

Biogen Inc. (BIIB)

\$305.63 (As of 03/10/20)

Price Target (6-12 Months): **\$321.00**

Long Term: 6-12 Months

Zacks Recommendation:

Neutral

(Since: 01/02/19)

Prior Recommendation: Underperform

Short Term: 1-3 Months

Zacks Rank: (1-5)

3-Hold

Zacks Style Scores:

VGM:A

Value: A

Growth: B

Momentum: C

Summary

Biogen's efforts to diversify beyond MS to other areas are commendable. Spinraza has multi-billion dollar potential. Biogen regularly in-licenses assets to build its pipeline. Several important data readouts are expected in 2020-2021. Its intention to seek U.S. approval of Alzheimer's treatment, aducanumab, a few months after it halted late-stage studies on the same drug following a futility analysis, gave a major boost to the stock. The recent PTAB's ruling in favor of Biogen in its IPR litigation against Mylan on the '514 patent for Tecfidera removes a short-term overhang. However, competitive pressure is expected to rise in 2020 in both MS and SMA markets. Though Biogen's CNS pipeline is attractive, it is a high-risk area. The stock has outperformed its industry in the past one year.

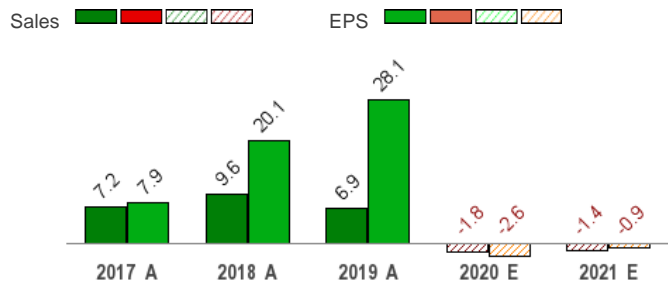
Price, Consensus & Surprise



Data Overview

52 Week High-Low	\$374.99 - \$215.77
20 Day Average Volume (sh)	1,630,840
Market Cap	\$53.2 B
YTD Price Change	3.0%
Beta	0.90
Dividend / Div Yld	\$0.00 / 0.0%
Industry	Medical - Biomedical and Genetics
Zacks Industry Rank	Top 39% (99 out of 253)

Sales and EPS Growth Rates (Y/Y %)



Last EPS Surprise	4.1%
Last Sales Surprise	3.8%
EPS F1 Est- 4 week change	0.3%
Expected Report Date	04/22/2020
Earnings ESP	-11.1%
P/E TTM	9.1
P/E F1	9.4
PEG F1	1.2
P/S TTM	3.7

Sales Estimates (millions of \$)

	Q1	Q2	Q3	Q4	Annual*
2021	3,391 E	3,479 E	3,442 E	3,455 E	13,916 E
2020	3,438 E	3,569 E	3,547 E	3,576 E	14,116 E
2019	3,490 A	3,617 A	3,600 A	3,671 A	14,378 A

EPS Estimates

	Q1	Q2	Q3	Q4	Annual*
2021	\$8.00 E	\$8.27 E	\$8.11 E	\$8.05 E	\$32.38 E
2020	\$7.83 E	\$8.39 E	\$8.25 E	\$8.15 E	\$32.68 E
2019	\$6.98 A	\$9.15 A	\$9.17 A	\$8.34 A	\$33.57 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 03/10/2020. The reports text is as of 03/11/2020.

Overview

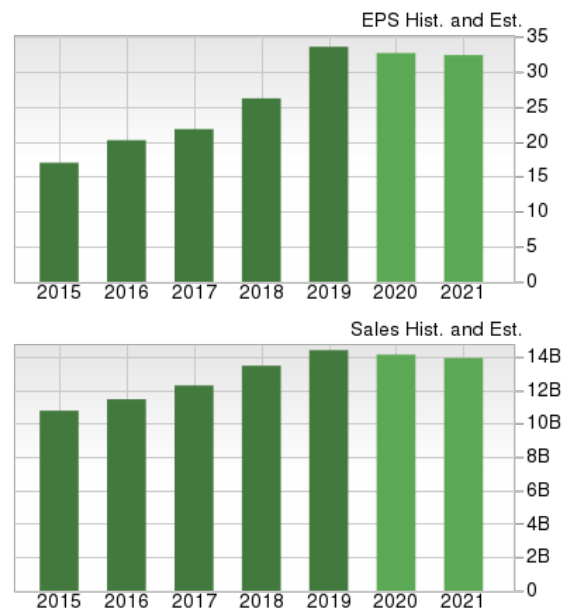
Based in Cambridge, MA, Biogen Inc. is one of the world's leading biotechnology companies, which focuses on developing innovative therapies for treating serious neurological and neurodegenerative diseases, including its core growth areas of multiple sclerosis (MS) and neuroimmunology, Alzheimer's disease (AD) and dementia, movement disorders including Parkinson's disease, neuromuscular disorders, including spinal muscular atrophy (SMA) and amyotrophic lateral sclerosis (ALS) and ophthalmology.

Key multiple sclerosis/MS drugs in its portfolio are Tecfidera, Avonex and Tysabri. Other approved/marketed products include Fumaderm (severe psoriasis), Fampyra (improvement of walking in MS patients), Plegridy (MS), Vumerity (RMS) and Spinraza (spinal muscular atrophy (SMA)). Key MS drugs Tecfidera and Tysabri accounted for around 39% and 16%, respectively, of the company's 2019 product revenues. Spinraza accounted for 18% of Biogen's total product revenues in 2019.

On Feb 1, 2017, Biogen completed the spin-off of its hemophilia business into a new company called Bioverativ. Bioverativ began trading under the ticker symbol "BIVV" on the NASDAQ stock market from Feb 2.

Biogen also generates significant royalties from partnership agreements with other pharmaceutical and biotechnology companies. It has collaborations with companies like Roche (Rituxan and Gazyva – cancer and Ocrevus – PPMS and RMS), Eisai (aducanumab and BAN2401– Alzheimer's disease), Acorda (Fampyra), Alkermes (Vumerity) and Ionis (Spinraza).

Biogen garnered total sales of \$14.4 billion in 2019, up 7% year over year.



Reasons To Buy:

▲ **Share Price Outperforming Industry:** Though Biogen's stock has declined 2.3% in the past year, it has still outperformed the 12.4% decline of the industry.

▲ **MS – Key Focus Area:** Biogen holds a strong position in the MS market with a wide range of products including Avonex, Tysabri, Tecfidera and Plegridy. Biogen's MS revenues (including royalties) were \$9.2 billion in 2019, up 2% year over year, almost half of which came from Tecfidera. Tecfidera recorded revenues of \$4.4 billion in 2019. Meanwhile, Tysabri, the company's second MS product, continues to contribute significantly to the top line despite carrying a "black box" warning for the risk of progressive multifocal leukoencephalopathy (PML) and other cautionary messages. Biogen recorded Tysabri revenues of around \$1.9 billion in 2019.

Avonex posted sales of \$1.7 billion in 2019. Another MS treatment, Plegridy, launched in 2014, raked in sales of \$436 million in 2019.

Meanwhile, Roche's Ocrevus (ocrelizumab) was approved for the treatment of relapsing MS (RMS) and primary progressive MS (PPMS) in Mar 2017. Though Ocrevus poses strong competition for Biogen's MS drugs, Biogen is receiving royalties on U.S. sales of Ocrevus.

Meanwhile Biogen is working on consolidating its position in the MS market by bringing new treatments to market. In November 2017, Biogen in-licensed worldwide commercialization rights to Alkermes' Vumerity (BIIB098), which the company claims has a potentially differentiated profile to Tecfidera. Vumerity gained FDA's approval for relapsing forms of MS in October 2019 and was launched in the fourth quarter of 2019.

Also, the company's patent position for Tecfidera was strengthened after PTAB ruled in its favor in its IPR litigation against Mylan on the '514 patent, which covers the treatment of multiple sclerosis with 480mg dose of dimethyl fumarate (DMF), the active ingredient of Tecfidera. Though Mylan announced its intention to appeal against this decision, the favorable ruling raises hopes for Biogen's chances of maintaining Tecfidera's exclusivity until 2028.

▲ **Growth Opportunities beyond MS:** As competition in the MS market intensifies, Biogen is trying to diversify its pipeline and aims to be a leader in neuroscience and the adjacent therapeutic area. In the three years from 2017-2019, Biogen executed 15 business development transactions, which significantly boosted its pipeline.

Biogen is looking to strengthen its Alzheimer's disease (AD) and other neurodegenerative disorders pipeline. The December 2016 FDA approval of Biogen's spinal muscular atrophy (SMA) treatment, Spinraza (nusinersen), consolidated its position in the neurological disease market with the drug being the first and only treatment to be approved in the U.S. for SMA. The market potential of the disease is huge. The drug has performed beyond expectations witnessing strong patient uptake in the United States and internationally and has now become the standard of care in SMA. Biogen has also expanded its collaboration with Ionis to identify new gene therapies for the treatment of SMA as well as a broad range of neurological diseases. In July 2018, Biogen acquired two programs from AliveGen, targeting the myostatin pathway for potential muscle enhancement across a range of neuromuscular diseases including SMA. In early 2019, Biogen signed a new collaboration with Skyhawk Therapeutics to develop an oral splicing modulator for multiple diseases, including MS and SMA.

Biogen is also building a portfolio of best-in-class treatments for stroke and acute neurology. In May 2018, Biogen purchased a phase III candidate, BIIB093/Cirara from Remedy Pharmaceuticals, which is being studied for the treatment of large hemispheric infarction (LHI), a severe form of stroke with no available therapy.

The June 2019 acquisition of gene therapy maker Nightstar Therapeutics provided Biogen with two potentially mid-to late-stage clinical assets (BIIB111 and BIIB112) in inherited retinal disease.

We believe the company will continue pursuing deals to add late-stage and commercial assets to its portfolio.

▲ **Pipeline Diversification:** Biogen plans to strengthen existing efforts in multiple sclerosis and spinal muscular atrophy while continuing to focus R&D efforts in the field of neuroscience. The company also spun off its hemophilia business in February 2017, which allows it to focus on neurology, its key area of expertise.

Promising pipeline candidates include opicinumab (a potential remyelination therapy in MS - phase II), BIIB074/vixotrigine (trigeminal neuralgia – phase II, small fiber neuropathy – phase II), BIIB054 (Parkinson's – phase II), BIIB092/gosuranemab (AD – phase II), BIIB104 (cognitive impairment associated with schizophrenia (CIAS)- phase IIb), dapirolizumab pegol (active systemic lupus erythematosus [SLE] - phase IIb), BIIB111 (choroideremia – phase III), BIIB093 (LHI – phase III, brain contusion – phase II), BIIB059 (lupus - phase II), tofersen/BIIB067 (ALS with SOD1 mutations – phase III) and BAN2401 (early Alzheimer's – phase III). By end of 2021, eleven mid- to late-stage data readouts are expected across clinical programs in MS, PSP, lupus, epilepsy, Parkinson's disease and others.

▲ **Exploring Biosimilar Opportunity:** Biogen is also working with Samsung BioLogics to bring new biosimilars to market. Samsung Bioepis, the joint venture between the two companies, markets three anti-TNF biosimilars in the EU – Flixabi (a biosimilar referencing Remicade), Benepali (a biosimilar referencing Enbrel) and Imraldi (a biosimilar referencing Humira). Biosimilars revenues rose 43% in 2018 and 35% in 2019. Biogen has a 49.9% stake in Samsung Bioepis. In December 2019, Biogen acquired exclusive rights from Samsung Bioepis to commercialize two new potential ophthalmology biosimilars – a biosimilar of Roche's Lucentis and Regeneron's Eylea. Biogen is optimistic that its biosimilars business has the opportunity to potentially double over the next couple of years.

▲ **Restructuring Initiative to Drive Cost Savings:** With its focus on streamlining operations and increasing efficiencies, in October 2015, Biogen announced a restructuring program. Under the program, it discontinued several pipeline programs and executed an 11% reduction in its workforce. The restructuring program generated annual cost savings of about \$250 million which were invested in pipeline development and commercial activities. In 2016, Biogen initiated additional cost saving measures that included the realignment of its organizational

Biogen's efforts to diversify beyond MS to other areas like Alzheimer's are commendable. Spinraza has multi-billion dollar potential.

structure and achieve further targeted cost reductions.

Reasons To Sell:

▼ **Rising Competitive Pressure on MS Drugs:** The competitive landscape remains challenging for Biogen's MS products with newer, competitive entrants. The Ocrevus launch by Roche is adversely impacting MS franchise sales, mainly Tysabri. Moreover, treatments like Novartis' Gilenya and Sanofi's Aubagio pose competitive threat to Tysabri.

Biogen's U.S. Interferon revenues are also experiencing declining trends with patients transitioning to other oral or high efficacy MS therapies with the trend expected to continue in 2020. Global MS revenues, excluding Ocrevus royalties, declined 4% in 2018 and almost 1% in 2019. Volumes of Tecfidera and Tysabri are expected to decline in the United States in 2020.

While PTAB's February ruling in favor of Biogen removes a short-term overhang, the company still needs to deal with the ongoing district court litigations with generic makers for the '514 patent.

▼ **Competition to Spinraza may Rise in 2020:** Novartis' new SMA treatment, Zolgensma was approved in May 2019 to treat children under two years old, representing about 5% of the prevalent market. Biogen acknowledged that it has begun to see some negative impact of Zolgensma's launch on Spinraza's U.S. sales within the infant population.

Meanwhile, Roche and PTC Therapeutics' regulatory application seeking approval for risdiplam in a broad range of patients with SMA is under priority review with the FDA, which may be approved in mid-2020, and raise competitive pressure on Spinraza.

▼ **Safety Concerns of MS Drugs:** We remain concerned that an increase in the number of PML cases associated with the use of Tysabri could lead to a slowdown in Tysabri sales going forward. Additional instances of PML cases could hamper the product's acceptance in the medical community thereby limiting its sales growth.

Since the emergence of the first PML case in a patient on Tecfidera, increased caution is being exercised by physicians and patients. These issues are being faced in the more mature markets of Europe like Germany as well. Additional PML cases would have a negative impact on Tecfidera sales.

In March 2018, Biogen announced the decision to withdraw Zinbryta from the markets, less than two years of its approval, due to growing safety concerns and limited commercial adoption of the drug due to its restrictive label. The company decided to discontinue marketing of the drug on grounds of its complex and evolving benefit/risk profile.

▼ **Development and Regulatory Setbacks:** Although Biogen has an impressive pipeline, we remind investors that product development involves a high degree of risk. Development and regulatory setbacks for late-stage candidates would be a major disappointment for the company. Pipeline setbacks include disappointing phase II data on opicinumab for RMS, dexpramipexole's (amyotrophic lateral sclerosis) failure to achieve the primary endpoint in a phase III study and the discontinuation of the development of lumiliximab for the treatment of relapsed and front-line chronic lymphocytic leukemia (CLL). Biogen also announced that it will no longer develop Tecfidera and a second interferon beta-1a for rheumatoid arthritis and ulcerative colitis, respectively. The company also decided to discontinue the development of Parkinson's disease candidate, vipadenant. Biogen has terminated the development of neublabin (neuropathic pain) as well following disappointing phase II data. Meanwhile, Tysabri failed to achieve the primary endpoint in a phase II study for acute ischemic stroke and a phase III study for secondary progressive multiple sclerosis (SPMS). Biogen has also discontinued a phase III program for Tecfidera in SPMS, the development of anti-TWEAK in lupus nephritis, and certain activities in immunology and fibrosis research. In 2016, Biogen discontinued the development of amiselimod, which was being evaluated for the treatment of autoimmune diseases.

In early 2018, Pfizer halted development of Tysabri for acute ischemic stroke (AIS) as Tysabri did not demonstrate improvement in clinical outcomes compared to placebo in a phase IIb study in AIS patients.

In March 2019, Biogen/Eisai announced the discontinuation of ENGAGE and EMERGE phase III studies on aducanumab in early AD as a futility analysis showed that the studies were unlikely to meet their primary endpoints. In October, Biogen revealed plans to pursue U.S. regulatory approval of aducanumab based on positive results of a new analysis of larger dataset, which became available after the discontinuation of the studies. However, the FDA may not approve aducanumab particularly with mixed outcome results across the two studies. Also, the FDA may require additional studies to be conducted

In September 2019, Biogen and Eisai discontinued two late-stage studies on elenbecestat. The decision was taken following a safety review conducted by the Data Safety Monitoring Board. The board's recommendation to discontinue the studies was due to unfavorable risk-benefit ratio.

Biogen is heavily reliant on sales of its MS drugs, which is a highly competitive disease space. Though Biogen's CNS pipeline is attractive, it is a high-risk area.

Last Earnings Report

Biogen Beats on Q4 Earnings & Sales

Biogen reported fourth-quarter 2019 earnings per share of \$8.34, which comprehensively beat the Zacks Consensus Estimate of \$8.00. Earnings rose 19% year over year, backed by higher revenues.

Sales came in at \$3.67 billion, up 4% from the year-ago quarter. Sales also beat the Zacks Consensus Estimate of \$3.54 billion.

Revenue growth was principally driven by higher sales of MS drugs and Spinraza.

Quarter Ending **12/2019**

Report Date	Jan 30, 2020
Sales Surprise	3.79%
EPS Surprise	4.12%
Quarterly EPS	8.34
Annual EPS (TTM)	33.64

Quarter in Detail

Product sales in the quarter were \$2.9 billion, up 4% year over year. Royalties on sales of Ocrevus were \$205 million in the quarter, up 35% year over year. Revenues from Biogen's share of Rituxan and Gazyva operating profits increased 3% from the year-ago period to \$395 million. A biosimilar version of Rituxan has been launched, which may hurt Biogen's profits in 2020. Other revenues declined 12% in the quarter to \$146 million due to unfavorable timing of shipments.

Biogen's MS revenues of \$2.39 billion in the reporter quarter, including Ocrevus royalties, rose 2% year over year as well as sequentially. However, excluding Ocrevus royalties, MS revenues were \$2.2 billion, down 2% year over year.

In the fourth quarter, increase in channel inventory hurt U.S. MS product revenues by approximately \$135 million compared with a decrease of approximately \$30 million in the third quarter.

Tecfidera sales rose 5% year over year to \$1.16 billion driven by strong global patient growth. Tecfidera global sales were up 3% sequentially. U.S. sales in the quarter were \$877 million, up 2.4% year over year while ex-U.S. sales were \$284.3 million, up 11.9%.

Tysabri sales rose 2% year over year but declined 2% sequentially to \$473 million. Tysabri U.S. sales rose 4.9% to \$269.5 million in the quarter. International revenues declined 2% to \$203.4 million.

Combined interferon revenues (Avonex and Plegridy) in the quarter were \$516 million, down 14% year over year. Avonex revenues declined 15% from the year-ago quarter to \$411 million. Plegridy contributed \$106 million to revenues, down 9% year over year.

Vumerity was launched in the United States late in the fourth quarter and recorded \$5 million of revenues.

Sales of Spinraza increased 16% year over year to \$543.0 million driven by higher sales in the United States as well as ex-U.S. markets. However, Spinraza sales declined 1% sequentially.

Spinraza U.S. sales were \$242.8 million in the quarter, up 2.8% year over year as well as sequentially driven by continued patient growth. In ex-U.S. markets, Spinraza sales rose 28.5% year over year to \$300.4 million driven by strong overall patient growth from both existing and newly launched countries. However, Spinraza's ex-U.S. sales declined 3% sequentially due to a combination of loading dose dynamics, country mix, the timing of shipments in certain markets and pricing dynamics.

The number of patients on Spinraza grew approximately 2% in the United States and 10% outside the United States in the quarter compared with the end of the third quarter.

In the United States, more than 50% of new patient starts in Q4 were adults, with the company making strong progress in capturing the under-penetrated adult segment.

On the call, the company once again said that it has begun to see some negative impact of Zolgensma's launch on Spinraza's U.S. sales within the infant population.

In 2020, Spinraza's sales growth rate is expected to moderate from 2019 levels, primarily due to a lower rate of new patient starts as well as the impact of loading dose dynamics as patients transition to dosing once every four months.

In the quarter, biosimilars revenues increased 25% year over year to \$196 million driven by Imraldi.

Imraldi generated sales of \$52 million in the fourth quarter compared with \$49 million in the third quarter. Benepali recorded sales of \$126 million in the quarter, up 1% year over year. Flixabi sales of \$18 million rose 29% year over.

Research and development (R&D) expenses rose 15% year over year to \$692 million. Selling, general and administrative (SG&A) expenses rose 12% year over year to \$662 million, primarily due to increased commercial and medical investments, as well as the timing of spend on G&A.

In the quarter, Biogen repurchased approximately 7.7 million shares worth \$2.1 billion. As of Dec 31, it had \$6.3 billion remaining under its share buyback plan including the new \$5 billion plan approved by the board in December 2019.

2019 Results

The company reported 2019 earnings per share of \$33.57, which beat the Zacks Consensus Estimate of \$33.20. Earnings rose 28% year over year.

Revenues came in at \$14.38 billion, which increased 7% year over year and exceeded the Zacks Consensus Estimate of \$14.24 billion.

2020 Guidance

Biogen expects revenues of \$14-\$14.3 billion in 2020, the midpoint of which represents a decline from 2019 levels. Earnings per share are expected between \$31.50 and \$33.50.

Adjusted R&D costs are expected to be 15% to 16% of total revenues. Adjusted SG&A costs are expected in the range of 19.5% to 20.5% of total revenues. Adjusted tax rate guidance is 18% to 19%.

The guidance assumes no generic competition in the United States for Tecfidera in 2020 and does not include any impact from potential acquisitions or large business development transactions. The guidance includes additional commercial and R&D expenses related to aducanumab and assumes that Roche's risdiplam will be launched in 2020.

Recent News

Biogen Collaborates With Sangamo – Feb 27

Biogen announced a global licensing collaboration agreement with Sangamo Therapeutics. The companies are collaborating to develop and commercialize ST-501 for tauopathies, including Alzheimer's disease; ST-502 for synucleinopathies, including Parkinson's disease; and a third undisclosed neuromuscular disease target. Additionally, Biogen has exclusive rights to nominate up to nine additional undisclosed neurological disease targets over a target selection period of five years. The companies will leverage Sangamo's proprietary zinc finger protein (ZFP) technology delivered via adeno-associated virus (AAV) to modulate the expression of key genes involved in neurological diseases. Biogen will pay Sangamo an upfront fee of \$350 million, including a license fee and an equity investment in the Sangamo stock. Sangamo is also eligible to receive up to \$2.37 billion in potential milestones as well as royalties on potential net commercial sales.

PTAB Upholds Patentability of '514 Patent – Feb 5

The Patent Trial and Appeal Board (PTAB) of the U.S. Patent and Trademark Office (USPTO) gave a favorable ruling to Biogen over a patent dispute with Mylan relating to Tecfidera. Mylan in an inter partes review (IPR) challenged Biogen's '514 patent, which covers the treatment of multiple sclerosis with 480mg dose of dimethyl fumarate (DMF), the active ingredient of Tecfidera. The patent provides market exclusivity in the United States until 2028. Per the statement from PTAB, Mylan failed to demonstrate that some claims were not patentable. The PTAB issued a final written decision upholding the patentability of the '514 Patent.

Though Mylan announced its intention to appeal against this decision, the favorable ruling raises hopes for Biogen's chances of maintaining Tecfidera's exclusivity until 2028. The news removes a short-term overhang from the company. Meanwhile, the '514 patent has also been challenged in the U.S. District Courts of Delaware and West Virginia. The favorable ruling increases the chances of the same decision occurring in the district courts or reaching favorable terms on any settlements.

To Acquire Early-Stage CNS Drug From Pfizer – Jan 13

Biogen announced that it has signed an agreement with Pfizer to acquire the latter's CNS-penetrant small molecule inhibitor, PF-05251749. Per the terms of the agreement, Biogen will pay \$75 in upfront payment to Pfizer along with potential additional development and commercialization milestone payments of up to \$635 million. Pfizer is also eligible to receive tiered royalties in high-single digits to sub-teens. The transaction is expected to be completed in the first quarter of 2020. Biogen plans to develop PF-05251749 as a treatment for Sundowning symptom in patients with AD and Irregular Sleep Wake Rhythm Disorder (ISWRD) in patients with PD. The company is planning to initiate a phase Ib study in the fourth quarter of 2020.

Valuation

Biogen's shares are up 3.0% in the year-to-date period but down 2.3% over the trailing 12-month period. Stocks in the Zacks sub-industry and sector are down 7.5% and 9.9%, respectively, in the year-to-date period. Over the past year, the Zacks sub-industry and sector are down 12.4% and 9.4%, respectively.

The S&P 500 Index is down 14.8% in the year-to-date period and 2.6% in the past year.

The stock is currently trading at 3.79X trailing 12-month sales per share which compares to 2.6X for the Zacks sub-industry, 2.84X for the Zacks sector and 2.97X for the S&P 500 Index. Over the past five years, the stock has traded as high as 11.59X and as low as 2.85X, with a 5-year median of 5.26X. Our Neutral recommendation indicates that the stock will perform in-line with the market. Our \$321 price target reflects 3.97X trailing 12-month sales per share.

The table below shows summary valuation data for BIIB

Valuation Multiples - BIIB					
		Stock	Sub-Industry	Sector	S&P 500
P/S TTM	Current	3.79	2.6	2.84	2.97
	5-Year High	11.59	5.04	4.17	3.68
	5-Year Low	2.85	2.13	2.73	2.5
	5-Year Median	5.26	2.66	3.27	3.18
P/E F12M	Current	9.37	N/A	18.72	15.75
	5-Year High	27.13	N/A	21.08	19.34
	5-Year Low	6.74	20.59	15.82	15.18
	5-Year Median	13.01	40.26	18.74	17.42
P/B TTM	Current	4.13	3.57	4.13	3.69
	5-Year High	10.39	5.8	5.05	4.56
	5-Year Low	2.84	2.44	3.44	2.85
	5-Year Median	5.17	3.28	4.32	3.63

As of 3/10/2020

Industry Analysis Zacks Industry Rank: Top 39% (99 out of 253)



Top Peers

Pfizer Inc. (PFE)	Outperform
Bayer Aktiengesellschaft (BAYRY)	Neutral
Bristol-Myers Squibb Company (BMY)	Neutral
Novartis AG (NVS)	Neutral
Roche Holding AG (RHHBY)	Neutral
Sanofi (SNY)	Neutral
Teva Pharmaceutical Industries Ltd. (TEVA)	Neutral
Gilead Sciences, Inc. (GILD)	Underperform

Industry Comparison Industry: Medical - Biomedical And Genetics				Industry Peers		
	BIIB Neutral	X Industry	S&P 500	BAYRY Neutral	GILD Underperform	SNY Neutral
VGM Score	A	-	-	B	D	A
Market Cap	53.20 B	177.02 M	19.13 B	61.85 B	91.41 B	115.59 B
# of Analysts	27	2	13	2	12	6
Dividend Yield	0.00%	0.00%	2.26%	3.29%	3.48%	2.50%
Value Score	A	-	-	A	C	A
Cash/Price	0.08	0.22	0.05	0.09	0.24	0.09
EV/EBITDA	6.87	-2.72	11.99	7.35	11.93	10.72
PEG Ratio	1.24	1.73	1.68	1.17	5.10	1.83
Price/Book (P/B)	4.13	3.47	2.64	1.21	4.04	1.75
Price/Cash Flow (P/CF)	7.91	13.44	10.70	4.39	9.91	6.95
P/E (F1)	9.35	29.02	15.44	8.55	11.18	13.27
Price/Sales (P/S)	3.70	11.96	2.05	1.22	4.07	2.86
Earnings Yield	10.70%	-17.94%	6.47%	11.70%	8.94%	7.54%
Debt/Equity	0.37	0.02	0.70	0.82	1.02	0.36
Cash Flow (\$/share)	38.63	-1.09	7.01	3.78	7.30	6.64
Growth Score	B	-	-	D	F	B
Hist. EPS Growth (3-5 yrs)	16.51%	18.12%	10.85%	NA	-14.87%	0.74%
Proj. EPS Growth (F1/F0)	-2.62%	5.88%	6.25%	9.60%	-2.38%	4.77%
Curr. Cash Flow Growth	9.02%	16.16%	6.09%	60.37%	-2.57%	26.95%
Hist. Cash Flow Growth (3-5 yrs)	11.97%	7.56%	8.52%	6.70%	-8.08%	5.29%
Current Ratio	1.72	4.85	1.24	1.29	3.10	1.40
Debt/Capital	26.75%	4.29%	42.57%	45.00%	50.49%	26.32%
Net Margin	40.96%	-227.76%	11.69%	9.07%	23.99%	7.78%
Return on Equity	46.51%	-67.51%	16.74%	13.92%	35.49%	25.84%
Sales/Assets	0.54	0.21	0.54	0.35	0.36	0.65
Proj. Sales Growth (F1/F0)	-1.73%	14.45%	3.76%	-3.06%	-0.81%	5.72%
Momentum Score	C	-	-	D	C	A
Daily Price Chg	2.84%	-7.70%	-7.65%	0.48%	-1.61%	2.08%
1 Week Price Chg	3.10%	0.00%	-0.67%	0.67%	15.66%	4.74%
4 Week Price Chg	-8.02%	-14.77%	-19.26%	-21.46%	6.76%	-9.90%
12 Week Price Chg	2.87%	-8.55%	-17.26%	-15.40%	9.27%	-8.03%
52 Week Price Chg	-2.27%	-25.24%	-6.83%	-12.37%	11.58%	5.99%
20 Day Average Volume	1,630,840	215,619	2,684,709	507,607	23,851,580	2,597,975
(F1) EPS Est 1 week change	0.10%	0.00%	0.00%	0.00%	0.00%	0.00%
(F1) EPS Est 4 week change	0.27%	0.00%	-0.06%	-3.72%	-0.38%	0.29%
(F1) EPS Est 12 week change	-1.09%	0.00%	-0.46%	-3.72%	-10.29%	0.23%
(Q1) EPS Est Mthly Chg	-4.21%	0.00%	-0.40%	NA	0.00%	NA

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	B
Growth Score	B
Momentum Score	C
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

This report contains independent commentary to be used for informational purposes only. The analysts contributing to this report do not hold any shares of this stock. The analysts contributing to this report do not serve on the board of the company that issued this stock. The EPS and revenue forecasts are the Zacks Consensus estimates, unless indicated otherwise on the reports first page. Additionally, the analysts contributing to this report certify that the views expressed herein accurately reflect the analysts personal views as to the subject securities and issuers. ZIR certifies that no part of the analysts compensation was, is, or will be, directly or indirectly, related to the specific recommendation or views expressed by the analyst in the report.

Additional information on the securities mentioned in this report is available upon request. This report is based on data obtained from sources we believe to be reliable, but is not guaranteed as to accuracy and does not purport to be complete. Any opinions expressed herein are subject to change.

ZIR is not an investment advisor and the report should not be construed as advice designed to meet the particular investment needs of any investor. Prior to making any investment decision, you are advised to consult with your broker, investment advisor, or other appropriate tax or financial professional to determine the suitability of any investment. This report and others like it are published regularly and not in response to episodic market activity or events affecting the securities industry.

This report is not to be construed as an offer or the solicitation of an offer to buy or sell the securities herein mentioned. ZIR or its officers, employees or customers may have a position long or short in the securities mentioned and buy or sell the securities from time to time. ZIR is not a broker-dealer. ZIR may enter into arms-length agreements with broker-dealers to provide this research to their clients. Zacks and its staff are not involved in investment banking activities for the stock issuer covered in this report.

ZIR uses the following rating system for the securities it covers. **Outperform-** ZIR expects that the subject company will outperform the broader U.S. equities markets over the next six to twelve months. **Neutral-** ZIR expects that the company will perform in line with the broader U.S. equities markets over the next six to twelve months. **Underperform-** ZIR expects the company will underperform the broader U.S. equities markets over the next six to twelve months.

No part of this report can be reprinted, republished or transmitted electronically without the prior written authorization of ZIR.