

Boston Scientific (BSX)

\$44.10 (As of 04/29/21)

Price Target (6-12 Months): **\$46.00**

Long Term: 6-12 Months

Zacks Recommendation:

Neutral

(Since: 04/05/21)

Prior Recommendation: Underperform

Short Term: 1-3 Months

Zacks Rank: (1-5)

3-Hold

Zacks Style Scores:

VGM:A

Value: C

Growth: A

Momentum: A

Summary

Boston Scientific ended the first quarter of 2021 on an extremely bullish note with adjusted earnings and revenues both surpassing the respective Zacks Consensus Estimate as well as the company's expectations by a wide margin. Barring Latin America and Canada, organic revenues at each of its core business segments and geographies were up in the reported quarter. The company also registered strong sequential improvement in overall financial performance. The increase in cost however resulted in gross margin contractions in the quarter. The second-quarter and the narrowed full-year 2021 guidance also look impressive. The company currently expects a steady recovery from the pandemic with lesser impact from COVID-19 in the second quarter compared to the first quarter and more normal procedure levels in second half of 2021.

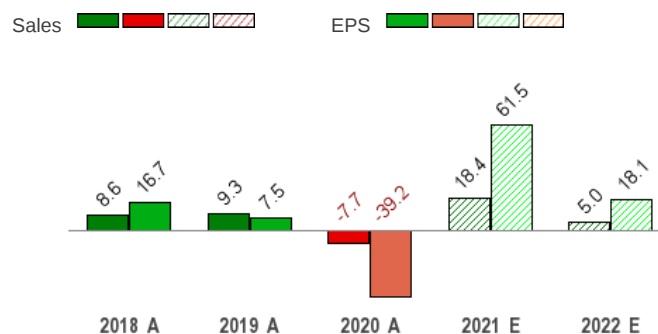
Price, Consensus & Surprise



Data Overview

52-Week High-Low	\$44.63 - \$32.99
20-Day Average Volume (Shares)	7,806,910
Market Cap	\$62.6 B
Year-To-Date Price Change	22.7%
Beta	0.84
Dividend / Dividend Yield	\$0.00 / 0.0%
Industry	Medical - Products
Zacks Industry Rank	Bottom 16% (210 out of 250)

Sales and EPS Growth Rates (Y/Y %)



Last EPS Surprise	23.3%
Last Sales Surprise	5.3%
EPS F1 Estimate 4-Week Change	2.1%
Expected Report Date	08/04/2021
Earnings ESP	2.8%
P/E TTM	42.0
P/E F1	28.5
PEG F1	2.6
P/S TTM	6.2

Sales Estimates (millions of \$)

	Q1	Q2	Q3	Q4	Annual*
2022	2,808 E	2,967 E	3,171 E	3,277 E	12,323 E
2021	2,752 A		2,949 E	3,107 E	11,739 E
2020	2,543 A	2,003 A	2,659 A	2,708 A	9,913 A

EPS Estimates

	Q1	Q2	Q3	Q4	Annual*
2022	\$0.38 E	\$0.44 E	\$0.47 E	\$0.51 E	\$1.83 E
2021	\$0.37 A	\$0.36 E	\$0.41 E	\$0.45 E	\$1.55 E
2020	\$0.28 A	\$0.08 A	\$0.37 A	\$0.23 A	\$0.96 A

*Quarterly figures may not add up to annual.

The data in the charts and tables, including the Zacks Consensus EPS and sales estimates, is as of 04/29/2021. The report's text and the analyst-provided price target are as of 04/30/2021.

Overview

Headquartered in Natick, MA and founded in 1979, Boston Scientific Corporation manufactures medical devices and products used in various interventional medical specialties worldwide. The company has adopted the organic as well as inorganic routes for success.

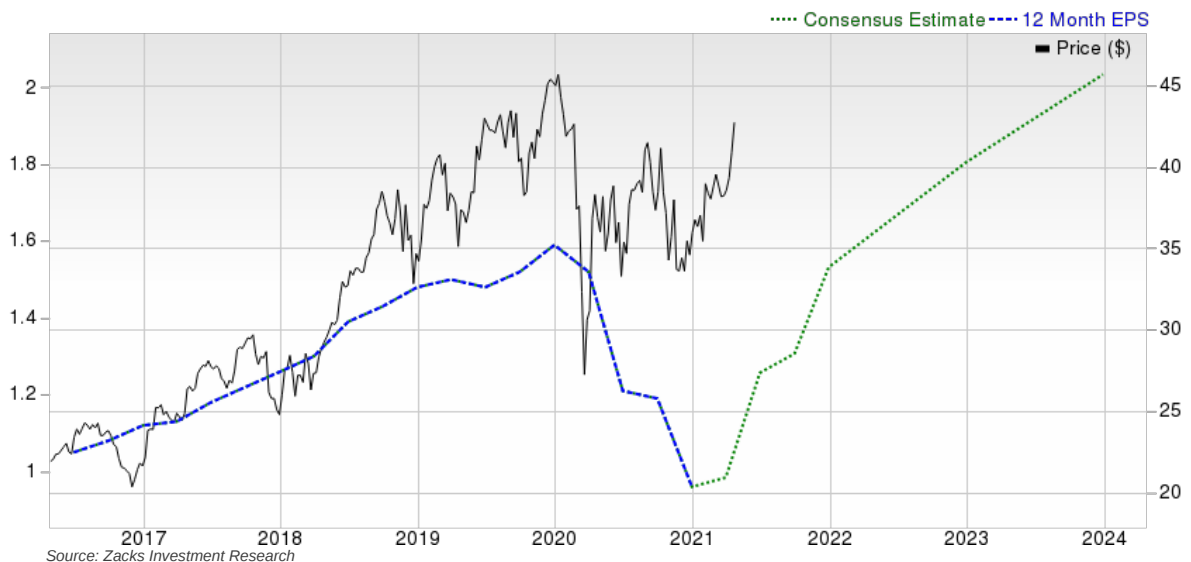
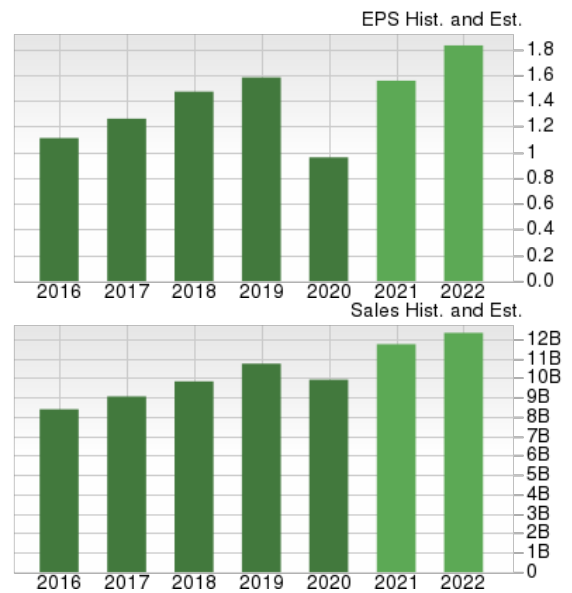
Boston Scientific currently has 3 global reportable segments viz. Cardiovascular (39.1% of total revenue in 2020; down 13.1% organically from 2019), Rhythm and Neuro (27.8%; down 13.4%) and MedSurg (31.6%; down 6.7%).

While Cardiovascular includes Interventional Cardiology (IC) and Peripheral Interventions (PI), Rhythm and Neuro comprises Cardiac Rhythm Management (CRM), Electrophysiology and Neuromodulation. The MedSurg group comprises 2 sub segments, viz. Endoscopy, Urology and Pelvic Health.

The company is one of the leading players in the interventional cardiology market with its coronary stent product offerings. Boston Scientific markets a broad portfolio of internally-developed and self-manufactured drug eluting stents including the Promus PREMIER, Promus Element and Promus Element Plus everolimus-eluting stents. In addition, in Europe, it markets the SYNERGY Everolimus-Eluting Platinum Chromium Coronary Stent System featuring an ultra-thin abluminal (outer) bioabsorbable polymer coating.

The company also markets balloon catheters, rotational atherectomy systems, guide wires, guide catheters, embolic protection devices, and diagnostic catheters used in percutaneous transluminal coronary angioplasty (PTCA) procedures, as well as intravascular ultrasound (IVUS) imaging systems.

Within the CRM segment, the company deals with implantable devices that monitor the heart and deliver electricity to treat cardiac abnormalities. The portfolio includes implantable cardioverter defibrillator (ICD) systems, cardiac resynchronization therapy defibrillator (CRT-D) systems and cardiac resynchronization therapy pacemaker (CRT-P) systems.



Reasons To Buy:

▲ **Share Price Performance:** Over the past three months, Boston Scientific outperformed the industry it belongs to. The stock rose 22.6% compared with 5.4% rise of the industry. Boston Scientific ended the first quarter on an extremely bullish note with adjusted earnings and revenues both surpassing the respective Zacks Consensus Estimate as well as the company's expectations by a wide margin. Organic sales grew 6% year over year and 3% compared to the 2019 comparable period. Growth came in the second half of the quarter on stronger-than-anticipated procedure recovery and market share gains across most of its businesses and regions. Many of these gains were fueled by new and ongoing product launches, including Ranger DCB, Eluvia DES, POLARx catheter, LUX-Dx implantable cardiac monitor and their Vercise Genus Deep Brain Stimulation platform. The company also registered strong sequential improvement in overall financial performance.

Boston Scientific is gaining traction in the emerging markets, particularly in the BRIC zone. Also, accretive acquisitions and significant progress in the company's restructuring initiatives buoy optimism.

The narrowed full-year guidance as well as the second-quarter outlook also look impressive. The company currently expects a steady recovery from the pandemic with lesser impact from COVID-19 in the second quarter compared to the first quarter and more normal procedure levels in second half of 2021.

▲ **MedSurg Market Share Gain Impressive:** Although, a higher mix of non-deferrable procedures within MedSurg business has resulted in decline in trends through the initial months of the pandemic within both Urology and Pelvic health and Endoscopy, Boston Scientific has registered faster recovery within this segment than rest of its business arms.

Within urology/pelvic health, Boston Scientific continues to expand market share globally. In the first quarter, sales grew 9% year over year organically on balanced regional growth with strengths in Stone franchise and Prostate Health. SpaceOAR Vue Hydrogel drove double-digit growth for the SpaceOAR business. Rezum too grew in double-digits, fueled in part by the publication of the compelling five-year results demonstrating Rezum's durability with a low 4.4% reintervention rate for BPH patients. The company currently expects to extend its global footprint with the impending acquisition (to close in the second half of 2021) of the surgical business of Lumenis and its leading laser fiber technology.

Within endoscopy, first quarter sales improved 10% with a broad based recovery across regions and notable strength in infection prevention. The quarter's performance reflected strong market share gains globally with double-digit growth in all regions versus compared to 2019. This was led by strength in key franchises such as pancreaticobiliary, hemostasis and infection prevention. Further, the recent product launches like Spyglass DS, Discover and AXIOS. EXALT D are adding significant momentum to the growth process.

As a major development, CMS in 2020 granted a transitional pass-through payment for single use endoscopes, including EXALT D, which went into effect on July 1. The company currently targets the launch of single-use bronchoscope in the second half of 2021.

▲ **Impressive Value-Adding Acquisitions:** We are impressed with Boston Scientific's several recent acquisitions that have added numerous products (though many are under development) with immense potential. This, in turn, should help boost the top line in the long term. The company is optimistic about its current deal to acquire Preventice Solutions which offers new-generation detection algorithms, a broad portfolio with BodyGuardian MINI and establishes a strong position for Boston Scientific in the field of cardiac diagnostics. The deal which is expected to complete by mid 2021, is going to strengthen the company's position across all diagnostic therapies, including AECG and LUX-Dx, implantable cardiac monitor, and HeartLogic, as well as implantable and ablative therapies.

Further, the company made a number of strategic acquisitions of late including Lumenis (in laser technology for kidney stones), BTG, Millipede (within Structural Heart) Claret Medical, VENITI and Augmenix. These acquisitions all target high-growth markets, enhance the company's category leadership strategy, leverage existing global capabilities and further enhance its short-term and long-term growth profile.

▲ **Long-Term Growth Goals Look Impressive:** In 2019, Boston Scientific provided a review of its long-term growth strategy and offered plans for product pipeline and strategic investments. According to the company, this is aimed at improving its clinical and economic outcomes, sustaining category leadership in served markets and expanding into high-growth, adjacent markets. The plan focuses on spaces like category leadership strategy, product diversification into faster-growth markets and expansion of portfolio and capabilities across geographies. In this regard, Boston Scientific noted that in 2018, it invested approximately \$1 billion in R&D and also announced 10 strategic acquisitions in support of its category leadership scheme. Based on these investments, the company expects to introduce approximately 75 products by 2022.

According to the company, by 2022, these product launches will help 80% of its sales to reach high and moderate -growth markets. In terms of geographic growth, Boston Scientific is working on widening its footprint in the emerging markets along with increasing patient access to care and supporting steady broad-based progress through physician training capabilities, channel explosion and local partnerships.

▲ **Structural Heart, a Long-Term Growth Component:** Boston Scientific's structural heart programs are fast building momentum banking on strong performance of the WATCHMAN left atrial appendage closure device and ACURATE TAVR valve. In this regard, WATCHMAN has recently received reimbursement in Japan. This apart, the next generation WATCHMAN FLX is strongly capturing the European market.

In the first quarter, Boston Scientific's Interventional Cardiology organic sales grew 7% driven by strong growth structural heart franchises WATCHMAN, ACURATE neo2 and SENTINEL. The WATCHMAN franchise accelerated its recovery rate, growing over 30% compared to the year-ago period. The company also completed the conversion to a consignment-based model in the fourth quarter 2020 and currently accounts in the United States are over 90% converted to FLX.

We believe, the combined strength of WATCHMAN, ACURATE, SENTINEL and Millipede has positioned the company well to capture a strong structural heart market share over the next couple of years. Management is optimistic about this large patient population in this space,

which is unfortunately underserved at the moment. Hence, this area represents a lucrative market to be tapped into.

▲ **New Strategic Investments to Drive Electrophysiology:** We are also looking forward to Boston Scientific's acquisition of Apama Medical which has allowed the company to expand into the single-shot pulmonary vein isolation ablation market, which is a potential \$1 billion market by 2022. Through this deal, Boston Scientific aims to expand its suite of arrhythmia solutions which fall under the Electrophysiology sub-segment of the company. In this regard, the global Electrophysiology (EP) market is poised to reach a value of around \$8.27 billion by 2022 (per data by Allied Market Research).

During the first quarter earnings call, the company noted that, its EP sales were up 8% with trends showing strong sequential improvement despite this franchise having higher deferrable mix than CRM. In December, the company begun the full launch of POLARx, the second-generation single-shot Cryoablation catheter in Europe. It is off to a strong start in Europe registering solid market share gains,

Reasons To Sell:

- ▼ **Legal Hassle Puts Pressure on Bottom Line:** Boston Scientific continues to incur escalating operating cost on its constant involvement in handling serious legal problems. The company is currently working to resolve its mesh litigation, with over 95% of all known claims now settled or in the final stages of settlement. On this, the total legal reserve, of which mesh is included, was \$569 million as of Dec 31, 2020. There is been no material change to the U.S. mesh claims outlook over the last three years. But during 2020, the company incorporated estimable international claims, one-time claims made by a coalition of State Attorneys General and adjustments to its legal fee reserve. According to Boston Scientific, materially, all U.S. claims have been settled or in the final stages of settlement and it continues to work to fully resolve global mesh claims. However, given the nature of resolving the final claims and given COVID-related delays in the courts, the company expects full global resolution to lag into 2022. Undoubtedly, these legal expenses are putting huge pressure on Boston Scientific's bottom line.
- ▼ **Pacemaker Sales Still Declining:** Declining worldwide pacemaker sales over the recent past continued to weigh on Boston Scientific's CRM results. However, pacemaker sales should gradually improve in with new product launches (including the launch of RESONATE platform) and easier comps.
- ▼ **Exposure to Currency Movement:** With Boston Scientific recording 47% of its sales from the international market, it remains highly exposed to currency fluctuations. Unfavorable currency movements have been a major dampener over the last few quarters, as in the case of other important MedTech players too.
- ▼ **Competitive Landscape:** The presence of a large number of players has made the medical devices market highly competitive. The company participates in several markets, including Cardiovascular, CRM, Endosurgery and Neuromodulation, where it faces competition from large, well-capitalized companies such as Johnson & Johnson, Abbott, Medtronic, Stryker, Smith & Nephew and Edwards Lifesciences, apart from several other smaller companies.

Unfavorable currency movement and product recall were major dampeners during the quarter. Strong competitors in the large medical device market also pose a tough challenge for Boston Scientific.

Last Earnings Report

Boston Scientific Sees Robust Q1 Sales Across Core Segments

Boston Scientific posted adjusted earnings per share of 37 cents for the first quarter of 2021, which marked a 32.1% surge from the year-ago figure. The figure exceeded the Zacks Consensus Estimate by 23.3%. The quarter's adjustments include certain amortization expenses, acquisition/divestitures-related net credits and investment portfolio net losses among others.

Reported earnings in the first quarter were 23 cents per share compared with the year-ago earnings per share of a penny.

Revenues of \$2.75 billion in the first quarter improved 8.2% year over year on a reported basis, up 5.6% on an operational basis (at constant exchange rate or CER). Revenues grew 5.9% on an organic basis (adjusted for foreign currency fluctuations and certain recent acquisitions and divestments). The top line exceeded the Zacks Consensus Estimate by 5.3%.

The top line also exceeded first-quarter revenue growth guidance of approximately 0-6% on a reported basis and (3)-3% on an organic basis.

Q1 Revenues in Detail

In the first quarter, revenues rose 8.6% in the United States on a reported basis (same operationally). Revenues were up 9.4% in the Europe, Middle East and Africa region (up 1.9%); up 15.6% in the Asia Pacific zone (up 9.1%); down 3.8% in Latin America and Canada (down 2.2%) and up 16% in emerging markets (up 13.2%).

Segmental Analysis

Boston Scientific currently has three global reportable segments: Cardiovascular, Rhythm and Neuro plus MedSurg.

The company generates maximum revenues from Cardiovascular. Sales from its sub segments, namely Interventional Cardiology and Peripheral Interventions were \$696 million (up 7.1% year over year organically) and \$433 million (up 7.7%), respectively, in the first quarter.

Boston Scientific's Rhythm and Neuro business comprises Cardiac Rhythm Management (CRM), Electrophysiology and Neuromodulation. CRM reflected a 0.5% year-over-year rise in organic sales to \$469 million in the reported quarter.

Electrophysiology sales grew 7.7% year over year organically to \$83 million. Neuromodulation sales rose 1.7% year over year on an organic basis to \$198 million.

Other segments like Endoscopy plus Urology and Pelvic Health (under the MedSurg broader group) recorded sales of \$499 million (up 9.9% organically) and \$361 million (up 8.8%), respectively.

The company's Specialty Pharmaceuticals segment registered revenues of \$13 million, a year-over-year decline of 44.4% on an organic basis. Notably, on Mar 1, 2021, Boston Scientific completed the sale of this business.

Margins

Gross margin in the first quarter contracted 79 basis points (bps) year over year to 67.5%. There was a 10.9% rise in the cost of products sold to \$894 million.

Selling, general and administrative expenses improved 4.1% to \$1.02 billion. Research and development expenses declined 8% to \$276 million. Meanwhile, royalty expenses of \$12 million remained unchanged year over year. Adjusted operating margin improved 244 bps to 20% in the reported quarter.

Guidance

Based on strong first-quarter results, the company has narrowed its full-year 2021 guidance.

Full-year revenue growth is expected in the range of 16-19% on a reported basis and 15-18% on an organic basis (earlier guidance was expected growth of 13-19% on a reported basis and 12-18% on an organic basis). Adjusted earnings per share is expected in the range of \$1.53-\$1.60 (earlier range was \$1.50-\$1.60). The current Zacks Consensus Estimate for 2021 earnings and revenues is pegged at \$1.53 and \$11.44 billion, respectively.

For the second quarter of 2021, revenue growth is projected in the range of approximately 46-50% on a reported basis and 44-48% on an organic basis. Adjusted earnings are expected in the range of 36-38 cents per share. The current Zacks Consensus Estimate for second-quarter earnings and revenues is pegged at 35 cents and \$2.76 billion, respectively.

Quarter Ending **03/2021**

Report Date	Apr 28, 2021
Sales Surprise	5.30%
EPS Surprise	23.33%
Quarterly EPS	0.37
Annual EPS (TTM)	1.05

Recent News

Boston Scientific Gets FDA Nod for TheraSphere Y-90 Glass Microspheres: Mar 18, 2021

Boston Scientific announced the receipt of FDA approval for TheraSphere Y-90 Glass Microspheres, developed for the treatment of patients with hepatocellular carcinoma.

Boston Scientific To Acquire Lumenis LTD.: Mar 3, 2021

Boston Scientific announced its entry into a definitive agreement with an affiliate of Baring Private Equity Asia (BPEA) to acquire the global surgical business of Lumenis LTD., a privately-held company, for an upfront cash payment, subject to closing adjustments.

FDA Nod For The Vercise Genus DBS: Jan 22, 2021

Boston Scientific received FDA approval of its fourth-generation Vercise Genus Deep Brain Stimulation (DBS) System for conditional use in a magnetic resonance imaging (MRI) environment. This device consists of a family of Bluetooth-enabled, rechargeable and non-rechargeable, implantable pulse generators (IPGs) that power Cartesia Directional Leads, designed to provide optimal symptom relief.

Boston Scientific Announces Preventice Solutions Acquisition: Jan 21, 2021

Boston Scientific enters into a definitive agreement to acquire Preventice Solutions to expand its rhythm management and diagnostics portfolio and capabilities.

Valuation

Boston Scientific shares are up 22.7% and up 22.5% in the year-to-date and the trailing 12-month period, respectively. Stocks in the Zacks sub-industry are up 8.9% while the Zacks Medical sector is up 0.3% in the year-to-date period. Over the past year, the Zacks sub-industry is up 25.7% and sector is up 8.7%.

The S&P 500 index is up 13.2% in the year-to-date period and up 51.9% in the past year.

The stock is currently trading at 25.5X Forward 12-months earnings, which compares to 27.5X for the Zacks sub-industry, 23.1X for the Zacks sector and 23.1X for the S&P 500 index.

Over the past five years, the stock has traded as high as 32.5X and as low as 14.2X, with a 5-year median of 21.9X.

Our Neutral recommendation indicates that the stock will perform in-line with the market. Our \$46 price target reflects 26.6X forward 12-months earnings.

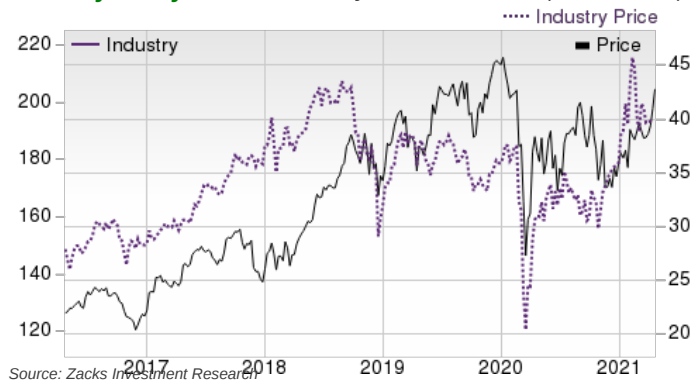
The table below shows summary valuation data for BSX

Valuation Multiples - BSX					
		Stock	Sub-Industry	Sector	S&P 500
P/E F12M	Current	25.46	27.49	23.06	23.10
	5-Year High	32.51	30.31	23.06	23.83
	5-Year Low	14.22	16.94	15.87	15.30
	5-Year Median	21.95	21.77	19.25	18.01
P/S F12M	Current	4.99	3.88	2.70	4.80
	5-Year High	5.89	3.88	3.16	4.80
	5-Year Low	2.97	2.61	2.27	3.21
	5-Year Median	4.44	3.28	2.78	3.71
P/B TTM	Current	3.81	3.78	3.94	7.08
	5-Year High	6.90	3.93	5.07	7.11
	5-Year Low	2.59	2.25	3.02	3.83
	5-Year Median	5.16	2.93	4.34	4.99

As of 04/29/2021

Source: Zacks Investment Research

Industry Analysis Zacks Industry Rank: Bottom 16% (210 out of 250)



Top Peers

Company (Ticker)	Rec	Rank
Owens & Minor, Inc. (OMI)	Outperform	2
Baxter International Inc. (BAX)	Neutral	3
Edwards Lifesciences Corporation (EW)	Neutral	3
Medtronic PLC (MDT)	Neutral	4
Smith & Nephew SNATS, Inc. (SNN)	Neutral	3
Stryker Corporation (SYK)	Neutral	3
Zimmer Biomet Holdings, Inc. (ZBH)	Neutral	3
Perrigo Company plc (PRGO)	Underperform	5

The positions listed should not be deemed a recommendation to buy, hold or sell.

Industry Comparison Industry: Medical - Products				Industry Peers		
	BSX	X Industry	S&P 500	ABT	BAX	MDT
Zacks Recommendation (Long Term)	Neutral	-	-	Neutral	Neutral	Neutral
Zacks Rank (Short Term)	3	-	-	3	3	4
VGM Score	A	-	-	B	B	C
Market Cap	62.64 B	563.23 M	30.59 B	214.37 B	43.11 B	177.27 B
# of Analysts	13	3	12	10	11	14
Dividend Yield	0.00%	0.00%	1.28%	1.49%	1.15%	1.76%
Value Score	C	-	-	B	B	B
Cash/Price	0.03	0.10	0.05	0.03	0.08	0.08
EV/EBITDA	36.14	-0.69	17.18	25.53	19.93	24.22
PEG F1	2.62	2.62	2.33	1.74	2.71	3.96
P/B	4.08	4.16	4.21	6.50	4.94	3.48
P/CF	20.60	21.29	17.57	21.71	17.69	19.87
P/E F1	28.45	30.94	22.12	23.98	25.10	30.23
P/S TTM	6.19	6.26	3.45	5.74	3.65	6.35
Earnings Yield	3.51%	1.31%	4.42%	4.17%	3.98%	3.31%
Debt/Equity	0.60	0.02	0.66	0.56	0.66	0.52
Cash Flow (\$/share)	2.14	0.02	6.78	5.57	4.82	6.62
Growth Score	A	-	-	A	C	C
Historical EPS Growth (3-5 Years)	4.84%	6.52%	9.70%	12.85%	14.44%	-1.20%
Projected EPS Growth (F1/F0)	61.94%	33.76%	17.90%	38.25%	10.03%	-5.23%
Current Cash Flow Growth	-9.43%	-2.03%	0.72%	11.96%	-3.94%	-9.02%
Historical Cash Flow Growth (3-5 Years)	8.10%	9.10%	7.37%	15.87%	9.99%	7.68%
Current Ratio	1.82	3.26	1.38	1.72	2.52	2.10
Debt/Capital	37.33%	13.51%	41.51%	35.95%	39.87%	34.23%
Net Margin	1.69%	-8.84%	11.34%	15.33%	9.04%	10.36%
Return on Equity	9.84%	-4.61%	15.46%	24.40%	18.34%	9.37%
Sales/Assets	0.33	0.52	0.50	0.53	0.60	0.30
Projected Sales Growth (F1/F0)	17.65%	11.75%	8.16%	20.94%	7.45%	4.00%
Momentum Score	A	-	-	D	B	B
Daily Price Change	-0.32%	-0.03%	0.95%	-0.36%	-1.89%	0.23%
1-Week Price Change	4.45%	0.13%	0.47%	-0.84%	1.51%	4.20%
4-Week Price Change	14.31%	0.00%	4.28%	1.74%	1.22%	11.26%
12-Week Price Change	13.78%	-0.75%	13.31%	1.06%	10.59%	12.39%
52-Week Price Change	17.66%	41.30%	51.32%	31.40%	-3.86%	34.69%
20-Day Average Volume (Shares)	7,806,910	202,943	1,724,478	4,889,489	1,975,060	4,276,331
EPS F1 Estimate 1-Week Change	2.10%	0.00%	0.00%	0.00%	3.70%	0.00%
EPS F1 Estimate 4-Week Change	2.10%	0.00%	0.41%	-0.44%	3.75%	0.00%
EPS F1 Estimate 12-Week Change	-2.77%	-0.44%	2.24%	-0.44%	2.70%	3.41%
EPS Q1 Estimate Monthly Change	4.46%	0.00%	0.33%	-6.23%	-3.69%	0.00%

Source: Zacks Investment Research

Zacks Stock Rating System

We offer two rating systems that take into account investors' holding horizons: Zacks Rank and Zacks Recommendation. Each provides valuable insights into the future profitability of the stock and can be used separately or in combination with each other depending on your investment style.

Zacks Recommendation

The Zacks Recommendation aims to predict performance over the next 6 to 12 months. The foundation for the quantitatively determined Zacks Recommendation is trends in the company's estimate revisions and earnings outlook. The Zacks Recommendation is broken down into 3 Levels; Outperform, Neutral and Underperform. Unlike many Wall Street firms, we maintain a balance between the number of Outperform and Neutral recommendations. Our team of 70 analysts are fully versed in the benefits of earnings estimate revisions and how that is harnessed through the Zacks quantitative rating system. But we have given our analysts the ability to override the Zacks Recommendation for the 1200 stocks that they follow. The reason for the analyst over-rides is that there are often factors such as valuation, industry conditions and management effectiveness that a trained investment professional can spot better than a quantitative model.

Zacks Rank

The Zacks Rank is our short-term rating system that is most effective over the one- to three-month holding horizon. The underlying driver for the quantitatively-determined Zacks Rank is the same as the Zacks Recommendation, and reflects trends in earnings estimate revisions.

Zacks Style Scores

The Zacks Style Score is as a complementary indicator to the Zacks rating system, giving investors a way to focus on the highest rated stocks that best fit their own stock picking preferences.

Academic research has proven that stocks with the best Value, Growth and Momentum characteristics outperform the market. The Zacks Style Scores rate stocks on each of these individual styles and assigns a rating of A, B, C, D and F. We also produce the VGM Score (V for Value, G for Growth and M for Momentum), which combines the weighted average of the individual Style Scores into one score. This is perfectly suited for those who want their stocks to have the best scores across the board.

Value Score	C
Growth Score	A
Momentum Score	A
VGM Score	A

As an investor, you want to buy stocks with the highest probability of success. That means buying stocks with a Zacks Recommendation of Outperform, which also has a Style Score of an A or a B.

Disclosures

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Glossary of Terms and Definitions

52-Week High-Low: The range of the highest and lowest prices at which a stock has traded during the past year. This range is determined based on the stock's daily closing price which may differ from the intra-day high or low. Many investors use it as a technical indicator to determine a stock's current value and future price movement. The idea here is that if price breaks out from the 52-week range, in either direction, the momentum may continue in the same direction.

20-Day Average Volume (Shares): The average number of shares of a company traded in a day over the last 20 days. It is a direct indication of a security's overall liquidity. The higher the average daily trading volume, the easier it is to enter or exit the stock at a desired price with more buyers and sellers being available.

Daily Price Change: This is the percentage difference between a trading day's closing price and the prior trading day's closing price. This item is updated at 9 p.m. EST each day.

1-Week Price Change: This is the percentage change in a stock's closing price over the last 5 trading days. This change reflects the collective buying and selling sentiment over the 1-week period.

A strong weekly price increase for the stock, especially when accompanied by increased volume, is an indication of it gaining momentum.

4-Week Price Change: This is the percentage change in a stock's closing price over the last 20 trading days or past 4 weeks. This is a medium-term price change metric and an indication of the stock gaining momentum.

12-Week Price Change: This is the percentage change of a stock's closing price over the last 60 trading days or past 12 weeks. Similar to 4-week price change, this is a medium-term price change metric. It shows whether a stock has been enjoying strong investor demand, or if it has been in consolidation, or distress over this period.

52-Week Price Change: This is the percentage change in a stock's closing price over the last 260 trading days or past 52 weeks. This long-term price change metric is a good reference point for investors. Some investors seek stocks with the best percentage price change over the last 52 weeks, expecting the momentum to continue.

Market Cap: The number of outstanding common shares of a company times its latest price per share. This figure represents a company's size, which indicates various characteristics, including price stability and risk, in which investors could be interested.

Year-To-Date Price Change: Change in a stock's daily closing price in the period of time beginning the first day of the current calendar year through to the previous trading day.

of Analysts: Number of EPS estimates used in calculating the current-quarter consensus. These estimates come from the brokerage analysts tracking this stock. However, the number of such analysts tracking this stock may not match the number of estimates, as all brokerage analysts may not come up with an estimate or provide it to us.

Beta: A measure of risk commonly used to compare the volatility of a stock to the overall market. The S&P 500 Index is the base for calculating beta and carries a value of 1. A stock with beta below 1 is less risky than the market as a whole. And a stock with beta above 1 is riskier.

Dividend: The portion of earnings a company is expected to distribute to its common shareholders in the next 12 months for each share they own. Dividends are usually paid quarterly. Dividend payments reflect positively on a company and help maintain investors' trust. Investors typically find dividend-paying stocks appealing because the dividend adds to any market price appreciation to result in higher return on investment (ROI). Moreover, a steady or increasing dividend payment provides investors a cushion in a down market.

Dividend Yield: The ratio of a company's annual dividend to its share price. The annual dividend used in the ratio is calculated based on the most recent dividend paid by the company. Dividend yield is an estimate of the dividend-only return from a stock in the next 12 months. Since dividend itself doesn't change frequently, dividend yield usually changes with a stock's price movement. As a result, often an unusually high dividend yield is a result of weak stock price.

S&P 500 Index: The Standard & Poor's 500 (S&P 500) Index is an unmanaged group of securities considered to be representative of the stock market in general. It is a market-capitalization-weighted index of stocks of the 500 largest U.S. companies. Each stock's weight in the index is proportionate to its market value.

Industry: One of the 250+ groups that Zacks classifies all stocks into based on the nature of business. These groups are termed as expanded (aka "X") industries and map to their respective (economic) sectors; Zacks has 16 sectors.

Zacks Industry Rank: The Zacks Industry Rank is determined by calculating the average Zacks Rank for all stocks in the industry and then assigning an ordinal rank to it. For example, an industry with an average Zacks Rank of 1.6 is better than an industry with an average Zacks Rank of 2.3. So, the industry with the better average Zacks Rank would get a better Zacks Industry Rank. If an industry has the best average Zacks Rank, it would be considered the top industry (1 out of 250+), which would place it at the top 1% of Zacks-ranked industries. Studies have shown that roughly half of a stock's price movement can be attributed to the industry group it belongs to. In fact, the top 50% of Zacks-ranked industries outperforms the bottom 50% by a factor of more than 2 to 1.

Last EPS Surprise: The percentage deviation of a company's last reported earnings per share from the Zacks Consensus Estimate. Companies with a positive earnings surprise are more likely to surprise again in the future (or miss again if they recently missed).

Last Sales Surprise: The percentage deviation of a company's last reported sales from the Zacks Consensus Estimate.

Expected Report Date: This is an estimated date of a company's next earnings release. The information originated or gathered by Zacks Investment Research from its information providers or publicly available sources is the basis of this estimate.

Earnings ESP: The Zacks Earnings ESP compares the Most Accurate Estimate to the Zacks Consensus Estimate for the yet-to-be reported quarter. The Most Accurate Estimate is the most recent version of the Zacks Consensus EPS Estimate. The idea here is that analysts revising their estimates closer to an earnings release have the latest information, which could potentially be more accurate than what they and others contributing to the consensus had predicted earlier. Thus, a positive or negative Earnings ESP reading theoretically indicates the likely deviation of the actual earnings from the consensus estimate. However, the model's predictive power is significant for positive ESP readings only. A positive Earnings ESP is a strong predictor of an earnings beat, particularly when combined with a Zacks Rank #1 (Strong Buy), #2 (Buy) or #3 (Hold). Our research shows that stocks with this combination produce a positive surprise nearly 70% of the time.

Periods:

TTM: Trailing 12 months. Using TTM figures is an effective way of analyzing the most-recent financial data in an annualized format that helps neutralize the effects of seasonality and other quarter-to-quarter variation.

F1: Current fiscal year. This period is used to analyze the estimates for the ongoing full fiscal year.

F2: Next fiscal year. This period is used to analyze the estimates for the next full fiscal year.

F12M: Forward 12 months. Using F12M figures is an effective way of analyzing the near-term (the following four unreported quarters) estimates in an annualized manner. Instead of typically representing estimates for the full fiscal year, which may not represent the nitty-gritty of each quarter, F12M figures suggest an all-inclusive annualized estimate for the following four quarters. The annualization helps neutralize the potential effects of seasonality and other quarter-to-quarter variations.

P/E Ratio: The price-to-earnings ratio measures a company's current market price per share relative to its earnings per share (EPS). Usually, the trailing-12-month (TTM) EPS, current-fiscal-year (F1) EPS estimate, or forward-12-month (F12M) EPS estimate is used as the denominator. In essence, this ratio shows what the market is willing to pay today for each dollar of EPS. In other words, this ratio gives a sense of what the relative value of the company is at the already reported level of earnings or at a future level of earnings.

It is one of the most widely-used multiples for determining the value of a company and helps comparing its valuation with that of a competitor, the industry group or a benchmark.

PEG Ratio: The price/earnings to growth ratio is a stock's P/E ratio using current fiscal year (F1) EPS estimate divided by its expected EPS growth rate over the coming 3 to 5 years. This ratio essentially determines a stock's value by factoring in the company's expected earnings growth and is thus believed to provide a more complete picture than just the P/E ratio, particularly for faster-growing companies.

P/S Ratio: The price-to-sales ratio is calculated as a company's current price per share divided by trailing 12 months (TTM) sales or revenues per share. This ratio shows what the market is willing to pay today for each dollar of TTM sales per share. The P/S ratio is at times the only valuation metric when the company has yet to become profitable.

Cash/Price Ratio: The cash-to-price ratio or Cash Yield is calculated as cash and marketable securities per share divided by the company's current share price. Like the earnings yield, which shows the anticipated yield (or return) on a stock from earnings for each dollar invested, the cash yield does the same, with cash being the source of return instead of earnings. For example, a cash/price ratio of 0.08 suggests a return of 8% or 8 cents for every \$1 investment.

EV/EBITDA Ratio: The EV/EBITDA ratio, also known as Enterprise Multiple, is calculated as a company's enterprise value (market capitalization + value of total long-term debt + book value of preferred shares - cash and marketable securities) divided by EBITDA (earnings before interest, taxes, depreciation and amortization). Usually, trailing-12-month (TTM) or forward-12-month (F12M) EBITDA is used as the denominator.

EV/Sales Ratio: The enterprise value-to-sales ratio is calculated as a company's enterprise value (market capitalization + value of total long-term debt + book value of preferred shares - cash and marketable securities) divided by annual sales. It is an expansion of the P/S valuation, which uses market value instead of enterprise value. The EV/Sales ratio is perceived as more accurate than P/S, in part, because the market capitalization does not take a company's debt into account when valuing it.

EV/CF Ratio: The enterprise value-to-cash flow ratio is calculated as a company's enterprise value (market capitalization + value of total long-term debt + book value of preferred shares - cash and marketable securities) divided by the trailing-12-month (TTM) operating cash flow. It's a measure of how long it would take to buy the entire business if you were able to use all the company's operating cash flow.

The EV/CF ratio is perceived as more accurate than the P/CF ratio, in part, because the market price does not take a company's debt into account when valuing it.

EV/FCF Ratio: The enterprise value-to-free cash flow metric compares a company's enterprise value to its trailing-12-month (TTM) free cash flow (FCF). This metric is very similar to the EV/CF ratio, but is considered a more exact measure owing to the fact that it uses free cash flow, which subtracts capital expenditures (CAPEX) from a company's total operating cash flow, thereby reflecting the actual cash flow available for funding growth activities and payments to shareholders.

P/EBITDA Ratio: The P/EBITDA ratio is calculated as a company's per share market value divided by EBITDA (earnings before interest, taxes, depreciation, and amortization). This metric is very similar to the EV/EBITDA ratio, but is considered a little less exact measure as it uses market price, which does not take a company's debt into account. However, since EBITDA is often considered a proxy for cash income, the metric is used as a measure of what the market is willing to pay today for each dollar of the company's cash profitability in the trailing 12 months (TTM) or forward 12 months (F12M).

P/B Ratio: The price-to-book ratio is calculated as a company's current price per share divided by its book value (total assets – liabilities – preferred stocks) per share. In short, the book value is how much a company is worth. In other words, it reflects the total value of a company's assets that its common shareholders would receive if it were to be liquidated. So, the P/B ratio indicates whether you're paying higher or lower than what would remain if the company went bankrupt immediately. Investors typically use this metric to determine how a company's stock price stacks up to its intrinsic value.

P/TB Ratio: The price-to-tangible-book value ratio is calculated as a the per share market value of a company divided by the value of its tangible assets (total assets – liabilities – preferred stocks – intangible assets) per share. Tangible book value is the same thing as book value except it excludes the value of intangible assets to get a step closer to the baseline value of the company.

P/CF Ratio: The price-to-cash flow ratio measures a company's per share market price relative to its trailing-12-month (TTM) operating cash flow per share. This metric is used to determine whether a company is undervalued or overvalued relative to another stock, industry or sector. And like the P/E ratio, a lower number is typically considered better from the value perspective.

One of the reasons why P/CF ratio is often preferred over P/E ratio is the fact that operating cash flow adds back non-cash expenses such as depreciation and amortization to net income. This feature helps valuing stocks that have positive cash flow but are not profitable because of large noncash charges.

P/FCF Ratio: The price-to-free cash flow ratio is an extension of P/CF ratio, which uses trailing-12-month (TTM) free cash flow per share instead of operating cash flow per share. This metric is considered a more exact measure than P/CF ratio, as free cash flow subtracts capital expenditures (CAPEX) from a company's total operating cash flow, thereby reflecting the actual cash flow available for funding activities that generate additional revenues.

Earnings Yield: The earnings yield is calculated as current fiscal year (F1) EPS estimate divided by the company's current share price. The ratio, which is the inverse of the P/E ratio, measures the anticipated yield (or return) from earnings for each dollar invested in a stock today.

For example, earnings yield for a stock, which is trading at \$35 and expected to earn \$3 per share in the current fiscal year (F1), would be 0.0857 ($3/35 = 0.0857$) or 8.57%. In other words, for \$1 invested in the stock today, the yield from earnings is anticipated to be 8.57 cents.

Investors most commonly compare the earnings yield of a stock to that of a broad market index (such as the S&P 500) and prevailing interest rates, such as the current 10-year Treasury yield. Since bonds and stocks compete for investors' dollars, stock investors typically demand a higher yield for the extra risk they assume compared to investors of U.S. Treasury-backed securities that offer virtually risk-free returns. This additional return is referred to as the risk premium.

Debt/Equity Ratio: The debt-to-equity ratio is calculated as a company's total liabilities divided by its shareholder equity. This metric is used to gauge a company's financial leverage. In other words, it is a measure of the degree to which a company is financing its operations through debt versus its own funds. The higher the ratio, the higher the risk for shareholders.

However, this ratio is difficult to compare across industry groups where ideal amounts of debt vary. Some businesses are more capital intensive than others and typically require higher debt to finance their operations. So, a company's debt-to-equity ratio should be compared with other companies in the same industry.

Cash Flow (\$/share): Cash flow per share is calculated as operating cash flow (after-tax earnings + depreciation + other non-cash charges) divided by common shares outstanding. It is used by many investors as a measure of a company's financial strength. Since cash flow per share takes into consideration a company's ability to generate cash by adding back non-cash expenses, it is regarded by some as a more accurate measure of a company's financial situation than earnings per share, which could be artificially deflated.

Current Ratio: The current ratio or liquidity ratio is a company's current assets divided by its current liabilities. It measures a company's ability to pay short-term obligations. A current ratio that is in line with the industry average or slightly higher is generally considered acceptable. A current ratio that is lower than the industry average would indicate a higher risk of distress or default. A higher number is usually better. However, a very high current ratio compared to the industry average could be an indication of inefficient use of assets by management.

Debt/Capital Ratio: Debt-to-capital ratio is a company's total debt (interest-bearing debt + both short- and long-term liabilities) divided its total capital (interest-bearing debt + shareholders' equity). It is a measure of a company's financial leverage. All else being equal, the higher the debt-to-capital ratio, the riskier the stock.

However, this ratio can vary widely from industry to industry, the ideal amount of required debt being different. Some businesses are more capital intensive than others and typically require higher debt to finance their operations. So, a company's debt-to-capital ratio should be compared with the same for its industry.

Net Margin: Net margin is calculated as net income divided by sales. It shows how much of each dollar in sales generated by a company translates into profit. For example, if a company's net margin is 15%, its net income is 15 cents for every \$1 of sales it makes.

A change in margin can reflect either a change in business conditions, or a company's cost controls, or both. If a company's expenses are growing faster than sales, its net margin will decline. However, different net margin rates are considered good for different industries, so it's better to compare net margin rates of companies in the same industry group.

Return on Equity: Return on equity (ROE) is calculated as trailing-12-month net income divided by trailing-12-month average shareholder equity (including reinvested earnings). This metric is considered a measure of how effectively management is using a company's assets to generate profits. For example, if a company's ROE is 10%, it creates 10 cents profits for every \$1 shareholder equity, which is basically the company's assets minus debt. A company's ROE deemed good or bad depends on what's normal for its peers or industry group.

Sales/Assets Ratio: The sales-to-assets ratio or asset utilization ratio or asset turnover ratio is calculated as a company's annual sales divided by average assets (average of assets at the beginning of the year and at the year's end). This metric helps investors understand how effectively a company is using its assets to generate sales. For example, a sales-to-assets ratio of 2.5 indicates that the company generated \$2.50 in sales for every \$1 of assets on its books.

The higher the sales-to-assets ratio, the better the company is performing. However, similar to many other ratios, the asset turnover ratio tends to be higher for companies in certain industries/sectors than in others. So, a company's sales-to-assets ratio should be compared with the same for its industry/sector.

Historical EPS Growth (3-5 Years): This is the average annual (trailing-12-month) EPS growth rate over the last 3-5 years. This metric helps investors see how a company's EPS has grown from a long-term perspective.

Note: There are many factors that can influence short-term numbers — a recession will reduce this number, while a recovery will inflate it. The longterm perspective helps smooth out short-term events.

Projected EPS Growth (F1/F0): This is the estimated EPS growth rate for the current financial year. It is calculated as the consensus estimate for the current fiscal year (F1) divided by the reported EPS for the last completed fiscal year (F0).

Current Cash Flow Growth: It measures the latest year-over-year change in operating cash flow. Cash flow growth tells an investor how quickly a company is generating inflows of cash from operations. A positive change in the cash flow is desired and shows that more 'cash' is coming in than going out.

Historical Cash Flow Growth (3-5 Years): This is the annualized change in cash flow over the last 3-5 years. The change in a longer period helps put the current reading into proper perspective. By looking at the rate, rather than the actual dollar value, the comparison across the industry and peers becomes easier.

Projected Sales Growth (F1/F0): This metric looks at the estimated sales growth for the current year. It is calculated as sales estimate for the current fiscal year (F1) divided by the reported sales for the last completed fiscal year (F0).

Like EPS growth, a higher rate is better for sales growth. A look at a company's projected sales growth instantly tells you what the outlook is for their products and services. However, different sales growth rates are considered good for different industries, so it's better to compare sales growth rates of companies in the same industry group.

EPS F1 Estimate 1-Week Change: The percentage change in the Zacks Consensus EPS estimate for the current fiscal year over the past week. The change in a company's consensus EPS estimate (or earnings estimate revision) has proven to be strongly correlated with the near-term price movement of its shares. It is an integral part of the Zacks Rank.

If a stock's consensus EPS estimate is \$1.10 now versus \$1.00 a week ago, that will be reflected as a 10% upward revision. If, on the other hand, it went from \$1.00 to 90 cents, that would be a 10% downward revision.

EPS F1 Estimate 4-Week Change: The percentage change in the Zacks Consensus EPS estimate for the current fiscal year over the past four weeks.

A stock's earnings estimate revision in a 1-week period is important. But it's more meaningful to look at the longer-term revision. And, of course, the 4-week change helps put the 1-week change into proper perspective.

EPS F1 Estimate 12-Week Change: The percentage change in the Zacks Consensus EPS estimate for the current fiscal year over the past 12 weeks.

This metric essentially shows how the consensus EPS estimate has changed over a period longer than 1 week or 4 weeks.

EPS Q1 Estimate Monthly Change: The percentage change in the Zacks Consensus EPS estimate for the current fiscal quarter over the past four weeks.

While the revision in consensus EPS estimate for the current fiscal year is strongly correlated with the near-term price movement of its shares, the estimate revision for the current fiscal quarter is an important metric as well, especially over the short term, and particularly as a stock approaches its earnings date. If a stock's Q1 EPS estimate decreases ahead of its earnings release, it's usually a negative sign, whereas an increase is a positive sign.