AK MEDICAL HOLDINGS LIMITED
愛康醫療控股有限公司
(Incorporated in the Cayman Islands with limited liability)
(Stock Code: 1789)

INTERIM RESULTS ANNOUNCEMENT FOR THE SIX MONTHS ENDED 30 JUNE 2021

FINANCIAL HIGHLIGHTS

The board (the "**Board**") of directors (the "**Directors**") of AK Medical Holdings Limited hereby announces the unaudited consolidated interim results of the Company and its subsidiaries (hereinafter collectively referred to as the "**Group**") for the six months ended 30 June 2021 (the "**Reporting Period**"), which have been reviewed by the Company's audit committee (the "**Audit Committee**"). The financial highlights of the Group for the Reporting Period together with the comparative figures for the corresponding previous period are set out as follows:

	Six months ended 30 June		
	2021	2020	Variance
	RMB'000	*RMB'000*	*%*
Revenue	**447,633**	478,979	-6.5%
Gross profit	**308,333**	336,323	-8.3%
Profit for the period	**111,483**	162,871	-31.6%
Profit attributable to equity shareholders of the Company	**111,483**	162,871	-31.6%
Earnings per share			
Basic	**RMB0.10**	RMB0.15	
Diluted	**RMB0.10**	RMB0.15	

For the six months ended 30 June 2021, the Group achieved revenue of RMB447.6 million, representing a decrease of 6.5% as compared to the corresponding period of 2020. Affected by the national joint implant volume-based procurement policy, there was uncertainty with the price trend and distributors (being the Group's customers) purchased less joint implants, causing a decrease in revenue. Along with the decreasing revenue, profit of the Group for the six months ended 30 June 2021 decreased significantly by 31.6% as compared to the six months ended 30 June 2020. The decrease in profit was mainly attributed to the abovesaid revenue decline, and increase in marketing expenses (as a result of the resumption of marketing events) and payment of social insurance. In 2020, under the impact of COVID-19 pandemic, most of the Company's marketing activities were cancelled and the government had also reduced or waived some of the social insurance payments for staff.

CONSOLIDATED STATEMENT OF PROFIT OR LOSS AND OTHER COMPREHENSIVE INCOME

for the six months ended 30 June 2021 – unaudited

(Expressed in Renminbi ("RMB"))

		Six months ended 30 June	
		2021	2020
	Note	***RMB'000***	*RMB'000*
Revenue	*3*	**447,633**	478,979
Cost of sales		**(139,300)**	(142,656)
Gross profit		**308,333**	336,323
Other income, net		**2,080**	943
Selling and distribution expenses		**(78,721)**	(62,750)
General and administrative expenses		**(51,036)**	(38,260)
Research and development expenses		**(51,737)**	(43,900)
Operating profit		**128,919**	192,356
Net finance income		**2,693**	4,515
Profit before taxation		**131,612**	196,871
Income tax	*4*	**(20,129)**	(34,000)
Profit for the period		**111,483**	162,871
Profit attributable to equity shareholders of the Company		**111,483**	162,871
Other comprehensive income items that are or may be reclassified subsequently to profit or loss			
Exchange differences on translation of financial statements of entities outside mainland China		**(4,438)**	9,140
Other comprehensive income, net of tax		**(4,438)**	9,140
Total comprehensive income		**107,045**	172,011
Total comprehensive income attributable to equity shareholders of the Company		**107,045**	172,011
Earnings per share			
Basic	*5(a)*	**RMB0.10**	RMB0.15
Diluted	*5(b)*	**RMB0.10**	RMB0.15

CONSOLIDATED STATEMENT OF FINANCIAL POSITION
at 30 June 2021 – unaudited
(Expressed in RMB)

	Note	**30 June 2021** *RMB'000*	31 December 2020 *RMB'000*
Non-current assets			
Property, plant and equipment	*6*	**364,243**	364,339
Intangible assets		**86,166**	76,045
Goodwill		**133,238**	133,076
Deferred tax assets		**54,925**	50,625
		638,572	624,085
Current assets			
Inventories		**418,732**	360,711
Trade receivables	*7*	**481,212**	450,599
Bills receivable		**110,416**	101,892
Deposits, prepayments and other receivables		**35,428**	33,551
Other financial assets		**238,907**	188,402
Pledged deposits and time deposits		**112,521**	54,575
Cash and cash equivalents		**541,080**	713,091
		1,938,296	1,902,821
Current liabilities			
Trade payables	*8*	**105,091**	145,766
Contract liabilities		**52,632**	46,400
Accruals and other payables		**196,031**	172,177
Lease liabilities		**9,208**	11,413
Current taxation		**48,134**	42,082
		411,096	417,838
Net current assets		**1,527,200**	1,484,983
Total assets less current liabilities		**2,165,772**	2,109,068

	Note	30 June 2021 RMB'000	31 December 2020 RMB'000
Non-current liabilities			
Deferred income		**12,296**	12,026
Lease liabilities		**14,477**	15,435
Deferred tax liabilities		**42,268**	38,831
		69,041	66,292
NET ASSETS		**2,096,731**	2,042,776
Capital and reserves			
Share capital	*9(a)*	**9,451**	9,451
Reserves		**2,087,280**	2,033,325
Total equity attributable to equity shareholders of the Company		**2,096,731**	2,042,776
TOTAL EQUITY		**2,096,731**	2,042,776

CONDENSED CONSOLIDATED CASH FLOW STATEMENT
for the six months ended 30 June 2021 – unaudited
(Expressed in RMB)

	Six months ended 30 June	
	2021	2020
	RMB'000	*RMB'000*
Operating activities		
Cash generated from operations	**19,703**	171,009
Tax paid	**(15,009)**	(25,134)
Net cash generated from operating activities	**4,694**	145,875
Investing activities		
Acquisition of property, plant and equipment and intangible assets	**(39,230)**	(34,630)
Acquisition of a subsidiary, net of cash acquired	**–**	(261,039)
Uplift of structured deposits and time deposits	**349,709**	–
Placement of structured deposits and time deposits	**(458,280)**	(302,688)
Other cash flows arising from investing activities	**4,688**	4,028
Net cash used in investing activities	**(143,113)**	(594,329)
Financing activities		
Issuance of new shares	**–**	701,355
Capital element of lease rentals paid	**(10,952)**	(11,132)
Interest element of lease rentals paid	**(426)**	(278)
Proceeds from shares issued under share option scheme	**–**	9,534
Payment for shares held for share award scheme	**(16,785)**	–
Other cash flows arising from financing activities	**–**	(1,700)
Net cash (used in)/generated from financing activities	**(28,163)**	697,779
Net (decrease)/increase in cash and cash equivalents	**(166,582)**	249,325
Cash and cash equivalents at 1 January	**713,091**	276,521
Effect of movements in exchange rates on cash hold	**(5,429)**	12,352
Cash and cash equivalents at 30 June	**541,080**	538,198

NOTES TO THE UNAUDITED INTERIM FINANCIAL REPORT

(Expressed in RMB'000 unless otherwise indicated)

1 BASIS OF PREPARATION

This interim financial report has been prepared in accordance with the applicable disclosure provisions of the Rules Governing the Listing of Securities on The Stock Exchange of Hong Kong Limited, including compliance with International Accounting Standard ("**IAS**") 34, *Interim financial reporting*, issued by the International Accounting Standards Board ("**IASB**"). It was authorised for issue on 24 August 2021.

The interim financial report has been prepared in accordance with the same accounting policies adopted in the 2020 annual financial statements, except for the accounting policy changes that are expected to be reflected in the 2021 annual financial statements. Details of any changes in accounting policies are set out in note 2.

The preparation of an interim financial report in conformity with IAS 34 requires management to make judgements, estimates and assumptions that affect the application of policies and reported amounts of assets and liabilities, income and expenses on a year to date basis. Actual results may differ from these estimates.

This interim financial report contains condensed consolidated financial statements and selected explanatory notes. The notes include an explanation of events and transactions that are significant to an understanding of the changes in financial position and performance of the Group since the 2020 annual financial statements. The condensed consolidated interim financial statements and notes thereon do not include all of the information required for full set of financial statements prepared in accordance with International Financial Reporting Standards ("**IFRSs**").

The interim financial report is unaudited, but has been reviewed by KPMG in accordance with Hong Kong Standard on Review Engagements 2410, *Review of interim financial information performed by the independent auditor of the entity*, issued by the Hong Kong Institute of Certified Public Accountants ("**HKICPA**").

The financial information relating to the financial year ended 31 December 2020 that is included in the interim financial report as comparative information does not constitute the Company's annual consolidated financial statements for that financial year but is derived from those financial statements. The Company's annual consolidated financial statements for the year ended 31 December 2020 are available from the Company's registered office. The auditors have expressed an unqualified opinion on those financial statements in their report dated 22 March 2021.

2 CHANGES IN ACCOUNTING POLICIES

The Group has applied the following amendments to IFRSs issued by the IASB to this interim financial report for the current accounting period:

- Amendments to IFRS 9, IAS 39, IFRS 7, IFRS 4 and IFRS 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 in this interim financial report. The Group has not applied any new standard or interpretation that is not yet effective for the current accounting period.

3 REVENUE AND SEGMENT INFORMATION

(a) Revenue

The principal activities of the Group are manufacturing and sale of orthopedic joint implants, spinal implants, trauma implants and their complete set of surgical instruments.

The amount of each significant category of revenue recognised during the period is as follows:

	Six months ended 30 June	
	2021	2020
	RMB'000	*RMB'000*
Revenue from contracts with customers		
Disaggregated by major products of service lines		
– Hip replacement implants	**243,375**	271,064
– Knee replacement implants	**108,861**	122,619
– Spinal and trauma implants	**20,327**	9,711
– 3D-printed products	**64,258**	60,546
– Third party orthopedic products	**775**	3,616
– Others	**10,037**	11,423
	447,633	478,979
Disaggregated by geographical location of customers		
– Mainland China	**379,553**	432,933
– Other countries	**68,080**	46,046
	447,633	478,979

The geographical location of customers is based on the country in which the customer is registered and operated.

The Group's customer base is diversified. There was no customer with whom transactions have exceeded 10% of the Group's revenue during the six months ended 30 June 2020 and 2021.

(b) Information about profit or loss, assets and liabilities

The Group manages its businesses by geographical location in which the entities operate. 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 two reportable segments. No operating segments have been aggregated to form the following reportable segments:

For the six months ended 30 June	Orthopedic implants – China		Orthopedic implants – United Kingdom		Total	
	2021	2020	**2021**	2020	**2021**	2020
	RMB'000	*RMB'000*	***RMB'000***	*RMB'000*	***RMB'000***	*RMB'000*
Revenue from external customers	**408,682**	449,957	**38,951**	29,022	**447,633**	478,979
Inter-segment revenue	**–**	–	**38,034**	37,593	**38,034**	37,593
Reportable segment revenue	**408,682**	449,957	**76,985**	66,615	**485,667**	516,572
Reportable segment profit	**137,854**	197,852	**3,887**	2,773	**141,741**	200,625
As at 30 June/31 December						
Reportable segment assets	**2,116,795**	2,127,918	**189,613**	186,095	**2,306,408**	2,314,013
Reportable segment liabilities	**390,182**	404,342	**22,925**	25,009	**413,107**	429,351

The measure used for reporting segment profit is "reportable segment profit before taxation".

(c) Reconciliations of reportable segment profit or loss

	Six months ended 30 June	
	2021	2020
	RMB'000	*RMB'000*
Reportable segment profit	**141,741**	200,625
Elimination of inter-segment loss	**(10,129)**	(3,754)
Consolidated profit before taxation	**131,612**	196,871

4 INCOME TAX

	Six months ended 30 June	
	2021	2020
	RMB'000	*RMB'000*
Current tax – the PRC Enterprise Income Tax	**19,875**	27,353
Current tax – Overseas	**1,186**	763
Deferred tax	**(932)**	5,884
	20,129	34,000

Pursuant to the rules and regulations of the Cayman Islands, the Group is not subject to any income tax in the Cayman Islands.

The Group has no assessable profit in Hong Kong during the reporting period and is not subject to any Hong Kong profits tax. Hong Kong profits tax rate during the relevant periods is 16.5%. The payments of dividends by Hong Kong companies are not subject to any Hong Kong withholding tax.

Taxation on profits outside Hong Kong has been calculated on the estimated assessable profits for the six months ended 30 June 2021 at the rates of taxation prevailing in the countries in which the Group operates. Applicable statutory enterprise income tax rate of PRC subsidiaries of the Company for the six months ended 30 June 2021 are 25% (six months ended 30 June 2020: 25%). According to the relevant PRC income tax law, the Company's subsidiaries, Beijing AKEC Medical Co., Ltd. ("**AK Medical Beijing**") and ITI Medical Co., Ltd. ("**AK Medical Changzhou**") were certified as New and High Technology Enterprises, and are entitled to a preferential income tax rate of 15%. The current certification of New and High Technology Enterprise held by AK Medical Beijing and AK Medical Changzhou will be expired on 21 October 2023 and 2 December 2023, respectively. Taxation for subsidiaries operating mainly in the England and Wales were calculated at statutory enterprise income tax rate of 19% for the six months ended 30 June 2021 (six months ended 30 June 2020: 19%).

5 EARNINGS PER SHARE

(a) Basic earnings per share

The calculation of basic earnings per share is based on the profit attributable to ordinary equity shareholders of the Company of RMB111,483,000 (six months ended 30 June 2020: RMB162,871,000) and the weighted average of 1,114,609,000 ordinary shares (2020: 1,089,385,000 shares) in issue during the reporting period.

(b) Diluted earnings per share

The calculation of diluted earnings per share is based on the profit attributable to ordinary equity shareholders of the Company of RMB111,483,000 (six months ended 30 June 2020: RMB162,871,000) and the weighted average of 1,115,735,000 ordinary shares (2020: 1,097,283,000 shares).

6 PROPERTY, PLANT AND EQUIPMENT

(a) Right-of-use assets

During the six months ended 30 June 2021, the Group entered into a number of lease agreements for use of offices, and therefore recognised the additions to right-of-use assets of RMB7,928,000 (six months ended 30 June 2020: RMB11,235,000).

(b) Acquisitions of owned assets

During the six months ended 30 June 2021, the Group acquired items of property plant and machinery with a total cost of RMB27,596,000 (six months ended 30 June 2020: RMB25,512,000).

7 TRADE RECEIVABLES

As of the end of the reporting period, the ageing analysis of trade receivables, based on the invoice date (or date of revenue recognition, if earlier) and net of loss allowance, is as follows:

	At 30 June 2021 *RMB'000*	At 31 December 2020 *RMB'000*
Current to 3 months	**276,509**	337,945
3 to 6 months	**83,166**	42,232
6 to 12 months	**101,510**	41,736
Over 12 months	**20,027**	28,686
Trade receivables, net of loss allowance	**481,212**	450,599

The credit terms agreed with commercial customers were normally ranged from 1 month to 1 year from the date of billing. Balances from hospitals customers are settled within the period set by the hospitals' payment policy, within 3 to 12 months. No interest is charged on the trade receivables.

8 TRADE PAYABLES

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

	At 30 June 2021 *RMB'000*	At 31 December 2020 *RMB'000*
Within 3 months	**79,650**	127,532
3 to 6 months	**20,425**	15,689
6 to 12 months	**2,842**	857
1 year to 2 years	**751**	20
Over 2 years	**1,423**	1,668
	105,091	145,766

All trade payables are expected to be settled within one year.

9 CAPITAL, RESERVES AND DIVIDENDS

(a) Share capital

	2021		2020	
	No. of shares	**Amount**	No. of shares	Amount
		RMB'000		*RMB'000*
Authorised-ordinary shares of HK$0.01 each:				
At 1 January and 30 June	**20,000,000,000**	**168,981**	20,000,000,000	168,981
Ordinary shares, issued and fully paid:				
At 1 January	**1,115,500,000**	**9,451**	1,052,700,000	8,888
Issuance of new shares	**–**	**–**	53,500,000	479
Shares issued under share option scheme *(note 9(c))*	**–**	**–**	7,775,000	71
At 30 June	**1,115,500,000**	**9,451**	1,113,975,000	9,438

(b) Dividends

Dividends payable to equity shareholders attributable to the previous financial year, approved during the interim period

	Six months ended 30 June	
	2021	2020
	RMB'000	*RMB'000*
Final dividend in respect of the previous financial year, approved during the following interim period, of HK$4.0 cents per ordinary share (2020: HK$7.5 cents per ordinary share)	**37,127**	76,220

(c) Equity settled share-based transactions

On 17 November 2017, 36,000,000 share options were granted for nil consideration to employees of the Company under the Company's employee share option scheme. Each option gives the holder the right to subscribe for one ordinary share of the Company. These share options will vest in four equal batches and the grantees shall be entitled to exercise, on the first business day immediately following 1 May 2018 until 16 November 2027, if certain performance conditions are met. The exercise price is HK$1.34.

No options were exercised during the six months ended 30 June 2021 (six months ended 30 June 2020: 7,775,000).

No options were lapsed during the six months ended 30 June 2021 (2020: Nil).

(d) Shares held for share award scheme

On 8 December 2020, the Company adopted a share award scheme (the "**Share Award Scheme**"), which is not subject to the provisions of Chapter 17 of the listing rules, to recognise and reward the contribution of certain eligible participants to the growth and development of the Group through an award of the Company's shares. The Share Award Scheme will be valid and effective for a period of 10 years commencing from 8 December 2020.

The Company's shares to be granted under the Share Award Scheme will be purchased and held by a trustee. The maximum number of shares to be subscribed for and/or purchased for the purpose of the scheme shall not exceed 10% of the total number of issued shares as at the adoption date.

During the reporting period, the trustee purchased 1,922,000 shares of the Company on the open market at a total cost of RMB16,785,000.

No share award was granted under the Share Award Scheme until 30 June 2021.

MANAGEMENT DISCUSSION AND ANALYSIS

During the latest round of medical reform in China, National Healthcare Security Administration ("NHSA"), as the sole payer, has controlled the national medical insurance costs by means of volume-based procurement which has become a vital part of the medical reforms. Medical devices is one of the areas of focus of medical insurance. In 2020, the NHSA introduced the national volume-based procurement of percutaneous coronary drug-eluting stents, resulting in a slump in the retail price of stent by more than 90% and has brought a huge shock to the industry.

On 21 June 2021, National Organising United Procurement Office for High-Value Medical Consumables ("國家組織高值醫用耗材聯合採購辦公室") issued the No. 1 Announcement of Artificial Joint Volume-based Procurement ("人工關節帶量採購1號公告"), which confirmed that the second batch of volume-based procurement of high-value consumables will be targeted at joint products. Under the circumstances of volume-based procurement, the orthopaedic industry has entered a period of turbulence and adjustment and the development of the industry has been affected significantly. The general strategies, R&D directions and operating model of the Company have to be adjusted to a certain extent.

In the first half of 2021, the COVID-19 pandemic was under better control in China. Except in cities where sporadic cases were found, the majority of hospitals have resumed regular operation and the number of surgical operations conducted has gradually resume normal.

For the six months ended 30 June 2021, the Group recorded sales revenue of RMB447.6 million and net profit of RMB111.5 million, representing decreases of 6.5% and 31.6% respectively compared to the same period of the previous year.

BUSINESS OVERVIEW AND OUTLOOK

Industrial Policies

Since 2020, the everchanging industrial policies has brought uncertainty and challenges for the operation and development of the Company. Through analysis of the industrial policies, the Group would have a better understanding on the national planning on the development of the industry so as to formulate an appropriate developing strategy for the Company.

Since 2019, the issue of exaggerated price of high-value consumables has been frequently mentioned in the national medical reforms documents, and the volume-based procurement led by the health insurance department has been a main approach to solve such issue. In 2020, several provincial health insurance departments across the country have started to make attempts on volume-based procurement for joint products, with an average reduction in retail prices ranging from 35% – 85%.

In 2021, after the NHSA completed the first batch of nationwide volume-based procurement of percutaneous coronary drug-eluting stents, no sooner the second batch of nationwide volume-based procurement was confirmed to be artificial joints. On 21 June 2021, following establishment of pilot zones of joint products volume-based procurement in different provinces and promulgation of regulations on stents, the National-Organising United Procurement Office for high-value medical consumables issued the No. 1 Announcement of Artificial Joints Volume-based Procurement. The announcement confirmed the fundamental rules of volume-based procurement of artificial joints, and expressed the attitude of respecting the clinical practices, and the ability of enterprises to guarantee production supply is also further emphasised.

These rules of the Nationwide Artificial-Joints Volume-based Procurement are different from the previous pilot tests in different provinces, such as fewer groupings, no distinction between domestic and imported varieties, hip joints are classified into three classes in accordance with its component materials, and no classification for knee joints. These rules have also taken into account the development of enterprises, joint products are divided into group A and group B according to the clinical demand, group A which has large procurement volume and high technical standards will be given certain policy preference in competition.

This Nationwide Volume-based Procurement will bring substantial changes to the entire artificial joint industry. The retail price of the products covered by the centralised procurement will drop significantly, which will in turn affect the distribution model and the competition landscape of the industry.

3D Printing Products Industry

3D-printed products are the products produced using 3D-printing technologies.

The Group is the first orthopaedic companys to launch 3D printed metal implants approved by National Medical Products Administration ("NMPA") in the China market. As of 30 June 2021, the Group held a total of eight Class III registration certificates for 3D-printed products approved by NMPA, including six standardised products and two customised products. Meanwhile, the Group owned 24 3D-printed customised products which have been filed with the local medicine regulatory authorities and can be sold for use in partner hospitals.

During the Reporting Period, the Group has newly obtained three 3D-printed metal implant registration certificates for 3D-printed artificial total knee joint system, 3D-printed porous interbody cages, and 3D-printed porous artificial vertebral bodies respectively.

The 3D-printed artificial total knee joint system is consisted of the total knee joint bone defect reformation plan with 3D-printed augments. Such products can solve the bone defect caused by various reasons, assist the doctor to reconstruct the bony anatomy of the patient's knee joint, and further enrich the knee joint product line of the Company, especially in knee joint revision products. The 3D-printed porous interbody cages and artificial vertebral bodies are conducted with surface colour anodising process on the basis of the past generation products, which enhances the ability of surface anti-oxidation and corrosion resistance. In addition, the 3D-printed trabeculae structure can speed up the growth and attachment of osseous tissue from the micro perspective, thus promoting the osseointegration effect.

For the six months ended 30 June 2021, the Group's 3D-printed products delivered RMB64.3 million in revenue, increasing by 6.1% as compared with the same period of the previous year.

Hip and Knee Products Business

The business under this section does not include 3D-printed products.

In the first half of 2021, the Group continued to provide customers and patients with a full range of orthopedic joint products, including hip and knee implants and tools for primary, complex, revision and reconstruction surgeries.

For the six months ended 30 June 2021, the Group's hip and knee joint products delivered RMB352.2 million in revenue, representing a year-on-year decrease of 10.5%.

Spinal and Trauma Products Business

The Group has added non-3D printing spinal and trauma products to its product portfolio through the acquisition of Beijing Libeier Bio-engineering Institute Co., Ltd.* (北京理貝爾生物工程研究所有限公司) ("**Libeier**"), and on such basis it has made further refinements and additions. With continuous R&D of new products, the Group can now provide total solutions for spinal fusion surgery, the Group is also developing implants for application in minimally invasive spine surgery at the same time.

In the first half of 2021, the Group launched two trauma products with innovative design on traditional products which makes surgeries more precise and convenient.

For the six months ended 30 June 2021, the Group's spinal and trauma products delivered RMB20.3 million in revenue, representing a year-on-year increase of 109.3%.

Research and Development

In the first half of 2021, Beijing AK, a subsidiary of the Group, obtained three latest Class III medical device registration certificates approved by NMPA, including 3D-printed artificial total knee joint system, 3D-printed porous interbody cages, and 3D-printed porous artificial vertebral bodies. As of 30 June 2021, the Group held a total of 39 registration certificates for Class III medical devices approved by the NMPA, four CE certifications approved by European regulators, and one US FDA certification under the AK Medical brand. ITI Medical, another subsidiary of the Group, obtained seven registration certificates for Class III medical devices approved by NMPA. The JRI brand held ten CE certifications approved by European regulators and two registration certificates for Class III medical devices approved by the NMPA.

With the implementation of volume-based procurement, the Group's R&D directions have been proactively adjusted. The Group has gradually adjusted its R&D focus from the products utilised in primary replacement surgeries to products applied in complex revision surgeries and early treatment. At the same time, the Group has also started to explore into several new areas, such as the application of digital orthopaedic technology.

To cope with the possible pressure in lowering prices as a result of volume-based procurement, the Group has started a series of improvement projects on technique and skills for cost reduction and efficiency enhancement, including reuse of 3D printing waste powder, and reducing the consumable cost of 3D printing equipment per oven.

Sales and Operation

Joint products business

The Group has launched the "Master Plan" (大師計劃) project since 2019, aiming to build a three-dimensional platform model that integrates an innovative product platform, an advantageous technology platform and a customer platform, so as to build a platform for academic exchange at different levels and in different training directions surrounding the promotion of new products, technologies and techniques as well as doctor education programmes, and to build an academic high ground by leveraging on the systematic academic articles produced by such platform.

In the first half of 2021, the Group has been promoting the Master Plan project on a continuous basis, product level of which includes:

Being a leader in 3D printing orthopedic sector, AK Medical has launched:

1) The 3D metal printing of the Ring-fix refurbishment cup system. Continuing to build on the strengths of AK Medical's overall solutions on hip joints, the pioneering restrictive lining design is highly effective for patients with high risk of dislocation due to neuromuscular disorders, a history of previous dislocations, and severe muscle weakness.

2) MLII project system adopting minimally invasive project system. The MLII British Cup (MLII 英倫杯) system is the latest system launched by AK Medical that is adoptive to a wide range of lining acetabular systems and allows a larger diameter femoral head in a smaller cup diameter, increasing mobility and reducing the risk of dislocation.

3) In the first half of 2021, AK Medical was granted the registration certificate of the first 3D metal printing of the biological knee joint product system in China and was the first to market with the 3D ACT-NewBone™ System (NBS) knee implants revision system with augments to solve various problems of bone defect more conveniently. At present, AK Medical is the only company in China that offers a range of knee joint products from initial, complex, revision and tumour to 3D printed revision product system, further extending its product advantage in terms of knee joint.

4) Knee implants international tool system. The A3 knee system has been well accepted by both domestic and international markets since its launch. In order to expand its market advantage, the Company has put the international tool system, which was originally sold in Europe and the U.S. markets, into the domestic market in bulk. The excellent tool experience has improved the overall surgical experience of customers to accumulate research and development experience for the improvement and iteration of the tool, which has been recognised by top hospitals in China, and has led to significant product placement.

Academic platform:

1) By building an academic platform for doctors and evaluating the cooperation with top experts in China, AK Medical's products have published several high-quality articles in core journals in China and abroad, including The Journal of Bone and Joint Surgery, the Chinese Medical Association, and the Orthopedic Journal of China, further enhancing the academic high ground of AK Medical.

2) In the first half of 2021, leveraging on the "Master Plan" platform, AK Medical has launched a number of online and offline academic activities surrounding the promotion of hip and knee revision products and training on the minimally invasive technology platform with the focus on the professional upgrading needs of doctors, and has established four provincial level training centres, accumulatively covering approximately 1,000 key hospitals and over 50,000 person/times of training clients.

Spinal and trauma business:

The implementation of the 3D spinal fusion centre is an important development strategy for the AK Libeier brand and has far-reaching strategic significance in promoting the market expansion and exploration of 3D spinal and Libeier internal fixation technology. Such programme consists of the establishment of a series of fusion centres. Five tertiary hospitals have been established nationwide as customisation Centre for in-depth collaboration with clinical experts to promote the development of 3D printing customised products and technology, which is expected to drive the volume of customised surgical implantations, leveraging the leading edge of 3D printing customisation to solve clinical challenges.

Outlook

2021 is the year in preparation for volume-based procurement, the annual operating results of the Company will face some uncertainties due to the impact of such industrial policy. Under such circumstances, the Group has made a series of adjustments to strategic planning, including adjusting the direction of R&D and streamlining the operational model.

As a leading brand in China's orthopedic industry, the Group has strong confidence in China's orthopedic industry development and its ability to cope with the challenges. The Company believes that the volume-based procurement will accelerate the integration of the industry and provide an opportunity for the Company to further expand its market share.

FINANCIAL REVIEW

Overview

	Six months ended 30 June		
	2021	2020	Variance
	RMB'000	*RMB'000*	%
Revenue	**447,633**	478,979	-6.5%
Gross profit	**308,333**	336,323	-8.3%
Profit for the period	**111,483**	162,871	-31.6%
Profit attributable to equity shareholders of the Company	**111,483**	162,871	-31.6%
Earnings per share			
Basic	**RMB0.10**	RMB0.15	
Diluted	**RMB0.10**	RMB0.15	

Affected by the national joint implant volume-based procurement policy, there was uncertainty with the price trend and distributors (being the Group's customers) purchased less joint implants, causing a decrease in revenue. Meanwhile, the established brand image of the Company by virtue of its 3D-printing technology and 3D ACT platform effectively promoted the sales of its 3D-printed products and regular hip and knee products, which assisted the Group to record a growth of 6.1% in 3D-printed products.

The following discussions are based on the financial information and notes set out in this announcement above and should be read in conjunction with them.

Revenue

	Six months ended 30 June		
	2021	2020	Variance
	RMB'000	*RMB'000*	%
Hip replacement implants(1)	**243,375**	271,064	-10.2%
Knee replacement implants(2)	**108,861**	122,619	-11.2%
Spinal and trauma implants(3)	**20,327**	9,711	109.3%
3D-printed products(4)	**64,258**	60,546	6.1%
Third party orthopedic products	**775**	3,616	-78.6%
Others(5)	**10,037**	11,423	-12.1%
Total	**447,633**	478,979	-6.5%

Notes:

(1) Excluding 3D-printed hip replacement implants;

(2) Excluding 3D-printed knee replacement implants;

(3) Excluding 3D-printed spinal and trauma implants;

(4) Including 3D-printed hip replacement implants, knee replacement implants, spinal interbody cages, artificial vertebral bodies and artificial pelvis;

(5) Others primarily include surgical instruments and medical irrigators

The Group's revenue amounted to RMB447.6 million for the six months ended 30 June 2021, representing a decrease of 6.5% as compared with RMB479.0 million for the six months ended 30 June 2020. Affected by the price uncertainty caused by the national joint implant volume-based procurement policy, the revenue in hip and knee implants of the Company decreased as compared to the same period of 2020. In the first half of 2021, revenue in spinal and trauma implants of the Company increased by 109.3% as compared to the same period of 2020. Meanwhile, the 3D-printed products of the Company still achieved an increase of 6.1% in revenue.

Hip and Knee Implants Products

The Group's hip and knee implants products include hip implants and knee implants.

The Group's hip implants recorded revenue of RMB243.4 million for the six months ended 30 June 2021, representing a decrease of 10.2% as compared with RMB271.1 million for the six months ended 30 June 2020. The Group's knee implants recorded revenue of RMB108.9 million for the six months ended 30 June 2021, representing a decrease of 11.2% as compared with RMB122.6 million for the six months ended 30 June 2020. The decrease in revenue of hip and knee implants products was mainly attributable to the fact that distributors reduced their purchases of primary hip and knee implants products as affected by the aforesaid national joint implant volume-based procurement policy. At the same time, in the first half of 2021, the Group's complicated surgery solutions such as 3D-printed technology and AK Rotation Hinge Knee System had facilitated the implantation of joint replacement products, and the sales revenue of hip and knee replacement implants products increased accordingly.

Spinal and Trauma Implants Products

The Group's spinal and trauma implants products include Libeier's spinal implants and trauma implants. The Group's spinal and trauma implants recorded revenue of RMB20.3 million for the six months ended 30 June 2021, representing an increase of 109.3% as compared with RMB9.7 million for the six months ended 30 June 2020. Such increase was mainly owing to that for the first half of 2020, the Group only consolidated the revenue derived from spinal and trauma implants after the acquisition date of Libeier on 24 April 2020.

3D-printed products

The Group's 3D-printed products mainly include 3D-printed hip implants, 3D-printed Knee replacement implants, 3D-printed artificial vertebral bodies and spinal interbody cages and 3D-printed artificial pelvis implants. The Group's 3D-printed products recorded revenue of RMB64.3 million for the six months ended 30 June 2021, representing an increase of 6.1% as compared with RMB60.5 million for the six months ended 30 June 2020. In the first half of 2021, sales of the Group's 3D-printed artificial vertebral bodies and spinal interbody cage increased significantly as compared to the first half of 2020. Such increase was due to the Group's innovative 3D-printing technology, superiority of their functions and the continuous expanding product lines of spinal products which gained high recognition from the market, thus achieving a significant increase in sales.

Third Party Orthopedic Products

To enrich the Group's product portfolio, the Group also distributes orthopedic products produced by third parties. For the six months ended 30 June 2021 and the six months ended 30 June 2020, the Group's revenue from distributing third party orthopedic products amounted to RMB0.8 million and RMB3.6 million, representing 0.2% and 0.8% of its revenue, respectively. As the Group's own-brand product lines become more extensive, the proportion of the Group's revenue deriving from distributing third party orthopedic products has continued to decline.

Domestic and Overseas Sales

Most of the Group's revenue was derived from the sales in China with a small proportion of the revenue derived from the sales in the overseas market. A breakdown of the Group's sales revenue from China and overseas is as follows:

	Six months ended 30 June		
	2021	2020	Variance
	RMB'000	*RMB'000*	*%*
China	**379,553**	432,933	-12.3%
Other countries	**68,080**	46,046	47.9%
Total	**447,633**	478,979	-6.5%

Overseas sales were severely affected by the pandemic for the first half 2020, while in the first half of 2021, the spread of pandemic in the overseas has been slowing down, and the volume of operation in the overseas' hospitals started to increased. The sales revenue from overseas for the six months ended 30 June 2021 posted a significant increase of 47.9% to RMB68.1 million as compared to the corresponding period last year. Revenue from China for the six months ended 30 June 2021 was RMB379.6 million, representing a decrease of 12.3% as compared to the corresponding period last year, mainly affected by the aforesaid national joint implant volume-based procurement policy.

Cost of Sales

For the six months ended 30 June 2021, the Group's cost of sales was RMB139.3 million, representing a decrease of 2.4% as compared with RMB142.7 million for the six months ended 30 June 2020. The decrease in cost of sales was primarily due to a decrease in sales volume of the Group's products.

Gross Profit and Gross Margin

Gross profit represents revenue less cost of sales. The Group's gross profit decreased by 8.3% to RMB308.3 million for the six months ended 30 June 2021 from RMB336.3 million for the six months ended 30 June 2020. The decrease in gross profit was primarily caused by a decrease in revenue.

Gross margin is calculated as gross profit divided by revenue. The Group's gross margin was 68.9% for the six months ended 30 June 2021, decreased 1.3% from 70.2% for the six months ended 30 June 2020, which was primarily due to the decrease in gross profit of regular spinal and trauma implants products. Excluding the impact of regular spinal and trauma implants products, the gross margin was 69.8%.

Other Income, net

The Group's other income for the six months ended 30 June 2021 was RMB2.1 million, representing an increase of RMB1.2 million as compared with RMB0.9 million for the six months ended 30 June 2020.

Selling and Distribution Expenses

Selling and distribution expenses were RMB78.7 million for the six months ended 30 June 2021, representing an increase of 25.5% as compared with RMB62.8 million for the six months ended 30 June 2020. The increase was primary due to the impact of COVID-19 pandemic to the Group in the first half of 2020 in that most of the Company's marketing activities were cancelled and the government had also reduced or waived some of the social insurance payments for staff. In 2021, with the resumption of marketing activities, relevant marketing expenses, travelling cost and the remuneration and social insurance payment for employees increased.

General and Administrative Expenses

General and administrative expenses amounted to RMB51.0 million for the six months ended 30 June 2021, representing an increase of 33.4% as compared with RMB38.3 million for the six months ended 30 June 2020. The increase was mainly due to the abovesaid increase in remuneration and social insurance payment for the management and an increase in charity donation.

Research and Development Expenses

Research and development expenses for the six months ended 30 June 2021 were RMB51.7 million, representing an increase of 17.9% as compared with RMB43.9 million for the six months ended 30 June 2020. The increase was mainly due to the increase in labor costs for R&D staff, and cost of R&D materials as a result of more investment in R&D and the proactive promotion of R&D projects.

Net Finance Income

Net finance income was RMB2.7 million for the six months ended 30 June 2021, representing a decrease of RMB1.8 million from RMB4.5 million for the six months ended 30 June 2020. Such decrease was primarily attributable to the impact of the changes of foreign exchange.

Income Tax Expenses

Income tax expense was RMB20.1 million for the six months ended 30 June 2021, representing a decrease of 40.8% as compared with RMB34.0 million for the six months ended 30 June 2020. Such decrease was primarily attributable to the decline in profit before tax resulted from the combined effect of revenue decrease and expense increase. Meanwhile, in the first half of 2021, the additional tax deduction ratio on R&D costs increased from 75% to 100% in accordance with the national policy, and the Company further benefited from income tax incentives.

Liquidity and Financial Resources

As at 30 June 2021, the Group had cash and cash equivalents of RMB541.1 million, structured deposit of RMB238.9 million, time deposits over 3 months of RMB107.5 million and import tariff monthly settlement deposit of RMB5.0 million, amounting to RMB892.5 million in aggregate, as compared with RMB956.1 million as at 31 December 2020. The Board's approach to manage the liquidity of the Group is to ensure sufficient liquidity at any time to meet its matured liabilities so as to avoid any unacceptable losses or damage to the Group's reputation.

Net Current Assets

The Group had net current assets of RMB1,527.2 million as at 30 June 2021, representing an increase of RMB42.2 million as compared with RMB1,485.0 million as at 31 December 2020. Such increase primarily represents the proceeds from the operations of the Group.

Foreign Exchange Exposure

The Group's principal business is located in China, and it is exposed to foreign currency risks, primarily including trade receivables, trade payables and cash balances that are denominated in foreign currency, i.e. a currency other than the functional currency of the operations to which the transaction relates generating from overseas sales and purchases. The currencies giving rise to this risk are primarily US dollars and Euro. For the six months ended 30 June 2021, the Group recorded an exchange loss of RMB1.3 million, as compared to an exchange loss of RMB0.6 million for the six months ended 30 June 2020. So far, the Group has not had any hedging arrangements to manage foreign exchange risks but has been actively monitoring and overseeing its foreign exchange risks.

Capital Expenditure

For the six months ended 30 June 2021, the Group's total capital expenditure amounted to approximately RMB39.2 million, which was primarily used in (i) construction of factories; (ii) purchase of patents; and (iii) acquiring equipment, machinery, and software for manufacturing and R&D activities.

Charge of Assets/Pledge of Assets

As at 30 June 2021, the Group pledged a deposit of RMB5.0 million in the margin account to obtain the monthly settlement qualification of relevant tax for import and export operations incurred by the PRC Customs. Other than that, the Group did not have any charge of assets or pledge of assets.

Borrowings and Gearing Ratio

As at 30 June 2021, the Group did not have any outstanding bank loans or other borrowings (as at 31 December 2020: Nil).

Contingent Liabilities

As of 30 June 2021, the Group did not have any material contingent liabilities (as of 31 December 2020: Nil).

Significant Investments

The Group did not hold any significant investments in the equity interests of any other companies as at 30 June 2021.

Material Acquisitions and Disposals

For the six months ended 30 June 2021, the Group did not have any material acquisitions and disposals.

Future Plans for Material Investments and Capital Assets

As of 30 June 2021, in addition to the construction of Changzhou Facilities as disclosed in the prospectus of the Company dated 7 December 2017, the Group planned to acquire 50 acres of land in the Beijing Changbei base for production and to consolidate leased premises in multiple locations to improve operational and management efficiency and to reduce overall operating costs. The Company will issue further announcement(s) as and when appropriate to keep its shareholders and potential investors informed of such acquisition if it materialises in the future.

Employee and Remuneration Policy

As at 30 June 2021, the Group had 963 employees (30 June 2020: 963 employees). Total staff remuneration expenses including Directors' remuneration for the six months ended 30 June 2021 amounted to RMB100.4 million (for the six months ended 30 June 2020: RMB73.8 million). The increase in staff remuneration was primary due to the increase in social insurance payment for the staff. Affected by the pandemic, in the first half of 2020, the government had reduced or waived some of the social insurance payments for the staff.

Remuneration is determined with reference to performance, skills, qualifications and experience of the staff concerned and in accordance with the prevailing industry practice. In addition to salary payments, other staff benefits include social insurance and housing provident contribution made by the Group, performance-based compensation and bonus, share option scheme and share award scheme.

Use of Proceeds from Initial Public Offering

The net proceeds from the initial public offering of the Company were approximately HK$477.0 million and were fully utilised as at 31 December 2020. Accordingly, no further proceeds from the initial public offering were available for use during the six months ended 30 June 2021 or will be available for use in the future.

Use of Proceeds from placement and top-up subscription

The net proceeds from the top-up subscription of the Company in the first half of 2020 were approximately HK$783.9 million. A portion of the net proceeds was used for the acquisition of Libeier and as general working capital of the Group. Up to the date of this announcement, the net proceeds had not been fully utilised by the Group and it is expected that the remaining proceeds will be used in full for strategic acquisition investment (if any) and/or general working capital of the Group by 31 December 2022.

SUBSEQUENT EVENT

As the date of this announcement, the Group had no material events since 30 June 2021.

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

During the six months ended 30 June 2021, pursuant to the rules of the share award scheme, the trustee purchased 1,922,000 shares of the Company through purchases on the open market at a total cost of RMB16,785,000.

Save for the above, neither the Company nor any of its subsidiaries has purchased, sold or redeemed any of the Company's listed securities during the six months ended 30 June 2021.

MATERIAL ACQUISITIONS AND DISPOSALS OF SUBSIDIARIES AND AFFILIATED COMPANIES

During the six months ended 30 June 2021, the Group did not have any material acquisition and disposal of subsidiaries and affiliated companies.

MODEL CODE FOR SECURITIES TRANSACTIONS BY DIRECTORS OF LISTED ISSUERS

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 Rules Governing the Listing of Securities on The Stock Exchange of Hong Kong Limited (the "**Listing Rules**") as the code of conduct regarding securities transactions by Directors. Having made specific enquiries by the Company, all the Directors confirmed that they have complied with the requirements as set out in the Model Code throughout the six months ended 30 June 2021.

COMPLIANCE WITH THE CODE ON CORPORATE GOVERNANCE PRACTICES

For the six months ended 30 June 2021, save as provision addressed below, the Company has complied with all the applicable code provisions as set out in the Corporate Governance Code and Corporate Governance Report contained in Appendix 14 to the Listing Rules.

Code provision A.2.1 stipulates that the roles of chairman and chief executive should be separate and should not be performed by the same individual.

The chairman and chief executive officer of the Company are held by Mr. Li Zhijiang who is one of the founders of the Group and has extensive experience in the industry.

The Board believes that Mr. Li Zhijiang can provide the Company with strong and consistent leadership that allows for effective and efficient planning and implementation of business decisions and strategies.

The Board is of the view that given that Mr. Li Zhijiang had been responsible for leading the strategic planning and business development of the Group, the arrangement would allow for effective and efficient planning and implementation of business decisions and strategies under his strong and consistent leadership, and should be overall beneficial to the management and development of the Group's business.

REVIEW BY THE AUDIT COMMITTEE

The Audit Committee consists of three members, namely Mr. Kong Chi Mo and Dr. Li Shu Wing David, independent non-executive Directors, and one non-executive Director, Dr. Wang David Guowei. Mr. Kong Chi Mo is the chairman of the Audit Committee.

The Group's interim results for the six months ended 30 June 2021 have been reviewed by all members of the Audit Committee. Based on such review, the Audit Committee was satisfied that the Group's unaudited interim results were prepared in accordance with applicable accounting standards. The Audit Committee does not have any disagreement with the accounting treatment adopted by the Company.

INDEPENDENT REVIEW BY AUDITORS

The interim financial report for the six months ended 30 June 2021 is unaudited, but has been reviewed by KPMG, in accordance with Hong Kong Standard on Review Engagements 2410 "Review of interim financial information performed by the independent auditor of the entity" issued by the Hong Kong Institute of Certified Public Accountants, whose unmodified review report is included in the interim report to be sent to the shareholders of the Company.

INTERIM DIVIDEND

The Board did not recommend to declare any interim dividend for the six months ended 30 June 2021.

PUBLICATION OF INTERIM RESULTS AND INTERIM REPORT

This announcement has been published on the websites of the Hong Kong Exchanges and Clearing Limited (http://www.hkexnews.hk) and the Company (http://ak-medical.net). The interim report of the Company for the six months ended 30 June 2021 containing all the information required by the Listing Rules will be despatched to shareholders of the Company and will be available on the same websites in due course.

By Order of the Board
AK Medical Holdings Limited
Li Zhijiang
Chairman

Hong Kong, 24 August 2021

As at the date of this announcement, the Board comprises Mr. Li Zhijiang, Ms. Zhang Bin, Mr. Zhang Chaoyang and Ms. Zhao Xiaohong as executive directors, Dr. Wang David Guowei as non-executive director, and Mr. Kong Chi Mo, Dr. Li Shu Wing David and Mr. Eric Wang as independent non-executive directors.

* *for identification purpose only*