

# AK Medical (1789 HK)

## Higher growth certainty in 2023E

Despite the negative impact of COVID-19 on surgery demand for orthopedic implants, AK Medical reported FY22E revenue of RMB1,052.0mn, up 38.2% YoY, primarily driven by the revenue growth in hip and knee implants (+44.7% YoY) after the VBP as well as the ICOS customized products (101.3% YoY). GPM was 60.5% (-5.1 ppt) due to the price reduction after VBP. Thanks to the significant reduction in selling expense ratio after the VBP, attributable net profit increased by 121.1% YoY in FY22, 5.9%/ 4.4% above CMBI/ consensus estimates.

■ **Strong volume growth after VBP more than offset the price cut.** In 2022, sales volume of the primary hip system increased by 81% YoY and the primary knee system increased by 130% YoY, attributable to the increasing demand in primary hip and knee replacement operations after VBP. As a result, AK Medical's total revenue from hip and knee implants grew by 44.7% YoY to RMB921.4mn. Moreover, thanks to VBP, AK Medical has successfully covered over 90% of provincial hospitals nationwide. With increasing market share in middle and high-end markets which have greater demand for knee replacement than low-end market, we expect sustained sales growth of primary knee system in the coming years.

■ **High-margin products safe from VBP to gradually unleash growth potential.** AK Medical is the only one in China with 3D printing customized registration certificates and continuous expansion in its Innovative Customized Orthopedic Solution (ICOS) services. As of the end of 2022, the Company has obtained two Class III 3D-printed customized product registration certificates and 54 customized product filings with cooperating hospitals. Growing demand in personalized treatment and broadening application prospects drove AK Medical's revenue growth from customized products and services by 101.3% YoY to RMB47.0mn in 2022. We expect the Company's ICOS income to reach RMB70.4mn in 2023E. Besides, with expanded coverage of provincial hospitals and enriched product portfolios, sales of revision products will achieve substantial growth. We believe the increasing proportion of revenue from these high-margin products will enhance AK Medical's profitability in the long term.

■ **Expect orthopedic surgery demand recovery in 2023E.** Several domestic hospitals reported a surge in surgery volume since Feb 2023 due to the pent-up surgery demand during the COVID-19 in 2022. We see orthopedic implant, as a non-emergency surgery, to recover rapidly in 2023E post a decrease in the volume during COVID-19 pandemic.

■ **Maintain BUY.** We expect AK Medical's revenue to grow at a CAGR of 31.2% from 2023E to 2025E. We raised our TP to HK\$12.31 based on a 9-year DCF model (WACC: 10.73%, terminal growth rate: 3.0%) to reflect improving profitability thanks to the strong growth of high-margin products in the long term.

### Earnings Summary

(YE 31 Dec)	FY21A	FY22A	FY23E	FY24E	FY25E
Revenue (RMB mn)	761	1,052	1,414	1,870	2,434
YoY growth (%)	(26.5)	38.2	34.4	32.3	30.2
Net profit (RMB mn)	93	205	272	367	491
YoY growth (%)	(70.5)	121.1	32.7	35.1	33.7
EPS (Reported) (RMB)	0.08	0.18	0.24	0.33	0.44
YoY growth (%)	(70.8)	121.8	32.0	35.1	33.7
P/E (x)	94.0	42.4	32.1	23.8	17.8
Yield (%)	0.3	0.7	0.8	1.1	1.4
ROE (%)	4.6	9.1	11.1	13.5	15.9
Net gearing (%)	Net cash	Net cash	Net cash	Net cash	Net cash

Source: Company data, Bloomberg, CMBIGM estimates

### BUY (Maintain)

Target Price	HK\$12.31
(Previous TP	HK\$11.44)
Up/Downside	33.7%
Current Price	HK\$9.21

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### Stock Data

Mkt Cap (HK\$ mn)	10,276.1
Avg 3 mths t/o (HK\$ mn)	9.3
52w High/Low (HK\$)	10.30/3.82
Total Issued Shares (mn)	1115.8
Source: FactSet	

### Shareholding Structure

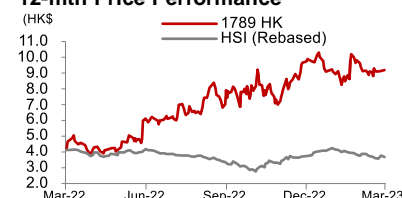
Ximalaya Limited	45.3%
Gaoling Fund	6.4%
Source: HKEx	

### Share Performance

	Absolute	Relative
1-mth	-1.7%	-1.7%
3-mth	-5.4%	-4.9%
6-mth	23.8%	7.9%

Source: FactSet

### 12-mth Price Performance



Source: FactSet

### Related report:

1. [Accelerating import substitution: positive outlook of 2023E](#)

Figure 1: Earnings revision

RMB mn	New			Old			Diff (%)		
	FY23E	FY24E	FY25E	FY23E	FY24E	FY25E	FY23E	FY24E	FY25E
Revenue	1,414	1,870	2,434	1,444	1,900	2,424	-2.1%	-1.6%	0.4%
Gross profit	855	1,141	1,497	881	1,150	1,454	-2.9%	-0.8%	2.9%
Operating profit	300	412	558	301	423	575	-0.4%	-2.6%	-2.9%
Net profit	272	367	491	273	377	505	-0.4%	-2.5%	-2.8%
EPS (RMB)	0.24	0.33	0.44	0.24	0.34	0.45	-0.4%	-2.5%	-2.8%
Gross margin	60.50%	61.00%	61.50%	61.00%	60.50%	60.00%	-0.50 ppt	+0.50 ppt	+1.50 ppt
Operating margin	21.21%	22.03%	22.91%	20.85%	22.26%	23.71%	+0.36 ppt	-0.23 ppt	-0.80 ppt
Net Margin	19.23%	19.64%	20.17%	18.90%	19.82%	20.85%	+0.33 ppt	-0.18 ppt	-0.68 ppt

Source: Company data, CMBIGM estimates

Figure 2: Risk-adjusted DCF valuation

DCF Valuation (in Rmb mn)	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E	2031E
EBIT	300	412	558	669	796	940	1,099	1,275	1,467
Tax rate	15%	15%	15%	15%	15%	15%	15%	15%	15%
EBIT*(1-tax rate)	255	350	474	569	677	799	935	1,084	1,247
+ D&A	74	74	74	84	94	104	115	125	135
- Change in working capital	-210	-221	-245	-277	-311	-345	-379	-413	-446
- Capex	-50	-50	-50	-57	-63	-70	-77	-84	-91
FCFF	69	154	253	319	397	488	593	711	844
Terminal value									11,257
FCF + Terminal value	69	154	253	319	397	488	593	711	12,102

Terminal growth rate	3.0%
WACC	10.73%
Cost of Equity	13.5%
Cost of Debt	5.0%
Equity Beta	1.05
Risk Free Rate	3.00%
Market Risk Premium	10.0%
Target Debt to Asset ratio	30.0%
Effective Corporate Tax Rate	15.0%

PV of enterprise value (RMB mn)	11,032
Net debt (RMB mn)	(646)
Minority interests (RMB mn)	0
Equity value (RMB mn)	11,678
Equity value (HK\$ mn)	13,738
# of shares outstanding (mn)	1,116
Price per share (HK\$)	12.31

Source: CMBIGM estimates

Figure 3: Sensitivity analysis

		WACC				
		9.73%	10.23%	10.73%	11.23%	11.73%
Terminal growth rate	4.0%	16.97	15.27	13.83	12.60	11.55
	3.5%	15.78	14.29	13.02	11.92	10.97
	3.0%	14.77	13.45	12.31	11.33	10.46
	2.5%	13.90	12.72	11.69	10.80	10.01
	2.0%	13.14	12.08	11.14	10.32	9.60

Figure 4: CMBIGM estimates vs consensus

RMB mn	CMBIGM			Consensus			Diff (%)		
	FY23E	FY24E	FY25E	FY23E	FY24E	FY25E	FY23E	FY24E	FY25E
Revenue	1,414	1,870	2,434	1,413	1,820	2,256	0.0%	2.7%	7.9%
Gross Profit	855	1,141	1,497	838	1,082	1,198	2.0%	5.4%	25.0%
Operating Profit	300	412	558	293	406	600	2.2%	1.4%	-7.1%
Net profit	272	367	491	265	360	542	2.6%	2.0%	-9.4%
EPS (RMB)	0.24	0.33	0.44	0.24	0.32	0.49	2.4%	2.2%	-10.2%
Gross Margin	60.50%	61.00%	61.50%	59.32%	59.46%	53.10%	+1.18 ppt	+1.54 ppt	+8.40 ppt
Operating Margin	21.21%	22.03%	22.91%	20.76%	22.32%	26.60%	+0.44 ppt	-0.28 ppt	-3.68 ppt
Net Margin	19.23%	19.64%	20.17%	18.75%	19.77%	24.02%	+0.47 ppt	-0.13 ppt	-3.85 ppt

Source: Company data, Bloomberg, CMBIGM estimates

## Financial Summary

INCOME STATEMENT	2020A	2021A	2022A	2023E	2024E	2025E
YE 31 Dec (RMB mn)						
Revenue	1,035	761	1,052	1,414	1,870	2,434
Cost of goods sold	(321)	(262)	(416)	(558)	(729)	(937)
Gross profit	715	499	636	855	1,141	1,497
Operating expenses	(346)	(400)	(416)	(555)	(729)	(939)
Selling expense	(154)	(187)	(180)	(254)	(337)	(438)
Admin expense	(83)	(105)	(118)	(155)	(196)	(243)
R&D expense	(105)	(113)	(111)	(155)	(206)	(268)
Others	(4)	6	(7)	10	10	10
Operating profit	369	99	220	300	412	558
Net Interest income/(expense)	8	9	20	20	20	20
Pre-tax profit	377	109	240	320	432	578
Income tax	(63)	(16)	(36)	(48)	(65)	(87)
After tax profit	314	93	205	272	367	491
Minority interest	0	0	0	0	0	0
Attributable net profit	314	93	205	272	367	491

BALANCE SHEET	2020A	2021A	2022A	2023E	2024E	2025E
YE 31 Dec (RMB mn)						
Current assets	1,903	1,934	2,065	2,291	2,638	3,087
Cash & equivalents	713	476	626	643	722	869
Account receivables	451	388	467	542	666	800
Inventories	361	423	402	535	679	847
Other current assets	378	648	570	570	570	570
Non-current assets	624	671	709	685	661	637
PP&E	364	382	436	424	412	401
Deferred income tax	51	76	75	75	75	75
Intangibles	76	80	85	73	60	48
Goodwill	133	132	113	113	113	113
Other non-current assets	0	0	0	0	0	0
Total assets	2,527	2,605	2,774	2,976	3,298	3,724
Current liabilities	418	489	436	434	481	538
Short-term borrowings	0	0	0	0	0	0
Account payables	146	93	155	153	200	257
Tax payable	42	52	23	23	23	23
Other current liabilities	230	345	258	258	258	258
Non-current liabilities	66	84	86	86	86	86
Deferred income	12	12	13	13	13	13
Other non-current liabilities	54	72	73	73	73	73
Total liabilities	484	574	522	520	567	624
Share capital	9	9	9	9	9	9
Other reserves	2,033	2,022	2,234	2,438	2,714	3,082
Total shareholders equity	2,043	2,032	2,244	2,448	2,723	3,091
Minority interest	0	0	0	0	0	0
Total equity and liabilities	2,527	2,605	2,766	2,968	3,290	3,715

<b>CASH FLOW</b>	<b>2020A</b>	<b>2021A</b>	<b>2022A</b>	<b>2023E</b>	<b>2024E</b>	<b>2025E</b>
<b>YE 31 Dec (RMB mn)</b>						
<b>Operating</b>						
Profit before taxation	377	109	240	320	432	578
Depreciation & amortization	58	73	74	74	74	74
Tax paid	(45)	(29)	(36)	(48)	(65)	(87)
Change in working capital	(186)	31	(21)	(210)	(221)	(245)
Others	1	(7)	(20)	(20)	(20)	(20)
<b>Net cash from operations</b>	<b>205</b>	<b>177</b>	<b>238</b>	<b>116</b>	<b>201</b>	<b>300</b>
<b>Investing</b>						
Capital expenditure	(351)	(76)	(50)	(50)	(50)	(50)
Net proceeds from disposal of short-term investments	(548)	(1,039)	0	0	0	0
Others	542	818	20	20	20	20
<b>Net cash from investing</b>	<b>(356)</b>	<b>(297)</b>	<b>(30)</b>	<b>(30)</b>	<b>(30)</b>	<b>(30)</b>
<b>Financing</b>						
Dividend paid	(75)	(37)	(60)	(68)	(92)	(123)
Net borrowings	(2)	0	0	0	0	0
Proceeds from share issues	701	0	0	0	0	0
Others	(13)	(64)	0	0	0	0
<b>Net cash from financing</b>	<b>612</b>	<b>(101)</b>	<b>(60)</b>	<b>(68)</b>	<b>(92)</b>	<b>(123)</b>
<b>Net change in cash</b>						
Cash at the beginning of the year	277	713	476	626	643	722
Exchange difference	(24)	(16)	0	0	0	0
<b>Cash at the end of the year</b>	<b>713</b>	<b>476</b>	<b>624</b>	<b>643</b>	<b>722</b>	<b>869</b>
<b>GROWTH</b>	<b>2020A</b>	<b>2021A</b>	<b>2022A</b>	<b>2023E</b>	<b>2024E</b>	<b>2025E</b>
<b>YE 31 Dec</b>						
Revenue	11.7%	(26.5%)	38.2%	34.4%	32.3%	30.2%
Gross profit	11.1%	(30.1%)	27.5%	34.4%	33.4%	31.3%
Operating profit	16.9%	(73.0%)	121.2%	36.3%	37.4%	35.4%
EBITDA	24.3%	(59.6%)	70.6%	27.1%	30.0%	30.0%
EBIT	16.9%	(73.0%)	121.2%	36.3%	37.4%	35.4%
Net profit	17.6%	(70.5%)	121.1%	32.7%	35.1%	33.7%
<b>PROFITABILITY</b>	<b>2020A</b>	<b>2021A</b>	<b>2022A</b>	<b>2023E</b>	<b>2024E</b>	<b>2025E</b>
<b>YE 31 Dec</b>						
Gross profit margin	69.0%	65.6%	60.5%	60.5%	61.0%	61.5%
Operating margin	35.6%	13.1%	20.9%	21.2%	22.0%	22.9%
EBITDA margin	41.3%	22.6%	28.0%	26.5%	26.0%	26.0%
Return on equity (ROE)	15.4%	4.6%	9.1%	11.1%	13.5%	15.9%
<b>GEARING/LIQUIDITY/ACTIVITIES</b>	<b>2020A</b>	<b>2021A</b>	<b>2022A</b>	<b>2023E</b>	<b>2024E</b>	<b>2025E</b>
<b>YE 31 Dec</b>						
Net debt to equity (x)	(0.4)	(0.3)	(0.3)	(0.3)	(0.3)	(0.3)
Current ratio (x)	4.6	4.0	4.7	5.3	5.5	5.7
Receivable turnover days	127.3	201.0	148.3	140.0	130.0	120.0
Inventory turnover days	335.6	545.4	362.4	350.0	340.0	330.0
Payable turnover days	127.8	166.0	108.9	100.0	100.0	100.0
<b>VALUATION</b>	<b>2020A</b>	<b>2021A</b>	<b>2022A</b>	<b>2023E</b>	<b>2024E</b>	<b>2025E</b>
<b>YE 31 Dec</b>						
P/E	27.4	94.0	42.4	32.1	23.8	17.8
Div yield (%)	0.4	0.3	0.7	0.8	1.1	1.4
EV/Sales	7.7	10.7	7.6	5.7	4.3	3.2
EV/EBIT	21.5	81.7	36.6	26.8	19.3	14.0
EV/EBITDA	18.6	47.1	27.4	21.5	16.4	12.3

Source: Company data, CMBIGM estimates. Note: The calculation of net cash includes financial assets.

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