

MedTech

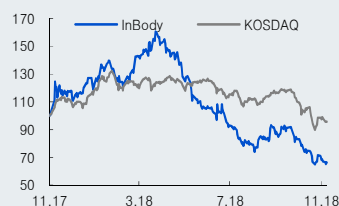
Results Comment
November 15, 2018

(Maintain)	Buy
Target Price (12M, W)	▼ 30,000
Share Price (11/14/18, W)	20,900
Expected Return	44%

OP (18F, Wbn)	26
Consensus OP (18F, Wbn)	25
EPS Growth (18F, %)	13.9
Market EPS Growth (18F, %)	11.1
P/E (18F, x)	13.0
Market P/E (18F, x)	8.3
KOSDAQ	671.56

Market Cap (Wbn)	286
Shares Outstanding (mn)	14
Free Float (%)	69.8
Foreign Ownership (%)	21.2
Beta (12M)	0.87
52-Week Low	20,450
52-Week High	50,600

(%)	1M	6M	12M
Absolute	-15.9	-46.8	-46.8
Relative	-8.4	-32.0	-40.0



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InBody

(041830 KQ)

Focus on historically low valuation

3Q18 review: Above-consensus OP

For 3Q18, InBody delivered revenue of W25bn (+2.3% YoY), slightly below our estimate. Revenue grew 9.3% YoY for professional-use InBody (including software), but fell by 30.4% and 8.7% YoY for consumer-use InBody and medical devices, respectively, on unfavorable base effects. Operating profit expanded to W7.3bn (+3.9% YoY; OP margin of 29%), beating the market consensus.

Pursuing a direct-sales strategy for overseas expansion

1) Overseas expansion strategy: InBody already derives 80% of its revenue from abroad, but overseas markets remain underpenetrated (5-30%). Given that body composition analysis is still a relatively unfamiliar concept in many countries, we think that direct sales are a more effective approach (subsidiaries account for 75% of revenue) than relying on dealers. Indeed, the company has continued to enjoy robust growth of around 20-30% annually in markets where it has successfully established subsidiaries (the US, China, and Japan). The company is also setting up subsidiaries in Europe and Asia, where we expect growth to match the levels currently seen in the company's three major markets.

2) High-margin strategy: We believe InBody is well-positioned to maintain high margins due to three factors. First, its key customers are businesses (hospitals, fitness centers, etc.), which exhibit less price resistance than consumers. For business customers, InBody's products can help generate additional income (e.g., personal training, medical exams, and oriental medicine prescriptions). Second, the company's products can directly measure the impedance of each body section, providing a more accurate measurement of body composition. Lastly, InBody plans to broaden its data-based services leveraging body composition data.

3) Diversification strategy: InBody has been diversifying its business into medical devices, such as blood pressure monitors and kidney monitors (revenue mix of medical devices has increased from 6.5% in 2015 to 8.8% in 3Q18). InBody's blood pressure monitor was recently validated by the European Society of Hypertension, which bodes well for overseas sales. Meanwhile, for consumer-use products (InBody Band and InBody Dial), we believe that the company will gradually expand sales by utilizing the overseas network it has established through InBody Band.

Maintain Buy, but lower TP to W30,000

We lower our target price on InBody to W30,000 (from W37,000), as we downward-adjusted our target P/E to the sector average multiple based on stocks under our coverage. With our target price implying 44% upside after the recent correction, we maintain our Buy rating. The stock has hit a historical low, trading at a 12-month forward P/E of 11.9x (versus sector average of 15.7x based on stocks under our coverage).

We attribute the recent slowdown in growth to weaker dealer sales (-37.8% YoY based on 1Q-3Q18) caused by the company's direct sales expansion strategy. Subsidiary revenue growth remains robust (+21.4% YoY based on 1Q-3Q18), and we believe the company's growth story and earnings momentum remain intact. In our view, InBody is a growth stock, not a cyclical stock. Amid solid growth momentum, we believe that the stock's historically low valuation deserves attention. We are upbeat on 2019 earnings, in light of the dissipation of unfavorable base effects related to InBody Band and the release of high-end professional-use products.

FY(Dec.)	12/15	12/16	12/17	12/18F	12/19F	12/20F
Revenue (Wbn)	69	80	93	100	111	130
OP (Wbn)	20	22	25	26	29	34
OP margin (%)	29.0	27.5	26.9	26.0	26.1	26.2
NP (Wbn)	17	17	19	22	24	29
EPS (W)	1,265	1,241	1,412	1,609	1,782	2,113
ROE (%)	25.5	20.1	19.4	18.9	17.7	17.8
P/E (x)	45.8	21.7	28.4	13.0	11.7	9.9
P/B (x)	10.4	4.0	5.0	2.2	1.9	1.6
Dividend yield (%)	0.1	0.4	0.3	0.6	0.6	0.6

Note: All figures are based on consolidated K-IFRS; NP refers to net profit attributable to controlling interests

Source: Company data, Mirae Asset Daewoo Research estimates

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Table 1. 3Q18 review

(Wbn, %, %p)

	3Q17	2Q18	3Q18P			Growth	
			Preliminary	Mirae Asset Daewoo	Consensus	YoY	QoQ
Revenue	24.4	25.2	25.0	25.8	25.9	2.3	-0.8
Operating profit	7.0	6.6	7.3	6.6	6.9	3.9	10.4
OP margin (%)	28.6	26.1	29.0	25.6	26.4	0.4	3.0
Pretax profit	7.4	7.0	7.2	6.6	7.2	-2.7	3.6
Net profit	5.8	6.0	6.0	5.5	4.8	4.0	-0.6

Notes: Based on consolidated K-IFRS; net profit is attributable to controlling interests

Source: FnGuide, company data, Mirae Asset Daewoo Research estimates

Table 2. Earnings forecast revisions

(Wbn, W, %)

	Previous		Revised		% chg.		Notes
	18F	19F	18F	19F	18F	19F	
Revenue	100.8	112.9	99.9	111.3	-0.8	-1.4	Reflects 3Q18 earnings
Operating profit	25.0	28.9	26.3	29.2	5.4	0.8	
Pretax profit	25.7	29.5	27.0	29.7	5.1	0.9	
Net profit	21.3	24.2	22.0	24.4	3.5	0.9	
EPS (W)	1,555	1,766	1,609	1,782	3.5	0.9	

Notes: Based on consolidated K-IFRS; net profit is attributable to controlling interests

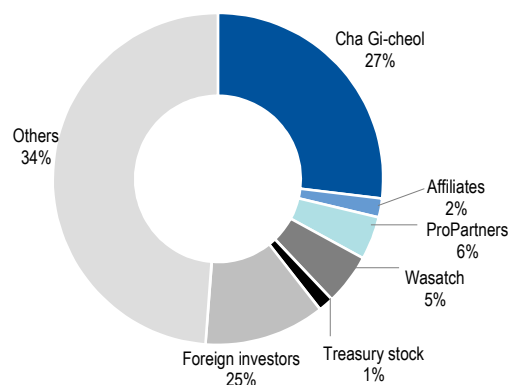
Source: Company data, Mirae Asset Daewoo Research estimates

Table 3. Quarterly and annual earnings

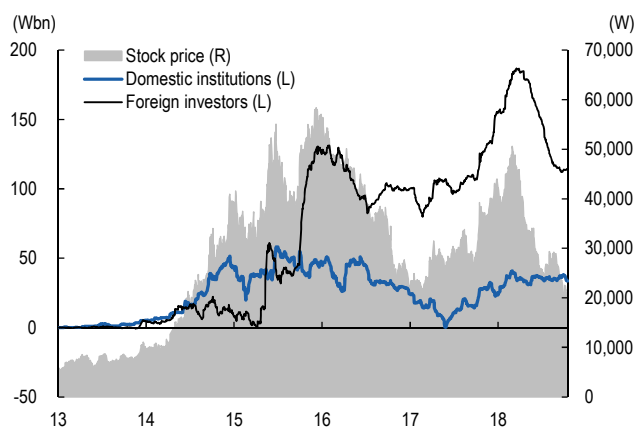
(Wbn, %)

	1Q17	2Q17	3Q17	4Q17	1Q18	2Q18	3Q18P	4Q18F	2017	2018F	2019F
Revenue	19.7	22.2	24.4	26.9	21.7	25.2	25.0	28.0	93.3	99.9	111.3
Professional InBody	17.6	19.1	19.2	20.5	18.4	21.0	21.0	24.2	76.4	84.6	95.8
Home InBody	0.7	1.4	3.5	4.3	0.8	1.7	2.4	1.1	9.9	6.0	5.0
Medical devices	1.4	1.7	1.7	2.1	2.6	2.5	1.6	2.7	7.0	9.3	10.5
Operating profit	4.5	5.8	7.0	7.6	4.6	6.6	7.3	7.9	24.9	26.3	29.2
Pretax profit	3.1	6.4	7.4	6.5	4.8	7.0	7.2	8.0	23.4	27.0	29.7
Net profit	2.4	4.9	5.8	6.2	3.7	6.0	6.0	6.9	19.3	22.0	24.4
OP margin (%)	22.8	26.2	28.6	28.3	21.0	26.1	29.0	28.4	26.7	26.4	26.2
Pretax margin (%)	15.8	28.8	30.4	24.0	22.0	27.7	28.9	28.7	25.1	27.1	26.7
Net margin (%)	12.4	22.1	23.6	23.1	16.7	23.7	21.5	24.7	20.7	22.0	21.9

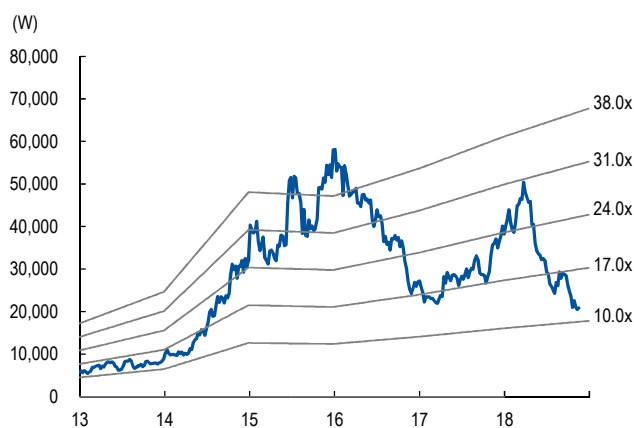
Source: Mirae Asset Daewoo Research estimates

Figure 1. Ownership breakdown

Source: Bloomberg, Mirae Asset Daewoo Research

Figure 2. Institutional and foreign net buying vs. share price

Source: Mirae Asset Daewoo Research

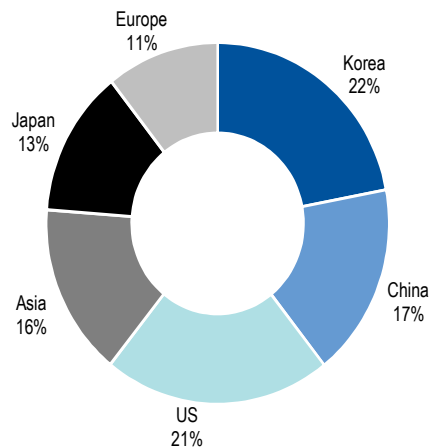
Figure 3. P/E band

Source: Mirae Asset Daewoo Research

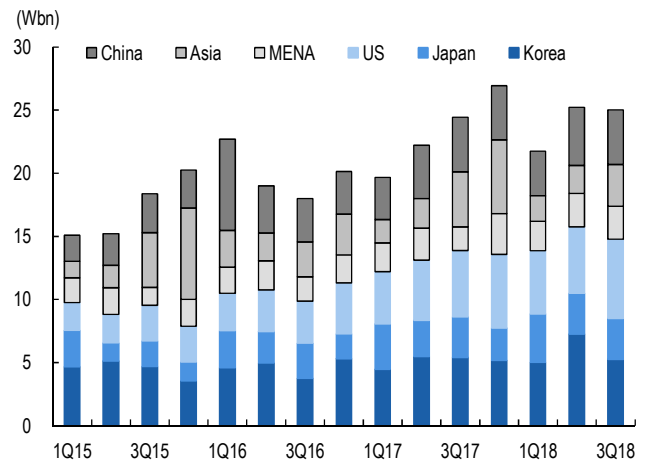
Table 4. Valuation comparison

Companies	Market cap (Wbn)	OP margin (%)			P/E (x)			P/B (x)			ROE (%)			EV/EBITDA (x)		
		17	18F	19F	17	18F	19F	17	18F	19F	17	18F	19F	17	18F	19F
Dentium	725	27.2	25.3	26.1	22.9	19.6	16.2	3.8	4.1	3.4	26.0	20.5	20.4	15.9	18.5	14.4
InBody	286	26.9	26.0	26.1	21.7	13.0	11.7	5.0	2.2	1.9	19.6	18.9	17.7	18.8	8.7	7.3
Koh Young	1,170	21.7	20.9	22.1	42.3	25.4	21.0	6.0	6.6	5.5	16.6	23.5	21.9	22.2	26.1	19.9
i-SENS	321	14.5	14.1	16.4	22.1	17.9	12.6	2.1	1.8	1.6	10.1	10.5	13.4	12.1	10.3	8.2
Rayence	237	15.9	19.3	19.6	21.0	12.0	10.5	1.7	1.2	1.1	8.5	10.9	11.4	9.5	5.1	3.9
DIO Implant	413	25.3	20.8	21.2	53.9	27.3	24.4	4.0	2.8	2.5	8.9	11.5	12.1	20.2	16.6	14.0
Osstem Implant	708	5.5	8.6	11.2	83.5	39.7	19.0	6.1	4.1	3.3	9.3	14.8	25.5	28.5	13.4	8.9
Vieworks	359	23.2	17.7	21.1	18.3	17.2	14.2	3.2	2.5	2.1	16.6	15.6	16.4	11.2	12.0	8.7
Vatech	325	17.8	18.1	18.2	21.4	9.6	7.8	2.6	1.6	1.3	13.7	16.1	17.0	11.5	7.3	6.2
Average		19.8	19.0	20.2	34.1	20.2	15.3	3.8	3.0	2.5	14.4	15.8	17.3	16.7	13.1	10.2

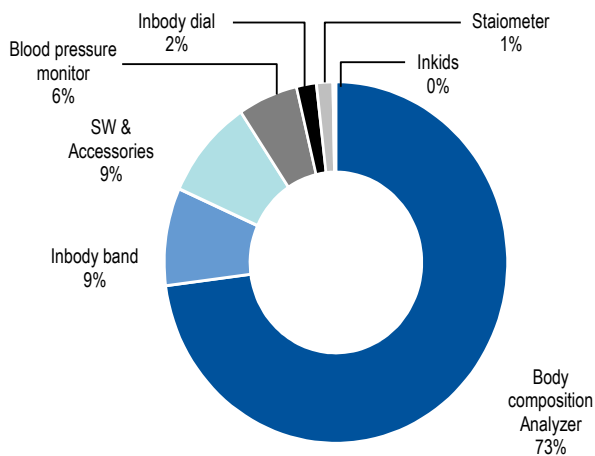
Source: Bloomberg, Mirae Asset Daewoo Research

Figure 4. Revenue breakdown by region

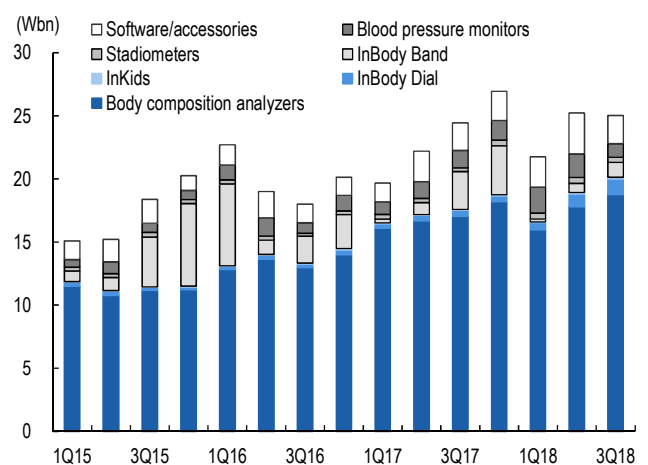
Source: Company data, Mirae Asset Daewoo Research

Figure 5. Revenue by region

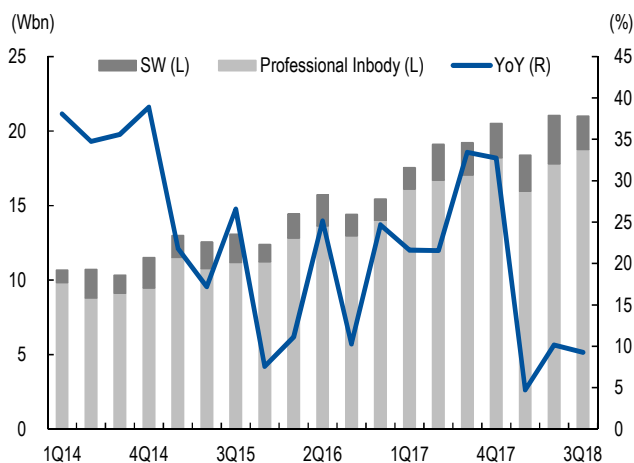
Source: Company data, Mirae Asset Daewoo Research

Figure 6. Revenue breakdown by item

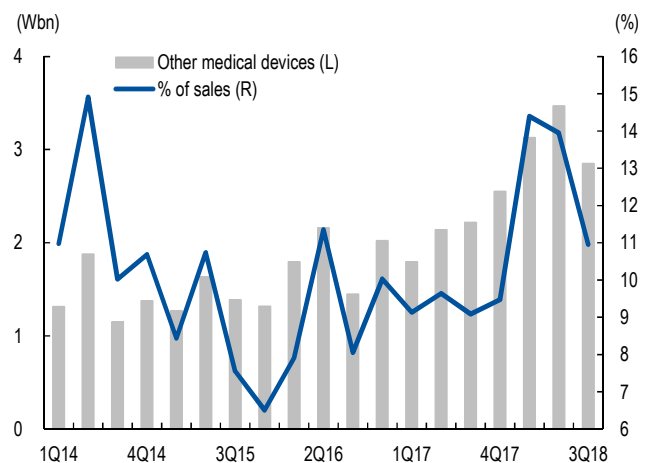
Source: Company data, Mirae Asset Daewoo Research

Figure 7. Revenue by item

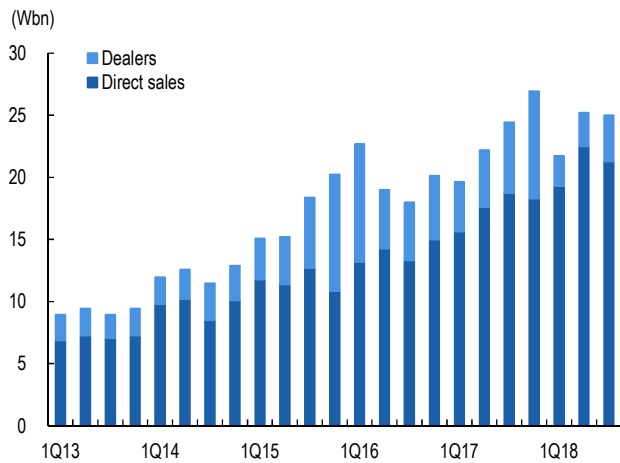
Source: Company data, Mirae Asset Daewoo Research

Figure 8. Steady revenue growth of professional-use InBody

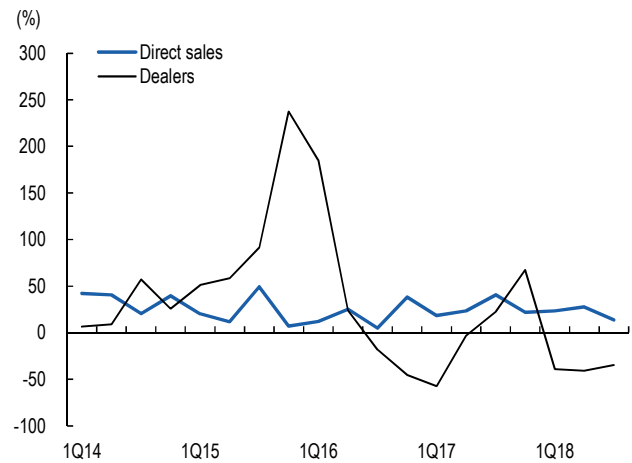
Source: Company data, Mirae Asset Daewoo Research

Figure 9. Product portfolio undergoing diversification

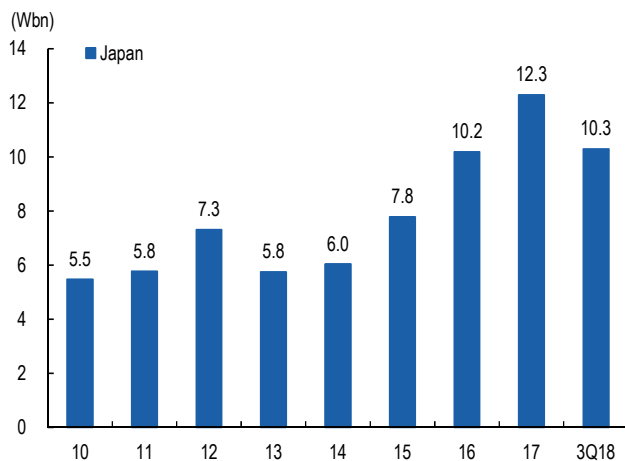
Source: Company data, Mirae Asset Daewoo Research

Figure 10. Direct sales vs. dealer sales

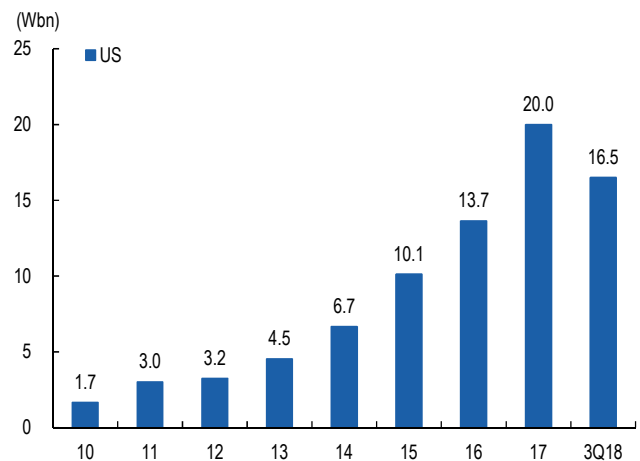
Source: Company data, Mirae Asset Daewoo Research

Figure 11. Growth of direct sales and dealer sales

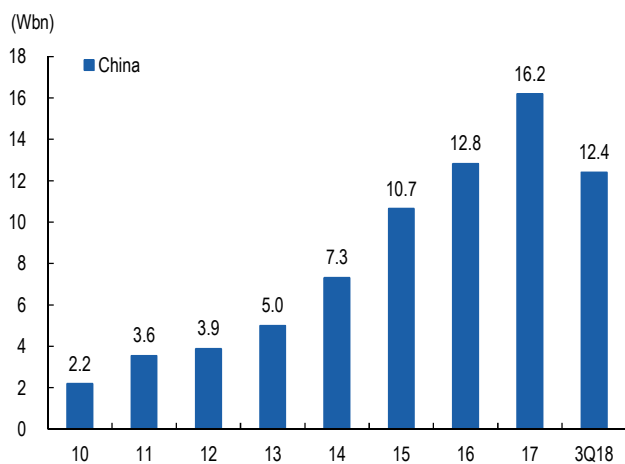
Source: Company data, Mirae Asset Daewoo Research

Figure 12. Revenue from Japanese subsidiary

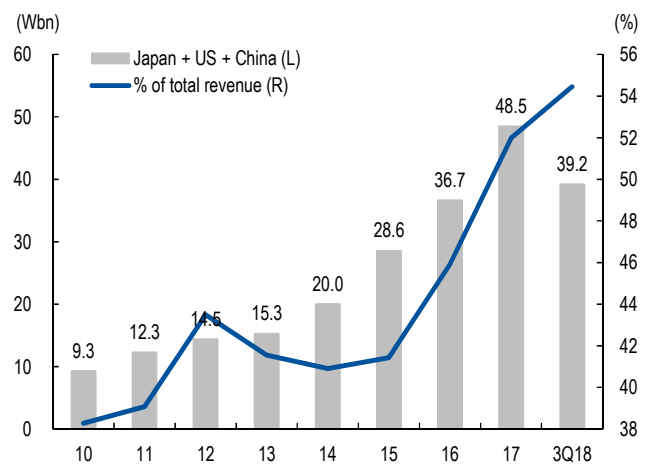
Source: Company data, Mirae Asset Daewoo Research

Figure 13. Revenue from US subsidiary

Source: Company data, Mirae Asset Daewoo Research

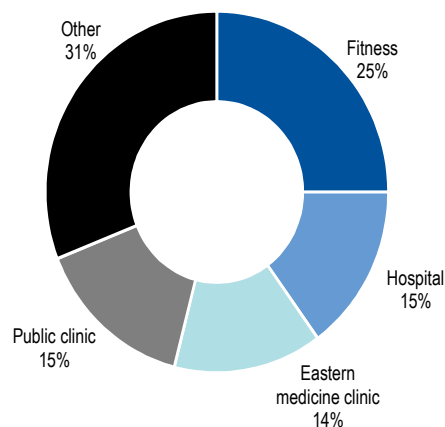
Figure 14. Revenue from Chinese subsidiary

Source: Company data, Mirae Asset Daewoo Research

Figure 15. US, Chinese, and Japanese subsidiaries: Combined revenue and % of total revenue

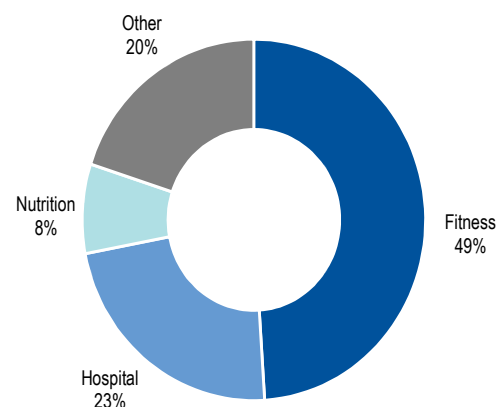
Source: Company data, Mirae Asset Daewoo Research

Figure 17. Domestic revenue breakdown by customer type



Source: Company data, Mirae Asset Daewoo Research

Figure 19. US revenue breakdown by customer type



Source: Company data, Mirae Asset Daewoo Research

Figure 21. InBody's diversified customer base



Source: Company data, Mirae Asset Daewoo Research

Figure 22. InBody analyzers have been installed in all locations of Life Time Fitness (a major US gym chain)



Source: KBS, Mirae Asset Daewoo Research

Figure 23. InBody analyzers are used by the Los Angeles Lakers



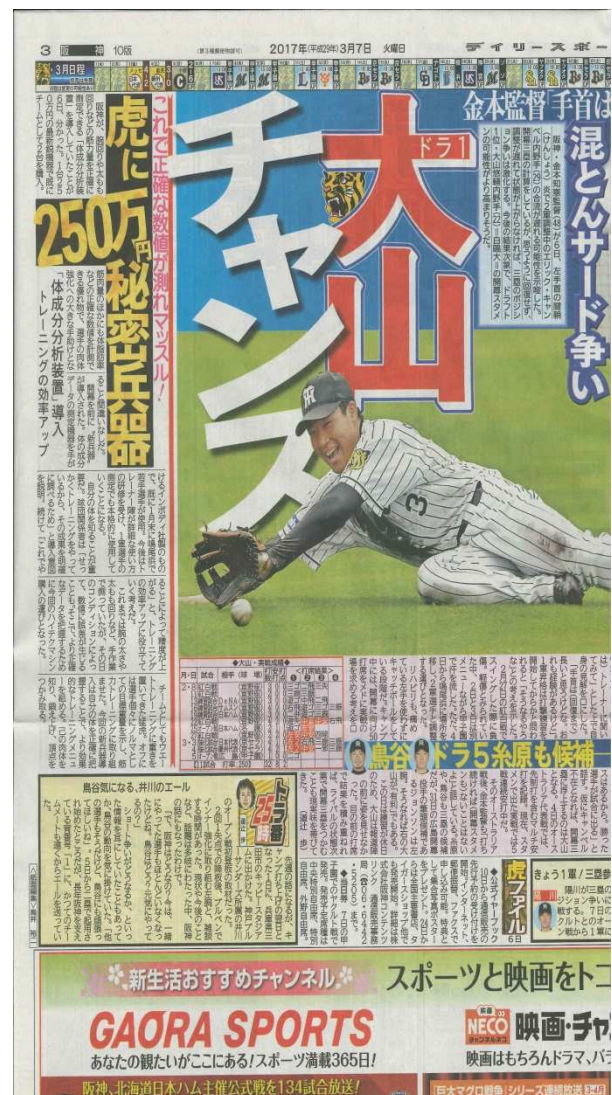
Source: KBS, Mirae Asset Daewoo Research

Figure 24. Japan's Hanshin Tigers baseball team uses InBody 770

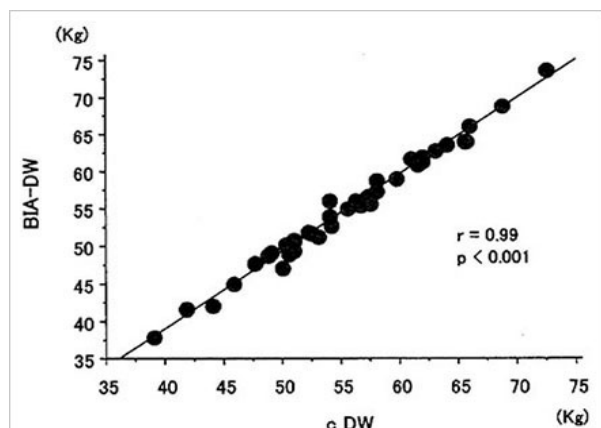


Source: Sankei Sports, Mirae Asset Daewoo Research

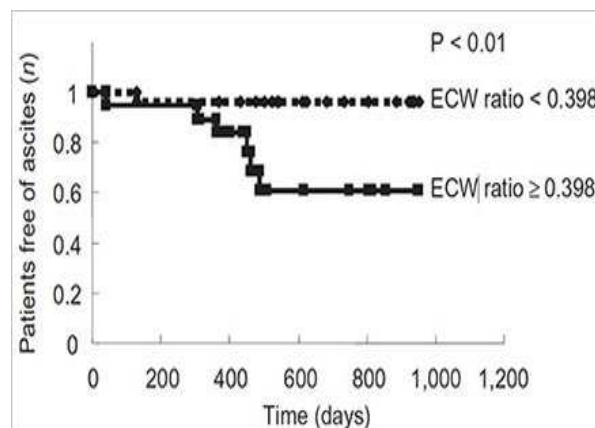
Figure 25. The InBody 770 model, which is priced at JPY2.5mn, has reportedly been beneficial for the team's performance



Source: Daily Sports, Mirae Asset Daewoo Research

Figure 26. Accuracy of InBody analyzer in measuring volume status for patients undergoing hemodialysis

Source: Japanese Society of Dialysis, Mirae Asset Daewoo Research

Figure 27. Measurement of extracellular water ratio for liver cirrhosis patients

Source: Hepatology Research, Mirae Asset Daewoo Research

Figure 28. Body cell mass monitoring for liver transplant patients

Table 5
Univariate analysis of factors affecting in-hospital death from infection

Variable	Incidence of event	P
Age (y)		0.017
<60 (n = 68)	19%	
≥60 (n = 32)	3%	
Gender		0.369
Male (n = 46)	17%	
Female (n = 54)	11%	
Child-Pugh class		0.030
A/B (n = 39)	5%	
C (n = 61)	20%	
MELD score		0.118
<20 (n = 55)	9%	
≥20 (n = 45)	20%	
Preoperative BCM		0.003
Low (n = 24)	29%	
Normal or high (n = 64)	5%	
Preoperative BCAA-enriched nutrient mixture		0.884
Present (n = 37)	14%	
Absent (n = 63)	15%	

Source: Nutrition, Mirae Asset Daewoo Research

Figure 29. Mortality and recurrence rates of acute heart failure have declined in patients monitoring their ECW ratios

Table II. Heart Failure (HF)-Related and All Cause-Related Events in the Three Groups

Event	Control n = 53	CM n = 53	EI n = 53	P
Death (%)	7 (13.2)	3 (5.7)	1 (1.9)	0.06
Rehospitalization				
HF-related (n/%)	10 (18.9)	7 (13.2)	2 (3.8)*	0.03
All cause-related (%)	21 (39.6)	16 (30.2)	8 (15.1)**†	0.01
HF-related all events (%)	14 (26.4)	8 (15.1)	2 (3.8)**†	0.004
All cause-related all events (%)	22 (41.5)	16 (30.2)	8 (15.1)**†	0.01

CM indicates case management group and EI, the group combining CM and the edema index. *P < 0.05, **P < 0.01, compared to the control group; †P < 0.05, ‡P < 0.01, compared to the CM group.

Source: International Heart Journal, Mirae Asset Daewoo Research

InBody (041830 KQ/Buy/TP: W30,000)

Comprehensive Income Statement (Summarized)

(Wbn)	12/17	12/18F	12/19F	12/20F
Revenue	93	100	111	130
Cost of Sales	24	25	28	33
Gross Profit	69	75	83	97
SG&A Expenses	45	49	54	63
Operating Profit (Adj)	25	26	29	34
Operating Profit	25	26	29	34
Non-Operating Profit	-2	1	1	1
Net Financial Income	1	0	1	1
Net Gain from Inv in Associates	0	0	0	0
Pretax Profit	23	27	30	35
Income Tax	4	5	5	6
Profit from Continuing Operations	19	22	24	29
Profit from Discontinued Operations	0	0	0	0
Net Profit	19	22	24	29
Controlling Interests	19	22	24	29
Non-Controlling Interests	0	0	0	0
Total Comprehensive Profit	18	22	24	29
Controlling Interests	18	23	25	29
Non-Controlling Interests	0	0	0	0
EBITDA	27	28	31	36
FCF (Free Cash Flow)	13	-13	23	27
EBITDA Margin (%)	29.0	28.0	27.9	27.7
Operating Profit Margin (%)	26.9	26.0	26.1	26.2
Net Profit Margin (%)	20.4	22.0	21.6	22.3

Cash Flows (Summarized)

(Wbn)	12/17	12/18F	12/19F	12/20F
Cash Flows from Op Activities	19	24	23	27
Net Profit	19	22	24	29
Non-Cash Income and Expense	7	6	7	7
Depreciation	1	2	2	2
Amortization	0	0	0	0
Others	6	4	5	5
Chg in Working Capital	-5	0	-3	-4
Chg in AR & Other Receivables	-3	-1	-2	-2
Chg in Inventories	-1	0	-2	-2
Chg in AP & Other Payables	0	0	0	0
Income Tax Paid	-4	-5	-5	-6
Cash Flows from Inv Activities	-13	-38	-6	-8
Chg in PP&E	-5	-37	0	0
Chg in Intangible Assets	0	0	0	0
Chg in Financial Assets	-7	-2	-6	-8
Others	-1	1	0	0
Cash Flows from Fin Activities	-4	11	-2	-2
Chg in Financial Liabilities	0	14	0	0
Chg in Equity	0	0	0	0
Dividends Paid	-1	-3	-2	-2
Others	-3	0	0	0
Increase (Decrease) in Cash	1	-3	15	17
Beginning Balance	10	11	8	23
Ending Balance	11	8	23	40

Source: Company data, Mirae Asset Daewoo Research estimates

Statement of Financial Condition (Summarized)

(Wbn)	12/17	12/18F	12/19F	12/20F
Current Assets	75	74	99	129
Cash and Cash Equivalents	11	8	23	40
AR & Other Receivables	13	13	15	18
Inventories	11	11	13	15
Other Current Assets	40	42	48	56
Non-Current Assets	37	72	71	69
Investments in Associates	1	1	1	1
Property, Plant and Equipment	32	67	66	64
Intangible Assets	2	1	1	1
Total Assets	112	146	170	198
Current Liabilities	5	19	20	21
AP & Other Payables	1	1	1	1
Short-Term Financial Liabilities	0	14	14	14
Other Current Liabilities	4	4	5	6
Non-Current Liabilities	1	1	1	1
Long-Term Financial Liabilities	0	0	0	0
Other Non-Current Liabilities	1	1	1	1
Total Liabilities	6	20	21	22
Controlling Interests	107	126	149	176
Capital Stock	7	7	7	7
Capital Surplus	1	1	1	1
Retained Earnings	103	122	145	172
Non-Controlling Interests	0	0	0	0
Stockholders' Equity	107	126	149	176

Forecasts/Valuations (Summarized)

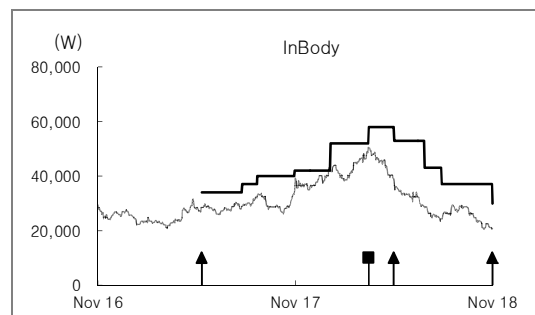
	12/17	12/18F	12/19F	12/20F
P/E (x)	28.4	13.0	11.7	9.9
P/CF (x)	20.8	10.2	9.2	7.9
P/B (x)	5.0	2.2	1.9	1.6
EV/EBITDA (x)	18.7	8.9	7.4	5.7
EPS (W)	1,412	1,609	1,782	2,113
CFPS (W)	1,928	2,059	2,271	2,638
BPS (W)	8,008	9,440	11,104	13,098
DPS (W)	120	120	120	120
Payout ratio (%)	8.4	7.4	6.6	5.6
Dividend Yield (%)	0.3	0.6	0.6	0.6
Revenue Growth (%)	16.3	7.5	11.0	17.1
EBITDA Growth (%)	12.5	3.7	10.7	16.1
Operating Profit Growth (%)	13.6	4.0	11.5	17.2
EPS Growth (%)	13.8	14.0	10.8	18.6
Accounts Receivable Turnover (x)	8.0	8.0	8.1	8.2
Inventory Turnover (x)	9.4	9.2	9.4	9.5
Accounts Payable Turnover (x)	66.9	74.5	77.4	77.8
ROA (%)	18.5	17.0	15.4	15.7
ROE (%)	19.4	18.9	17.7	17.8
ROIC (%)	41.0	29.9	26.8	30.9
Liability to Equity Ratio (%)	5.2	15.8	14.0	12.4
Current Ratio (%)	1,509.1	382.4	492.0	608.3
Net Debt to Equity Ratio (%)	-47.3	-27.1	-37.2	-45.4
Interest Coverage Ratio (x)	0.0	100.1	69.3	81.6

APPENDIX 1

Important Disclosures & Disclaimers

2-Year Rating and Target Price History

Company (Code)	Date	Rating	Target Price
InBody (041830)	11/14/2018	Buy	30,000
	08/12/2018	Buy	37,000
	07/11/2018	Buy	43,000
	05/16/2018	Buy	53,000
	05/15/2018	Buy	58,000
	03/30/2018	Trading Buy	58,000
	01/18/2018	Buy	52,000
	11/13/2017	Buy	42,000
	09/05/2017	Buy	40,000
	08/08/2017	Buy	37,000
	05/25/2017	Buy	34,000



Stock Ratings

Buy	: Relative performance of 20% or greater
Trading Buy	: Relative performance of 10% or greater, but with volatility
Hold	: Relative performance of -10% and 10%
Sell	: Relative performance of -10%

Industry Ratings

Overweight	: Fundamentals are favorable or improving
Neutral	: Fundamentals are steady without any material changes
Underweight	: Fundamentals are unfavorable or worsening

Ratings and Target Price History (Share price (—), Target price (—), Not covered (≡), Buy (▲), Trading Buy (■), Hold (●), Sell (◆))

* Our investment rating is a guide to the relative return of the stock versus the market over the next 12 months.

* Although it is not part of the official ratings at Mirae Asset Daewoo Co., Ltd., we may call a trading opportunity in case there is a technical or short-term material development.

* The target price was determined by the research analyst through valuation methods discussed in this report, in part based on the analyst's estimate of future earnings.

* The achievement of the target price may be impeded by risks related to the subject securities and companies, as well as general market and economic conditions.

Equity Ratings Distribution & Investment Banking Services

	Buy	Trading Buy	Hold	Sell
Equity Ratings Distribution	73.71%	13.92%	12.37%	0.00%
Investment Banking Services	82.61%	4.35%	13.04%	0.00%

* Based on recommendations in the last 12-months (as of September 30, 2018)

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