVIGO™ 4LV ARC and NAVIGO™ 4LV 2D, a new range of left ventricular pacing leads, have obtained CE Markings. These NAVIGO™ can be used in conjunction with Gali™, our latest implantable defibrillator featuring cardiac resynchronization (CRT-D), further enriching our product line to meet the diversified needs of patients.

During the Reporting Period, the CRM business in the PRC recorded a revenue of US$13.6 million, representing an increase of 53.7% (excluding the foreign exchange impact) as compared to last year. Our products have already covered over 920 hospitals in total across the country, and newly penetrated about 230 hospitals in various provinces and cities during the Reporting Period. As the first made-in-China pacemaker product with the world's leading quality that can perfectly fit the local needs in China, the "Rega series" implantable pacemakers have completed over 10,000 implantations accumulatively since their launch in 2018. The brand recognition and influence of our made-in-China pacemakers have been continuously strengthened, substantially solidifying our leading position with the largest market share among domestic players. In order to satisfy the huge clinical demands of domestic patients in the primary market, the Group has also made great efforts to explore the market of county-level hospitals and promote the cardiac pacemaker implantation surgeries to further penetrate into the primary medical institutions.

Endovascular and Peripheral Vascular Devices Business

The endovascular and peripheral vascular devices business provides 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.

During the Reporting Period, the endovascular and peripheral vascular devices business achieved a revenue of US$106.0 million, representing an increase of 45.6% (excluding the foreign exchange impact) as compared to last year. The increase was mainly attributable to the rapid revenue growth from innovative products approved and launched in recent years. As for the aortic products, the Castor® Branched Aortic Stent Graft System ("Castor®"), being the world's first branched aortic stent graft and delivery system, has achieved continuous growth in sales, and has penetrated in over 700 hospitals in aggregate as of the date of this announcement. The clinical application article about Castor® was published in the renowned international medical journal Endovascular Today ("EVT") for the first time, demonstrating the wide recognition of its innovative characteristics by clinical experts. The Group's self-developed new generation abdominal aortic aneurysm and delivery system Minos® has substantially contributed to the growth of revenue, and has covered over 400 hospitals as of the date of this announcement across the country. Moreover, Reewarm® PTX Drug Balloon Dilation Catheter ("Reewarm®") has been applied in over 400 hospitals around the country since its launch in 2020, achieving a remarkable increase in market penetration.

In overseas market, the endovascular and peripheral vascular devices business achieved a substantial year-on-year revenue increase of over 100%. As at the end of the Reporting Period, our international business has covered 18 overseas markets with the expansion to European, South African and other Asia-Pacific countries and regions. During the Reporting Period, the first clinical implantation of Minos® Abdominal Aortic Aneurysm and Delivery System was successfully completed in Britain, Czech and Brazil, covering 12 overseas countries in total and obtained wide recognition. Hercules® Low Profile Aneurysm and Delivery System has been approved for marketing in India and the first implant was performed, marking the first debut in the Indian market for this business segment, and it has also completed the first clinical implantation in Britain, Switzerland, Greece and Turkey. The first clinical implantation of Castor® was successfully completed in Britain, Spain, Italy, Argentina, Brazil and German, laying a solid foundation for further exploring the overseas markets, which will allow our high-quality and inclusive "Chinese medical solutions" to benefit more patients around the world. With the aggregate five products with CE Markings for this sector, we will continue to enrich our product lines of the international business in the future to speed up our globalization layout.

Neurovascular Devices Business

The neurovascular devices business specialises in R&D, production and commercialisation of neurovascular therapeutic and access devices for neurovascular diseases, including hemorrhagic stroke, cerebral atherosclerotic stenosis and acute ischemic stroke.

During the Reporting Period, the neurovascular devices business recorded a revenue of US$59.1 million, representing an increase of 72.5% (excluding the foreign exchange impact) as compared to last year, which continue to maintain good profitability, mainly benefited from the rebound in surgeries after the normalisation of the epidemic prevention, the rapid hospital penetration of products and improvement in market share. As at the end of the Reporting Period, the Group has penetrated a total of approximately 2,200 hospitals, including all the top 100 hospitals as monthly ranked by China's National Stroke Center during the Reporting Period. The Eagle & Swallows program, which focuses on serving stroke patients in the primary market, has covered about 80 lower-tier cities and counties. By expanding clinical applications and deepening academic education, the Tubridge® Flow-Diverting Stent achieved rapid growth in sales. The world's first and only intracranial stent graft for treating cerebral vessel diseases, Willis® has adopted a differentiated marketing scheme to focus on the characterised and unique treatment sector. During the Reporting Period, Willis® has achieved a significant increase in revenue. Benefited from the application in stenosis cases during emergency thrombectomy, the implantation of APOLLO™ Intracranial Arterial Stent System has grown rapidly. Three products launched in 2020, namely the NUMEN® Coil Embolisation System and the NUMEN FR® Coil Detachment System (collectively, the "NUMEN® Coil Embolisation System"), the Bridge® Rapamycin Target Eluting Vertebral Artery Stent System ("Bridge®") and the U-track® Intracranial Support Catheter System have gained a fast-growing market share in key areas, bringing new impetus to the continuous growth of the segment and further solidifying the Group's leading position among domestic neurointerventional medical device companies.

As to the overseas market, the self-developed NUMEN® Coil Embolisation System of the Group was approved by the Ministry of Food and Drug Safety ("MFDS") in South Korea and the United States Food and Drug Administration ("FDA") respectively after obtaining the CE Marking. Besides, the overseas clinical implantation for NUMEN® Coil Embolisation System was successfully completed in Chile, marking the overseas commercialisation for this business segment. Currently, the Group has established local sales teams in Brazil, Japan and the United Kingdom to expand its global sales network. We also plan to establish local R&D and manufacturing facilities in USA to further build our global supply capabilities. Meanwhile, the Group initiated collaboration around the world to build an international innovation platform. In particular, the Group has established an strategic collaboration with Israel-based Rapid Medical. The "dual stent" product combination of the self-developed Neurohawk® Stent Thrombectomy Device ("Neurohawk®") and the Rapid Medical's Tigertriever® Revascularization Device ("Tigertriever®"), as the world's first adjustable stent retriever with full visualization, makes the Group the only Chinese company who has stent retrievers that are compatible with procedures in varying sizes of blood vessels. The self-developed NUMEN® Coil Embolization System, together with Comaneci® Embolization Assist Device, which has obtained FDA breakthrough device designation, will further enhance the Group's global commercial competitiveness in the field of coil embolization surgery. In addition, both parties will leverage each other's mature and accumulated experience in sales channels to drive the adoption of innovative neurovascular disease solutions in the global market.

Heart Valve Business

The Group's heart valve products include three in-house developed and commercialized products: VitaFlow® Transcatheter Aortic Valve Implantation and Delivery System ("VitaFlow®"), VitaFlow Liberty™ Transcatheter Aortic Valve Implantation and Retrievable Delivery System (VitaFlow Liberty™) (including the procedural accessories as their offerings), Alwide® Plus Balloon Catheter, and various transcatheter aortic valve implantation ("TAVI") products, transcatheter mitral valve ("TMV") products, transcatheter tricuspid valve ("TTV") products, surgical valve products and procedural accessories at different development stage.

During the Reporting Period, the heart valve business recorded a revenue of US$31.3 million, representing an increase of 93.2% (excluding the foreign exchange impact) as compared to last year, with a substantial year-on-year rise of 15 percentage points in gross profit margin to 59.1%. The Group constantly integrates its resources and advantages in the treatment of heart and cardiovascular diseases, aiming to fully unleash synergies in market development, medical education and international business, and accelerate the popularization of its innovative transcatheter and surgical treatment solutions to structural heart disease. Leveraging on their excellent clinical performance, the VitaFlow® series products have been widely recognised by physicians in the industry since their launch in 2019. Our TAVI products have successfully covered nearly 310 hospitals nationwide, with about 160 hospitals newly penetrated during the Reporting Period, securing the largest market share in several major hospitals, which further strengthened the Group's leading position in the heart valve sector. During the Reporting Period, the second generation TAVI product VitaFlow Liberty™ was approved by the NMPA for marketing, becoming the China-made electrical retrieval TAVI product approved with international competitiveness, leading China's TAVI industry into the electrical retrieval era. In order to further explore the primary market, the TAVI sales team has cooperated with the Cardiovascular sales team, the "Swallow Program" team and distributors in the screening, diagnosis and referral of potential patients, with numerous referred surgeries successfully completed during the Reporting Period.

For the overseas market, the VitaFlow Liberty™, being the only Chinese self-developed TAVI product that conducted clinical trials in Europe, formally submitted the application for the CE Marking during the Reporting Period, marking another important progress in the international layout. Following the first overseas commercial implantation of the VitaFlow® in Argentina, several TAVI surgeries have been successfully completed thereafter. The VitaFlow Liberty™ was also approved in Argentina during the Reporting Period, laying a solid foundation for the market expansion of interventional heart valve treatment in Latin America.

Surgical Robot Business

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

The Group is the only company in the global surgical robot industry with a product portfolio covering five major and fast-growing surgical specialties, namely laparoscopic, orthopedic, panvascular, natural orifice and percutaneous surgical procedures. During the Reporting Period, the surgical robot business realized a revenue for the first time, mainly contributed by the first commercialized product DFVision® 3D Electronic Laparoscope ("DFVision®"). One of the Group's flagship products, Toumai® Laparoscopic Surgical Robot ("Toumai®"), was approved for marketing at the beginning of 2022, being it the first four-arm laparoscopic robot approved for marketing developed by a Chinese company. The launch of Toumai® marks a major breakthrough in the field of Chinese laparoscopic surgical robots, which will rapidly improve the clinical performance of robotic surgery in China. Another flagship product, the Honghu Orthopedic Surgical Robot ("Honghu"), as the only Chinese-developed joint replacement surgical robot with a self-developed robotic arm, completed the registrational clinical trials for total knee arthroplasty (TKA), and has submitted the registration application to the NMPA and FDA respectively. On top of independent R&D, the joint R&D projects with the world's leading surgical robot companies, Robocath and Biobot, also proceeded well. The R-One™ Vascular Interventional Surgical Robot and the Mona Lisa Robotic Transperineal Prostate Biopsy System, both have launched the registrational clinical trails.

In terms of market cultivation, the Group continues to facilitate the promotion of high-quality medical resources to primary areas by providing various clinical training and comprehensive services. During the Reporting Period, we have established more than ten clinical application and training centers with several hospitals nationwide to provide high-quality one-stop services including technical training, customer service and clinical support. With our innovative training and demonstration methodologies such as mobile platforms, we will continue to promote the "intelligently made-in-China" surgical robots to support hospitals at all levels, aiming to benefit more patients with intelligent robot-assisted surgical technology.

Surgical Devices Business

The surgical devices business focuses on the extracorporeal circulation and occlusion series products used for congenital heart disease. These products include extracorporeal circulation series consumable products such as oxygenation system (artificial lungs), occlusion series products used in congenital heart disease treatment (atrial septal defect occluder and delivery system, ductus arteriosus occluder and delivery system, ventricle septal defect occluder and delivery system) and general surgical polypropylene herniorrhaphy series products.

During the Reporting Period, the surgical devices business recorded a revenue of US$4.7 million, representing an increase of 11.6% (excluding the foreign exchange impact) as compared to last year. In the overseas market, the suction tube product obtained the CE Marking, and the single-use arterial micro-embolic filter and venous cannulas were certified for commercialisation in Colombia. During the Reporting Period, the Group acquired 100% interest of Hemovent GmbH ("Hemovent"), a German company specializing in the development of Extracorporeal Life Support (ECLS) systems. Hemovent's core product MOBYBOX System, an extracorporeal membrane oxygenation ("ECMO") system, has already obtained CE Marking in the European Union. MOBYBOX® System is the world's first fully integrated ECMO system that manages both perfusion and gas exchange in a single device and is driven only by pneumatics. We are actively pursuing the internationalization application of the ECMO system through expediting the process of the clinical registration, manufacturing and commercialization, with the commitment to develop multiple pipeline products in the mechanically assisted circulation sector and provide more systematic and integrated solutions in cardiac surgery and critical care.

Emerging Business Segments

While its established business segments are showing rapid growth, the Group is also actively exploring emerging business fields such as the non-vascular intervention, endocrinology, rehabilitation treatment, sports medicine, assisted reproduction, in vitro diagnostics (IVD), skin and body management, otolaryngology, ophthalmology and stomatology as well as disinfection and sterilisation through its subsidiaries or associates.

In the field of non-vascular intervention, the Group continues to improve the diversified strategic layout of urology, gynecology, digestion and respiration, and has obtained 16 registration certificates. At the beginning of 2022, our single-use flexible ureteropelvic electronic endoscopic catheter was approved, marking the strategic breakthrough in the field of endoscopic solutions. Meanwhile, another self-developed product, prostatic lift system, was newly admitted in the Innovative Medical Device Special Review and Approval Procedure (the "Green Path") of the NMPA. In the field of endocrinology, the Group has built an integrated patient glucose, chemotherapy and pain management platform with microinfusion technology as the core, and the first chemotherapy injection pump, AutoEx®, was approved for marketing by the NMPA in early 2022. For rehabilitation treatment, the Group actively deploys the fields of musculoskeletal rehabilitation, cardiopulmonary rehabilitation and neurological rehabilitation, owning a total of six approved products, multiple commercialised product lines and over 100 technical patents. During the Reporting Period, the TherMotion® Cryo-Thermo Compression Device obtained the registration certificate, being its first active device approved for marketing. As for sports medicine, Archimedes®, the world's first long-term implantable balloon rotator cuff system

self-developed by an associated company, successfully performed the clinical implantation surgeries and commenced clinical trials in seven large sports medicine centers in the PRC. Four products, including non-absorbable surgical suture series and arthroscopic cannulas, have received medical device registration (filing) approvals from a number of drug administrations in China, becoming the first batch of certified products since the establishment of the business segment. In the field of assisted reproduction, the associated company's self-developed Orkid® Intrauterine Insemination Catheter and two Daylily® ovum aspiration needles were approved for commercialisation in the PRC, and the Daylily® Embryo Transfer Catheter and the Lotus™ Ovum Aspiration Needle were approved for commercialistion in Thailand. In the field of IVD, the Group's self-developed real-time PCR test, SARS-CoV-2 Nucleic Acid Test Kit received the CE Marking. The Group aims to solve the medical difficulties in clinical practice through the breakthrough of advanced technology by leveraging on the efficiency and synergies from group operation, and is committed to building a complete business portfolio from prevention and diagnosis to treatment and rehabilitation, that covers the entire life cycle of human beings.

Research and Development ("R&D")

During the Reporting Period, the Group's R&D expenses reached US$297.8 million, accounted for 38.2% of its revenue, and R&D projects achieved fruitful results. From the beginning of 2021 to the date of this announcement, the Group and associated companies have 22 products obtaining the registration certificates from the NMPA, and 5 products admitted in the Green Path and the Group had a total of 26 products being approved to enter the Green Path, ranking the first in the medical device industry for seven consecutive years. As for the overseas market, the Group also obtained the registration certificates from the United States FDA for 7 products and the CE Markings for 15 products.

As for the cardiovascular devices business, the Group has a variety of innovative products of iterative coronary stent and balloon catheter, active treatment device and angiography device under R&D, including the bioresorbable scaffold, the iterative products of drug-eluting stents, the coronary stent graft system and the drug-coated balloon, the coronary rotational atherectomy catheter, the intravascular lithotripsy balloon, the intra-aortic balloon pump ("IABP") and the intravascular ultrasound ("IVUS"). During the Reporting Period, the Firesorb® Bioresorbable Rapamycin Targeted Eluting Coronary Scaffold System ("Firesorb®") has completed the patient enrollment for its pre-market clinical trials FUTURE-III. Its FUTURE II research results was published on JACC Cardiovascular Interventions, a well-known cardiovascular journal, showed that the Firesorb® was comparable to a market-leading metal drug-eluting stent in terms of safety and reliability at the primary endpoint of one-year post surgery. The FUTURE series clinical studies of the Firesorb® will help promote the concept of "leave nothing behind" for bioabsorbable scaffolds to be widely applied in clinical practice. The TARGET series clinical studies conducted overseas in large scale for the Firehawk®, our coronary rapamycin targeted eluting stent system with international top quality, are under steady progress. As the world's lowest drug-loaded coronary stent, the Firehawk®'s long-term safety and effectiveness has been repeatedly verified through plenty of strong clinical evidence, allowing a solid step forward in obtaining future approvals in USA, Canada and Japan. During the Reporting Period, our first DSA system has obtained approval from the NMPA for launching to the market. The approved DSA system has the advantages of low dose acquisitions, low contrast agent consumption, intelligent human-machine interactions and high-density resolution images, which will further strengthen our multiple layout of angiography products.

As for the orthopedics devices business, the Group has actively promoted a variety of products to obtain certifications in both domestic and overseas markets. For the international market, after obtaining certification in Canada, the self-developed Dynasty® Dual Mobility Acetabular Hip System has received the U.S. FDA registration approval, thereby enriching the Dynasty® product series effectively. The Prime® series 3D printed acetabular cup system and multi-hole acetabular cup system, and the Dynasty® series 3D printed acetabular cup system are approved to for marketing in USA and Canada. In Europe, various products including the revision multi-hole cup and augments for the Procotyl® P Acetabular Cup System, the Hip Head Tensioner Device, and the Profemur® Cemented XM® Femoral Stem were certified successively for commercialisation. In China, the VenusOne Bio-acetabular System with plasma spray coating, Procotyl®-L Acetabular System and Profemur® Preserve Femoral Stem have obtained registration certificates from the NMPA, while VenusOne Eco Bio-Acetabular System is under registration. The self-developed two knee systems "SoSuperior®+" and "MedalOne™" were approved by the NMPA in 2022, marking the basic completion of the layout of the domestic knee product line MedalOne. The Zirconium-Niobium Alloy Femoral Head was admitted in the Green Path. Through independent R&D and medical-engineering collaboration projects, the Group also strives to explore new business areas and strengthen the diversified product layout of revision products, small joints (such as wrist joint) replacement and biological products. The Group's self-developed "personalized and precise" wrist joint prosthesis have been used in dozens of wrist joint replacement surgeries, demonstrating our strength in R&D to deal with various complex and difficult cases, as well as our technology reserve to provide personalized and precise products. In terms of orthopedics intelligent instruments, the Group's research projects in 2D and 3D surgical imaging system are in smooth progress.

As for the CRM business, the Invicta™ Defibrillation Lead has completed the pre-market clinical research ahead of schedule and submitted the registration application for CE Marking. The product is conditionally compatible to 1.5T/3T magnetic resonance imaging ("MRI") and will become a major breakthrough in our brand new product series of implantable defibrillation system. As for the PRC market, the Group actively promotes the R&D progress of MRI-compatible products. Among them, Kora 100, an out-of-chest MRI-compatible pacemaker has been approved by the NMPA for launching; Rega®, the first made-in-China out-of-chest MRI-compatible pacemaker, along with Beflex™ pacing lead, has submitted for the NMPA registration; the self-developed "Green Path" product, the BonaFire® MRI compatible passive pacing lead, has successfully completed all patients enrollment for the pre-market clinical research; in addition, a new generation of MRI-compatible pacemaker series, ENO™/TEO™/OTO™ and the Vega pacing lead, have completed the first Chinese patient enrollment for the pre-market clinical research. For the cardiac defibrillation products, we have submitted the registration applications to the NMPA for the Platinium™ ICD and the Platinium™ CRT-D, and has built the first production line for the made-in-China defibrillation products.

As for the endovascular and peripheral vascular devices business, all pipeline products are under rapid R&D progress. For the aortic products, two "Green Path" products, namely the Talos® Thoracic Stent Graft System and the Fontus® Branched Surgical Stent Graft System have been approved by the NMPA for commercialisation. The upgrading of launched products are also proceeding steadily. The new generation Cratos Thoracic Endovascular Stent Graft System has obtained the type verification report and the new generation Aegis® Abdominal Aortic Stent Graft System has obtained the animal experiment report, which will further improve the product layout in the aortic field and solidify our leading position. For the peripheral vascular products, Ryflumen® Peripheral High-Pressure Balloon Dilatation Catheter has received the registration certificate from the NMPA during the Reporting Period. The Group's first venous product, the Vflower® Venous Stent System, has successfully completed all patients enrollment for pre-market clinical trials and entered the NMPA green path, being the sixth product included in the "Green Path" for this business segment. The Fishhawk mechanical thrombectomy catheter and the vena cava filter have obtained type verification report and animal experiment report respectively. The Group has carried out a series of interventional oncology related R&D projects. In particular, the TIPS Stent Graft System, one of our core products, has completed the animal study and is under type verification.

As for the neurovascular devices business, the Group's commercialized product portfolio has covered three major areas of neurovascular diseases. In hemorrhagic stroke treatment, the Group's self-developed NUMEN® Coil Embolisation System has obtained the FDA approval, CE marking and Korean MFDS approval, further demonstrating its safety and efficacy. With our iterative innovation, the new generation product, NUMEN Silk® 3D Electronically Detachable Coil was approved for launch in early 2022, effectively improving the safety of aneurysm embolization surgeries. Besides, the Rebridge® Intracranial Visualized Stent, a coil embolization assisting stent, has entered the clinical enrollment stage. In the treatment of cerebral atherosclerotic stenosis, has the Diveer™ Intracranial Balloon Dilatation Catheter was approved for marketing in early 2022, further enriching the product line in this segment market. In acute ischemic stroke treatment, the Group's self-developed and fully visualized Neurohawk®, has been approved for launch in early 2022; the world's first diameter-adjustable stent retriever Tigertriever®, for which we act as the exclusive distributor of Rapid Medical, and our self-developed X-track™ Intracranial Distal Access Catheter, have submitted the registration application to the NMPA during the Reporting Period.

As for the heart valve business, the second generation of TAVI product, the VitaFlow Liberty™, has been approved for marketing in China and has submitted application for the CE Marking. During the Reporting Period, the Group released the five-year follow-up data for the clinical study of the VitaFlow®, further proving its safety and effectiveness in the treatment of patients with severe aortic valve calcification. In order to further improve the complementary TAVI procedural product portfolio, the Group also deployed resources for the development of cerebral embolism protection devices, which can be used to protect the brain during TAVI surgery. In addition, The Group has several TMV and TTV treatment products under development, which strategically covered all mainstream and feasible TMV and TTV therapies for mitral valve and tricuspid valve regurgitation. For TMV repair replacement products, our self-developed product and Helis™, the jointly-developed product with Valcare are both in the process of animal study. The AltaValve™, a jointly-developed TMV replacement product with 4C Medical, is in the stage of early feasibility study ("EFS") clinical trial. For the TMV repair products, the Group's self-developed product is at the design stage. The Amend™, a TMV repair product, jointly developed with Valcare, is an innovative semi-rigid TMV repair ring and has completed several trans-septal implantations. It can be used together with the TMV replacement product Helis™, providing a mitral regurgitation solution for patients that are ineligible for TMV repair. For the TTV repair products, the self-developed edge-to-edge repair product and the Trivid, a jointly-developed product with Valcre, are both in the design stage.

As for the surgical robot business, the Group continues to build an all-around fundamental technology system of surgical robotics, with an aim of laying a solid foundation for the technology of Chinese-developed surgical robots. For the laparoscopic surgical robots, following the completion of the registrational clinical trails during the Reporting Period for application in the field of urology, Toumai® has completed all enrolled surgeries in the multidisciplinary and multicenter-registered clinical trials at the beginning of 2022, making it the second laparoscopic surgical robot in the world, and the first of its kind in China, that can cover important and complex procedures in the thoracic, abdominal and pelvic cavities (urology and gynecology). In addition, Toumai® Single-arm Laparoscopic Surgical Robot ("Toumai® Single-arm") has completed the First-in-Man (FIM) trial of a robotic-assisted single-port laparoscopy cholecystectomy in China. In the future, with the support of the National Key Technologies R&D Program under the Ministry of Science and Technology, the Group will work closely with universities, research institutes, and hospitals in a joint effort to fill the gap in the area of single-arm laparoscopic surgical robot. For the orthopedics surgical robots, Honghu® has completed the registrational clinical trails for total knee arthroplasty and has filed the registration application to the NMPA and the United States FDA, respectively. In addition, the panvascular surgical robots and percutaneous surgical robots. which are jointly developed with world-renowned partners, have both entered the registrational clinical trial stage. Relying on our continuous exploration and accumulation of cutting-edge technologies including surgical robotics and artificial intelligence, the Group's self-developed Madam Curie™ Fully-Automated Unmanned Surgical Platform ("Madam Curie™ Platform") achieved a success in the animal experiment of interventional cryoablation for prostatic hyperplasia. The Madam Curie™ Platform consists of three core technological systems: intelligent imaging diagnosis, intelligent path planning, and automated robotic technology for precision treatment, laying an important foundation for exploring the feasibility, clinical implication and commercialisation of the fully-automated surgical technology.

As for the surgical devices business, through continuous technological innovation, the Group strives to improve the overall level of extracorporeal life support solutions, including oxygenators and premium cannulas. During the Reporting Period, the self-developed product VitaSprings™ Spiral Diversion Integrated Membrane Oxygenator ("VitaSprings™"), as the first highly integrated product developed in China, has successfully completed clinical trials and entered the NMPA Green Path relying on its clinically proved world-leading quality and its technical accumulation will boost the localization of ECMO high-end medical rescue equipment with membrane oxygenator as the core. The new generation of femoral arterial and venous cannulas are in the stage of design finalization.

HUMAN RESOURCES AND TRAINING

As at the end of the Reporting Period, the Group had a total of 8,019 employees around the world, of which 1,715 or 21.4% were overseas employees in the Asia Pacific region, Europe, the Middle East, Africa, North America and Australia.

Adhering to the principle of "maturity, usage, cultivation, remuneration and care" regarding human resources, the Group has built a comprehensive talent development platform through the construction mechanism of organisational competence. We focus on recruiting the world's top technical leaders, and accurately cultivating core technicians and future leaders. The Group takes the lead to design an employee career path of "2 ways, 3 levels, 6 paths, 18 steps and 108 posts", providing employees with a development path in combined directions horizontally and vertically, and accompanying employees to grow together by building a learning organization. Within the Group, we have set up four internal learning institutions, namely the "Jixia Leadership Academy", "Basic Knowledge, Skills and Innovation School", "Emerging Medical Science and Technology Knowledge and Practice Workshop", and "Culture Lecture Hall", with an aim of comprehensively cultivating "professional, excellent, special and uncommon" technical talents and future enterprise leaders, and working together to achieve our mission of "breaking barriers to support billions of people thrive beyond 115 years".

PROSPECTS

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

1) Consolidating its leading position in the medical device market in the PRC. With its strong brand recognition, extensive distribution network, and the economies of scale achieved by the deployment of multiple channels, the Group will further increase its market share in the PRC and continue to

play to the advantages of being a leading enterprise in the industry and make breakthroughs in every aspect of the domestic high-end medical device industry, thereby maximising value for the shareholders, customers, employees and society.

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

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

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

FINANCIAL REVIEW

Overview

Despite facing an increasingly fierce competition in the rapidly growing medical device industry in China and abroad as well as the impact of the COVID-19 pandemic, the revenue of the Group increased by 20.0% (in US$) for the year ended 31 December 2021 as compared to the year ended 31 December 2020. The Group persisted in providing a diversified product portfolio and pursued the Group's globalization strategy with non-China sales contributing to 54.1% of the total revenue. The Group aims to continuously bring its innovations, technologies and services to millions of global patients and become a patient oriented global enterprise capable of leading minimally invasive and other emerging medical technologies.

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

Revenue

US$'000	**Year ended 31 December**		**Percent change**	
	2021	2020	in US$	excluding the foreign exchange impact
Cardiovascular devices business	**139,541**	144,760	(3.6%)	(10.8%)
Orthopedics devices business	**215,614**	201,608	6.9%	5.1%
CRM business	**220,421**	180,299	22.3%	18.8%
Endovascular and peripheral vascular devices business	**106,028**	68,487	54.8%	45.6%
Neurovascular devices business	**59,053**	32,933	79.3%	72.5%
Heart valve business	**31,324**	15,204	106.0%	93.2%
Surgical robot business	**329**	–	N/A	N/A
Surgical devices business	**4,727**	3,939	20.0%	11.6%
Other business *(Note)*	**1,602**	1,502	6.6%	0.4%
Total	**778,639**	648,732	20.0%	15.0%

Note:

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

The Group's revenue for the year ended 31 December 2021 was US$778.6 million, increasing by 20.0% compared to US$648.7 million for the year ended 31 December 2020. The Group's reported revenue was impacted by translation from functional currencies of the Group's subsidiaries to US$, the presentation currency of the Group, due to the appreciation or depreciation of US$ against functional currencies. Excluding the foreign exchange impact, the Group's revenue increased by 15.0%. Such increase was primarily attributable to the rapid market penetration, especially in CRM business, endovascular and peripheral vascular devices business, neurovascular devices business and heart valve business and the new products contribution, as well as the increase in the volume of elective procedures from the easing of the COVID-19 pandemic compared to last year. The following discussion is based on the Group's major business segments.

– *Cardiovascular Devices Business*

The Group's cardiovascular devices business recorded a revenue of US$139.5 million for the year ended 31 December 2021, representing a decrease of 10.8% (excluding the foreign exchange impact) or a decrease of 3.6% (in US$) compared to the year ended 31 December 2020. Such decrease was mainly attributable to the adverse impact of the implementation of the centralised VBP on coronary stents in the PRC during the Reporting Period.

– *Orthopedics Devices Business*

US$'000	**Year ended 31 December**		**Percent change**	
	2021	2020	in US$	excluding the foreign exchange impact
Orthopedics Devices Business	**215,614**	201,608	6.9%	5.1%
－US	**86,727**	81,260	6.7%	6.7%
－Europe, Middle East and Africa	**51,926**	39,507	31.4%	27.6%
－Japan	**37,423**	36,045	3.8%	6.7%
－the PRC	**22,363**	29,903	(25.2%)	(31.7%)
－Others	**17,175**	14,893	15.3%	9.1%

The Group's orthopedics devices business recorded a revenue of US$215.6 million for the year ended 31 December 2021, representing an increase of 5.1% (excluding the foreign exchange impact) or 6.9% (in US$) compared to the year ended 31 December 2020. Such growth was mainly attributable to the increase in the number of elective surgeries from the easing of the COVID-19 pandemic, resulting in an increase in the number of implants.

– *CRM Business*

US$'000	**Year ended 31 December**		**Percent change**	
	2021	2020	in US$	excluding the foreign exchange impact
CRM Business	**220,421**	180,299	22.3%	18.8%
－US	**2,541**	2,061	23.3%	23.3%
－Europe, Middle East and Africa	**188,028**	161,118	16.7%	13.3%
－Japan	**13,230**	5,951	122.3%	127.2%
－the PRC	**13,647**	8,104	68.4%	53.7%
－Others	**2,975**	3,065	(2.9%)	3.4%

CRM business recorded a revenue of US$220.4 million for the year ended 31 December 2021, representing an increase of 18.8% (excluding the foreign exchange impact) or 22.3% (in US$) compared to the year ended 31 December 2020. Such growth was mainly attributable to the rapid growth of sales volume of newly launched products, and the increase in the number of elective surgeries from the easing of the COVID-19 pandemic, resulting in an increase in the number of implants.

– *Endovascular and Peripheral Vascular Devices Business*

The Group's endovascular and peripheral vascular devices business achieved a revenue of US$106.0 million for the year ended 31 December 2021, representing a growth of 45.6% (excluding the foreign exchange impact) or a growth of 54.8% (in US$) compared to the year ended 31 December 2020. Such growth was mainly attributable to: (i) the further enhanced competitiveness of the Group's endovascular and peripheral vascular devices benefited from the recent approvals obtained for the Castor® Branched Aortic Stent-Graft System, Minos® Abdominal Aortic Aneurysm and Delivery System, Reewarm® PTX Drug Coated Balloon, all of which maintained rapid growth during the Reporting Period; (ii) certain restrictions on carrying out surgeries affected by the COVID-19 pandemic in the prior year; and (iii) market cultivation in second-tier and third-tier cities through effective marketing mechanisms in response to government guidelines.

– *Neurovascular Devices Business*

The Group's neurovascular devices business recorded a revenue of US$59.1 million for the year ended 31 December 2021, representing a growth of 72.5% (excluding the foreign exchange impact) or a growth of 79.3% (in US$) compared to the year ended 31 December 2020. Such increase was mainly attributable to: (i) the positive market recognition and rapid growth of Tubridge®, the first flow diverting stent approved for product launch in China; (ii) the revenue contribution of the newly launched products NUMEN® Coil Embolisation System, the Bridge® Rapamycin Target Eluting Vertebral Artery Stent System and the U-track™ Intracranial Support Catheter System; and (iii) significant year-on-year growth in APOLLO™ Intracranial Stent System driven by greater market recognition.

– *Heart Valve Business*

The Group's heart valve business recorded a revenue of US$31.3 million for the year ended 31 December 2021, representing a growth of 93.2% (excluding the foreign exchange impact) or a growth of 106.0% (in US$) compared to the year ended 31 December 2020, primarily attributable to enhanced market recognition of VitaFlow® and VitaFlow Liberty™ Valve System and an increase in sales volume.

– *Surgical Robot Business*

The Group's surgical robot business recorded a revenue of US$0.3 million for the first time, mainly contributed by the first commercialized product DFVision® 3D Electronic Laparoscope ("DFVision®").

– *Surgical Devices Business*

The Group's surgical devices business recorded a revenue of US$4.7 million for the year ended 31 December 2021, representing an increase of 11.6% (excluding the foreign exchange impact) or an increase of 20.0% (in US$) compared to the year ended 31 December 2020.

– *Other Business*

The Group's other business recorded a revenue of US$1.6 million for the year ended 31 December 2021, representing an increase of 0.4% (excluding the foreign exchange impact) or an increase of 6.6% (in US$) compared to the year ended 31 December 2020. The other business did not meet the quantitative thresholds for determining reportable segments.

Cost of Sales

For the year ended 31 December 2021, the Group's cost of sales was US$286.9 million, representing a 34.9% increase compared to US$212.7 million for the year ended 31 December 2020. Such increase was primarily attributable to the increased sales volume of the major businesses.

Gross Profit and Gross Profit Margin

As a result of the foregoing factors, the Group's gross profit increased by 12.8% from US$436.0 million for the year ended 31 December 2020 to US$491.8 million for the year ended 31 December 2021. Gross profit margin is calculated as gross profit divided by revenue. The Group's gross profit margin decreased to 63.2% for the year ended 31 December 2021 as compared to 67.2% for the year ended 31 December 2020. Such change was mainly attributable to the impact of price reduction due to the centralized VBP policy on coronary stents.

Other Net Income

The Group recorded other net income of US$76.5 million for the year ended 31 December 2021, representing a 132.3% increase as compared to US$32.9 million for the year ended 31 December 2020. Such increase was mainly due to: (i) the increase in the Group's net realised and unrealised gains on financial instruments carried at fair value through profit or loss for the year ended 31 December 2021 of approximately US$39.0 million as compared to the corresponding period of last year; and (ii) the increase of approximately US$9.6 million in interest income from sufficient cash and cash equivalents.

Research and Development Costs

Research and development costs increased by 54.6% from US$192.6 million for year ended 31 December 2020 to US$297.8 million for the year ended 31 December 2021. Such increase was primarily due to the increased investments in the on-going and newly kicked off research and development projects.

Distribution Costs

Distribution costs increased by 17.1% from US$254.1 million for the year ended 31 December 2020 to US$297.5 million for the year ended 31 December 2021. Such increase was primarily attributable to the corresponding increase in marketing activities and sales commission from COVID-19 recovery.

Administrative Expenses

Administrative expenses increased by 47.0% from US$170.1 million for the year ended 31 December 2020 to US$250.0 million for the year ended 31 December 2021. Such increase was mainly attributable to: (i) the increase in salaries, wages and other benefits attributable to the corresponding increase in employees; (ii) the increase in costs recognised for the granting of incentive shares to certain employees under the Group's share incentive scheme during the Reporting Period.

Other Operating Costs

Other operating costs decreased by 15.9% from US$19.7 million for the year ended 31 December 2020 to US$16.5 million for the year ended 31 December 2021. The change was mainly due to the decrease in professional service fees and the decrease in impairment loss of intangible assets.

Finance Costs

Finance costs increased by 20.6% from US$39.7 million for the year ended 31 December 2020 to US$47.9 million for the year ended 31 December 2021. The increase was mainly attributable to the interest expense arising from the convertible bonds of the Company.

Income tax

Income tax increase from US$10.4 million for the year ended 31 December 2020 to US$14.0 million for the year ended 31 December 2021, primarily due to the increase in profit before tax of Endovascular and Peripheral Vascular Devices Business.

Capital Management

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

Liquidity and Financial Resources

As at 31 December 2021, the Group had US$1,754.4 million of cash and cash equivalents on hand, as compared to US$1,002.1 million as at 31 December 2020. Such increase was mainly attributable to (i) the issuance of convertible bonds by the Company; (ii) the completion of the spin-off listing of the heart valve business and surgical robot business; and (iii) the fundraising of the CRM business and the neurovascular devices business. The Board's approach to managing liquidity of the Group is to ensure sufficient liquidity at any time to meet its matured liabilities in order to avoid any unacceptable losses or damage to the Group's reputation.

BORROWINGS AND GEARING RATIO

Total borrowings of the Group, including interest-bearing borrowings and convertible bonds, as at 31 December 2021 were US$1,024.8 million, representing an increase of US$783.3 million as compared to US$241.5 million as at 31 December 2020, mainly due to the issuance of convertible bonds by the Company. The gearing ratio (calculated as total bank borrowings and convertible bonds divided by total equity) of the Group as at 31 December 2021 increased to 46.2% from 17.4% as at 31 December 2020.

NET CURRENT ASSETS

The Group's net current assets as at 31 December 2021 were US$1,840,0 million, as compared to US$960.5 million as at 31 December 2020.

FOREIGN EXCHANGE EXPOSURE

The Group is exposed to currency risk primarily from sales, purchases, borrowing and lending which give rises to receivables and payables that are denominated in a foreign currency (mainly RMB, Euro and JPY). For the year ended 31 December 2021, the Group recorded a net exchange loss of US$5.7 million, as compared to a net foreign exchange gain of US$2.0 million for the year ended 31 December 2020. 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

In addition, during the year ended 31 December 2021, the Group's total capital expenditure amounted to approximately US$247.9 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 2021, the Group had mortgaged its buildings held for own use and right-of-use assets for the purpose of securing bank loans with a carrying value of US$71.3 million; and the Group had pledged the equity interest in Kerui Pharma, Suzhou Argus and MP Vision of securing bank loans in connection with the acquisition and capital contribution with a carrying value of US$59.9 million.

FUTURE INVESTMENT PLANS AND EXPECTED FUNDING

Looking ahead, the Group will continue to expand its business in both domestic and overseas markets, explore its potential and create more value for the benefit of its shareholders. The Group will continue to grow and strengthen through self-development, mergers and acquisitions. The Group's future operating plans will be supported by various sources of financing to support capital expenditure, including but not limited to internal funding and bank loans. Currently, the Group has sufficient banking facilities.

SCOPE OF WORK OF KPMG

The financial figures in respect of the Group's consolidated statement of financial position, consolidated statement of profit or loss and other comprehensive income and the related notes thereto for the year ended 31 December 2021 as set out in this preliminary announcement have been compared by the Group's auditor, KPMG, Certified Public Accountants, to the amounts set out in the Group's audited consolidated financial statements for the year and the amounts were found to be in agreement. The work performed by KPMG in this respect did not constitute an audit, review or other assurance engagement in accordance with Hong Kong Standards on Auditing, Hong Kong Standards on Review Engagements or Hong Kong Standards on Assurance Engagements issued by the Hong Kong Institute of Certified Public Accountants and consequently no assurance has been expressed by the auditor.

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 2021, the Company has complied with all the applicable code provisions (the "Code Provisions") as set out in the Corporate Governance Code (the "CG Code") then in effect in 2021 contained in Appendix 14 to the Rules Governing the Listing of Securities on The Stock Exchange of Hong Kong Limited (the "Listing Rules") with the exceptions as addressed below:

Pursuant to Code Provision A.2.1 of the CG Code in effect in 2021, 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. Dr. Zhaohua Chang ("Dr. Chang") has assumed the responsibility of the executive Director and the chairman of the Board and is responsible for managing the Board and Group's business. As the Board considers that Dr. Chang has in-depth knowledge of the Group's business and can make appropriate decisions promptly and efficiently, he also assumed the position of the chief executive officer of the Company. Nevertheless, the Board will continue to review the efficacy of the Group's corporate governance structure to assess whether the separation of the positions of chairman and chief executive officer of the Company is necessary.

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

AUDIT COMMITTEE

The Company has established the Audit Committee with written terms of reference in compliance with the CG Code. As at the date of this announcement, the Audit Committee comprises three members: Mr. Jonathan H. Chou (Chairman), Mr. Norihiro Ashida and Mr. Chunyang Shao.

The Audit Committee has reviewed and discussed the annual results and annual report for the year ended 31 December 2021.

MODEL CODE FOR SECURITIES TRANSACTIONS

The Company has adopted the Model Code for Securities Transactions by Directors of Listed Issuers (the "Model Code") as set out in Appendix 10 of the Listing Rules.

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 2021.

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 in 2021.

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

Save for the 6,437,800 shares of the Company purchased by the trustee of the share award scheme at a cash consideration of US$40,379,000 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 2021.

MATERIAL ACQUISITION AND DISPOSAL OF SUBSIDIARIES AND ASSOCIATED COMPANIES

Save as disclosed above and in Note 14 and 15 to the financial statements in this announcement, there was no other material acquisition and disposal of subsidiaries and associated companies by the Company during the year ended 31 December 2021.

SUBSEQUENT EVENT

On 25 February 2022, the Group, AccuPath and other third-party investors entered into capital contribution agreements, pursuant to which, the Group and other third-party investors agreed to contribute RMB 64.0 million and RMB 136.0 million in cash to AccuPath. Upon the completion of the transaction, the Group's interests in AccuPath will be diluted from 47.4% as at 31 December 2021 to 43.5% and AccuPath is still an equity-accounted investees of the Group.

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 2021 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 the existing shareholders.

ANNUAL GENERAL MEETING

The Annual General Meeting (the "AGM") of the Company will be held on 23 June 2022. The notice of AGM will be sent to shareholders not less than 21 days before the AGM.

FINAL DIVIDEND

The Directors do not recommend the payment of a final dividend for the year ended 31 December 2021 (2020: HK4.3 cents (tax inclusive)).

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 Monday, 20 June 2022 to Thursday, 23 June 2022, 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 Friday, 17 June 2022 (Hong Kong Time), being the last registration date.

PUBLICATION OF RESULTS ANNOUNCEMENT AND ANNUAL REPORT

This annual results announcement is published on the websites of Hong Kong Exchanges and Clearing Limited (http://www.hkexnews.hk) and the Company (http://www.microport.com). The 2021 annual report of the Company will be dispatched to shareholders in due course and will also be available at the websites above at the same time.

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

Shanghai, the People's Republic of China, 30 March 2022

As at the date of this announcement, the executive Director is Dr. Zhaohua Chang; the non-executive Directors are Mr. Norihiro Ashida, Dr. Yasuhisa Kurogi, and Mr. Hongliang Yu; and the independent non-executive Directors are Mr. Jonathan H. Chou, Dr. Guoen Liu, and Mr. Chunyang Shao.