BioMarin Pharma (BMRN)

$77.96 (As of 11/24/20)

Price Target (6-12 Months): **$81.00**

Long Term: 6-12 Months	**Zacks Recommendation:** (Since: 08/07/20) Prior Recommendation: Outperform	**Neutral**
Short Term: 1-3 Months	**Zacks Rank:** (1-5)	**3-Hold**
	Zacks Style Scores:	VGM:B
	Value: C | Growth: B | Momentum: A	

Summary

BioMarin beat estimates for Q3 earnings and sales. Sales of BioMarin's key drugs — Vimizim and Kuvan — are being driven by strong demand trends. New drug, Palynziq is witnessing strong commercial uptake in the United States. BioMarin's rare disease pipeline is progressing well with growing focus on gene therapy agents. Regulatory applications for key candidate vosoritide are under review in United States and Europe with potential regulatory approvals anticipated in 2021. However, the FDA issued a CRL to BLA for Roctavian, a gene therapy for hemophilia A, asking for additional data, which resulted in a delay in potential approval timeline. Roctavian is now not anticipated to be launched until late 2022. Kuvan sales in Q4 are expected to be hurt by generic competition. The stock has underperformed the industry this year so far.

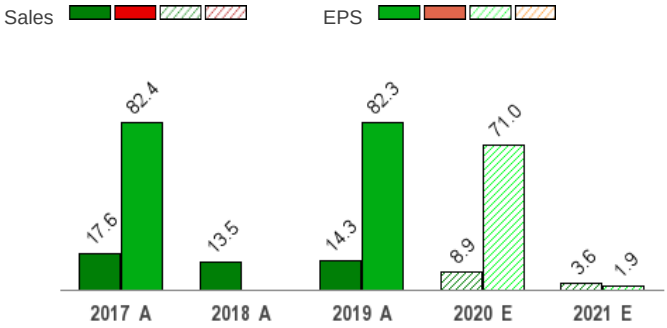
Price, Consensus & Surprise

Source: Zacks Investment Research

Data Overview

52-Week High-Low	**$131.95 - $68.25**
20-Day Average Volume (Shares)	**1,364,758**
Market Cap	**$14.0 B**
Year-To-Date Price Change	**-8.9%**
Beta	**0.69**
Dividend / Dividend Yield	**$0.00 / 0.0%**
Industry	**Medical - Biomedical and Genetics**
Zacks Industry Rank	**Bottom 22% (198 out of 254)**
Last EPS Surprise	**116.0%**
Last Sales Surprise	**3.6%**
EPS F1 Estimate 4-Week Change	**59.3%**
Expected Report Date	**02/24/2021**
Earnings ESP	**0.0%**
P/E TTM	**44.3**
P/E F1	**49.0**
PEG F1	**0.9**
P/S TTM	**7.5**

Sales and EPS Growth Rates (Y/Y %)



Sales Estimates (millions of $)

	Q1	Q2	Q3	Q4	Annual*
2021	466 E	455 E	472 E	498 E	1,922 E
2020	502 A	429 A	477 A	450 E	1,856 E
2019	401 A	388 A	461 A	454 A	1,704 A

EPS Estimates

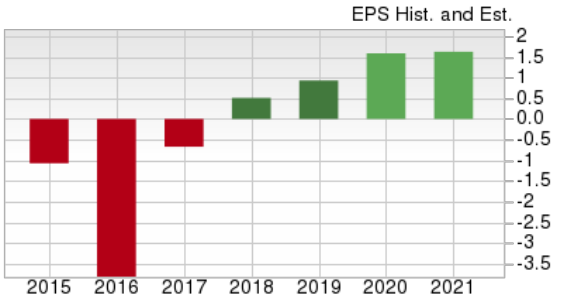
	Q1	Q2	Q3	Q4	Annual*
2021	$0.43 E	$0.33 E	$0.37 E	$0.48 E	$1.62 E
2020	$0.63 A	$0.32 A	$0.54 A	$0.17 E	$1.59 E
2019	$0.14 A	$0.09 A	$0.43 A	$0.25 A	$0.93 A

*Quarterly figures may not add up to annual.

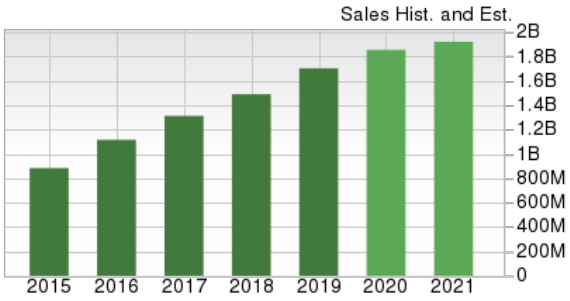
The data in the charts and tables, including the Zacks Consensus EPS and Sales estimates, is as of 11/24/2020. The reports text is as of 11/24/2020.

Overview

San Rafael, CA-based BioMarin Pharmaceutical Inc. focuses on the development and commercialization of treatments for serious life threatening medical conditions, mostly for children. The company's portfolio comprises six marketed products namely, Aldurazyme (mucopolysaccharidosis type I (MPS I)), Naglazyme (MPS VI), Kuvan (phenylketonuria (PKU) – a rare genetic enzyme deficiency disorder), Vimizim (MPS IVA or Morquio syndrome type A), Brineura (CLN2– a form of Batten disease) and Palynziq (PKU). BioMarin has a collaboration agreement with Sanofi's subsidiary Genzyme for Aldurazyme. Genzyme is BioMarin's sole customer for Aldurazyme and is responsible for marketing and selling Aldurazyme to third parties.



Its two key late-stage investigational products are Roctavian/valoctocogene roxaparvovec/valrox (hemophilia A) and vosoritide (achondroplasia).



BioMarin's BLA for Roctavian/valoctocogene roxaparvovec (valrox), a gene therapy for severe hemophilia A, was granted a complete response letter (CRL) by the FDA in August 2020. Regulatory applications for vosoritide, which has been developed for treating achondroplasia, the most common form of dwarfism, are under review in Europe and United States. Another important pipeline candidate is gene therapy PKU candidate, BMN 307.

In Jan 2015, BioMarin acquired a Dutch biotech company Prosensa, in an all-cash transaction valued at $751.5 million, to boost its rare disease pipeline. Moreover, the company acquired all global rights to Kuvan, excluding Japan, and Palynziq (pegvaliase) from Merck Serono in Jan 2016, for cash payments of $374.5 million plus certain milestone payments.

BioMarin generated total sales of $1.7 billion in 2019, up 14%.

Source: Zacks Investment Research

Reasons To Buy:

BioMarin's key drugs, Vimizim and Kuvan, enjoy strong demand trends. It has an impressive rare disease pipeline with a growing focus towards gene therapy agents.

- **Key Products Continue to Drive Growth:** Vimizim is doing well, surpassing the company's expectations. Vimizim's sales rose 17% in 2018 and 13% in 2019. Other products like Kuvan are also performing well. Kuvan's North American sales continue to be propelled by growth in new patients and high levels of adherence. Internationally, uptake has been solid and the acquisition of the drug's global rights has opened a stream of orders directly from the majority of the top markets to the company. Kuvan's sales rose 7% in 2019.

  Brineura was approved for the treatment of children with CLN2 disease – a form of Batten disease – both in the United States and the EU in 2017.

  Meanwhile, Palynziq (pegvaliase) injection, developed to reduce blood phenylalanine (Phe) levels in PKU patients, gained FDA approval in May 2018 and was launched in July 2018. In the EU, a marketing application was approved in May 2019. Palynziq is witnessing strong commercial uptake in the United States. BioMarin believes the injection has peak commercial opportunity of roughly $1 billion as it demonstrated dramatic Phe reductions in PKU patients in pivotal studies. BioMarin is optimistic that Palynziq will be the approved treatment of choice for adults, complementing Kuvan, which is a popular treatment choice for children. Palynziq sales were $87 million in 2019 and are expected to be much higher, in the range of $160-$190 million, in 2020.

- **Vosoritide; A Key Pipeline Candidate:** An important candidate in BioMarin's pipeline is vosoritide, which has been developed to treat achondroplasia, the most common form of dwarfism for which no drug is approved yet. Regulatory application for vosoritide are under review in the EU and the United States. A decision in the United States is expected on August 20, 2021. The regulatory applications are based on final data from a phase III study, evaluating the efficacy and safety of vosoritide in children (aged 5-14), long-term safety and efficacy data from the ongoing phase II and phase III extension studies and extensive natural history data.

  In December 2019, BioMarin announced positive top-line data from the phase III study, which showed that patients treated with the candidate achieved placebo-adjusted change from baseline in growth velocity of 1.6 cm/year after treatment duration of one year.

  A potential approval will make the drug the first and only approved treatment for achondroplasia in the United States. BioMarin estimates that around 25,000 children suffer from this disorder in its commercial territories, which represents a decent sales growth opportunity.

  Also, an investigator-initiated study on vosoritide for the second indication — genetic short stature (GSS) — has begun as part of a research collaboration with Children's National Hospital.

- **Promising Gene Therapy Pipeline:** A third PKU treatment option in BioMarin's PKU franchise is its gene therapy candidate, BMN 307. A phase I/II study on BMN 307 began in September 2020.

  Another gene therapy candidate in BioMarin's pipeline is BMN 331 for the treatment of hereditary angioedema (HAE) for which IND enabling activities have begun.

  Successful development and commercialization of these candidates will help drive long-term growth at BioMarin.

- **Deals to Boost Portfolio and Strengthen Pipeline:** In January 2016, BioMarin acquired all global rights to Kuvan and pegvaliase (now marketed as Palynziq) from Merck Serono. Previously, the company had exclusive rights to Kuvan in the U.S. and Canada and to pegvaliase in the U.S. and Japan. With this transaction, BioMarin has gained exclusive worldwide rights to Kuvan and pegvaliase with the exception of Kuvan in Japan. The acquisition of PKU rights in these markets represents significant opportunity for BioMarin to establish commercial leadership for the treatment of PKU, first with Kuvan, and then with pegvaliase.

- **Favorable Debt Profile:** As of Sep 30, 2020, BioMarin had $1.55 billion in total debt (long-term debt plus current debt) on its balance sheet. Cash and cash equivalents totaled approximately $1.51 billion. Its cash position is sound and the company is capable of paying the debt in case of insolvency. As of Sep 30, 2020, BioMarin's debt/capital ratio was 26.3%, less than 30.8% as of Jun 30, 2020. A lower ratio indicates lower financial risk.

Reasons To Sell:

- **Share Price Underperforming Industry:** BioMarin's share price movement shows that the stock has underperformed the industry this year so far. The stock has declined 8.9% during this period against 1.3% decrease for the industry.

- **CRL to Roctavian & Other Pipeline Setbacks:** While we believe that BioMarin has an impressive pipeline, delayed approvals or development setbacks would have a negative impact on the stock.

The a CRL given by the FDA to BLA for Roctavian, a gene therapy for hemophilia A,resulted in a delay in potential approval timeline

In August 2020, the FDA issued a complete response letter (CRL) to Roctavian's BLA ahead of Aug 21 PDUFA date as the FDA was not satisfied with the available data and has asked for two-year follow-up data on annualized bleed rates from the ongoing phase III study to provide additional evidence of a durable effect. The data is not expected to be available before November 2021.

Investors were expecting the FDA to grant accelerated approval to the drug on the PDUFA date. It was expected that Roctavian, if approved, would be a transformational product as it has the potential to dramatically change the treatment paradigm. However, the CRL now pushes potential approval of Roctavian to 2022 and is a major blow to BioMarin's prospects.

In 2016, BioMarin discontinued clinical and regulatory development of Kyndrisa for the treatment of Duchenne muscular dystrophy (DMD) amenable to exon 51 skipping. The decision followed the company's discussions with the European Medicines Agency's Committee for Medicinal Products for Human Use, which hinted at the issuance of a negative opinion. The FDA had also issued a complete response letter in January 2016 for Kyndrisa stating that the standard of substantial evidence of Kyndrisa effectiveness was not met.

BioMarin has also discontinued the development of the three follow-on products of Kyndrisa – BMN 044, BMN 045, and BMN 053 – that were being evaluated in phase II studies for specific forms of DMD. BioMarin terminated internal development of the reveglucosidase alfa program (for the treatment of patients with late-onset Pompe disease). Also, BioMarin halted further development of BMN-195 for a type of muscle disease following disappointing results from an early-stage study.

- **Kuvan Faces Generic Threat:** BioMarin is facing generic threat for Kuvan, one of its most promising drugs, which has been performing well since its launch. Per settlements with Dr Reddy's and Par Pharmaceuticals, two Kuvan generics entered U.S. market beginning October 2020 and are expected to hurt sales in the fourth quarter of 2020.

- **Prosensa Acquisition Failed to Deliver:** The Jan 2015 acquisition of Prosensa worth a million dollars was assumed to be a strategic move. The acquisition added a late-stage DMD candidate Kyndrisa, which was considered to be a synergistic fit for BioMarin's rare disease pipeline. However, BioMarin failed to clear regulatory hurdles related to Kyndrisa and ultimately decided to drop development of the candidate. DMD, a devastating and debilitating disease, is estimated to affect nearly 1 in every 3,500 boys born across the world. Kyndrisa, had it been developed successfully, would have captured a major share of this orphan disease market.

Last Earnings Report

BioMarin Beats on Q3 Earnings, Lowers Sales View

Quarter Ending	09/2020
Report Date	Nov 05, 2020
Sales Surprise	3.62%
EPS Surprise	116.00%
Quarterly EPS	0.54
Annual EPS (TTM)	1.74

BioMarin's adjusted earnings of 54 cents per share beat the Zacks Consensus Estimate of 25 cents. Earnings were up almost 23% year over year due to lower R&D expense.

Total revenues were $476.8 million in the reported quarter, up 3% from the year-ago period. Sales beat the Zacks Consensus Estimate of $460 million.

In the quarter, the company continued to experience a significant impact of COVID-19. The pandemic caused demand interruptions such as missed patient infusions and disruption in new patient starts for some of its products.

Quarterly Details

Product revenues (including Aldurazyme) were $460.7 million in the quarter, down 2.2% year over year. Product revenues from BioMarin's marketed brands (excluding Aldurazyme) declined 2% year over year to $419.8 million. Royalty and other revenues were $16.0 million in the quarter, higher than $10.2 million a year ago.

Kuvan revenues rose 3% to $124.1 million. Revenues are expected to decline in the fourth quarter due to generic competition.

New product, Palynziq injection sales grossed $46.1 million in the quarter compared with $40.7 million in the previous quarter, driven by new patients initiating therapy as well as the growing number of U.S. patients who have now achieved maintenance dosing.

The majority of Palynziq sales came from the United States. New patient starts picked up recently in the United States as additional clinics resumed operation. The pandemic slowed down patient growth in Germany and launch in European markets

Naglazyme sales declined 19% to $76.3 million. Vimizim contributed $147.9 million to total revenues, down 10% year over year. Sales of both Naglazyme and Vimizim were hurt by unfavorable timing of orders in Latin America. Naglazyme and Vimzim revenues vary on a quarterly basis, primarily due to the timing of central government orders from some countries, mainly Brazil. Meanwhile, like the previous quarter, missed patient infusions due to COVID-19 also hurt sales of the drugs in the third quarter.

Brineura generated sales of $25.4 million in the quarter, compared with $25.8 million in the previous quarter.

Product revenues from Aldurazyme totaled $40.9 million, up 79% year over year due to higher sales volume to Sanofi's subsidiary Genzyme. Genzyme is BioMarin's sole customer for Aldurazyme and is responsible for marketing and selling Aldurazyme to third parties.

R&D expenses declined 17.5% year over year to $125.6 million due to lower clinical manufacturing costs for BMN 307 and lower clinical activity spend for Roctavian. Launch preparations for Roctavian and continued global launch of Palynziq resulted in a 6.2% increase in SG&A expenses to $150.1 million.

As of Sep 30, 2020, BioMarin had $1.8 billion in cash, cash equivalents and investments, compared with $1.7 billion at the end of Jun 30, 2020

2020 Guidance

BioMarin lowered its sales guidance for the year to reflect the impact of COVID-19, loss of exclusivity for Kuvan in October and no contribution from Roctavian to 2020 revenues. The company said that the impact of COVID-19 is expected to be felt in 2021 as well due to the effect of delays in new patients initiating therapy.

Total revenue guidance was lowered from a range of $1.85-$1.95 billion to $1.81-$1.87 billion.

Vimizim sales are expected in the range of $515-$545 million compared with $530-$570 million guided previously. Kuvan sales guidance was maintained in the range of $430-$480 million. Naglazyme sales range was tightened from $360-$400 million to $370-$400 million. Brineura sales are expected within $90-$110 million versus $85-$115 million previously. Palynziq sales guidance was maintained in the range of $160-$190 million.

The guidance for costs was lowered due in part to cost containment measures during the pandemic. R&D costs are expected to be within $630-$670 million compared with $675-$725 million. SG&A expenses are anticipated in the range of $725-$765 million versus $780-$830 million.

The company raised its adjusted net income guidance to a range of $280-$330 million from $260-$310 million expected previously.

Pipeline Update

In August 2020, the FDA issued a complete response letter (CRL) to the biologics license application for Roctavian. The BLA application was based on interim data from an ongoing phase III study and the updated three-year results from a long-term phase I/II study

However, the FDA was not satisfied with the data and asked for two-year follow-up data on annualized bleed rates from the ongoing phase III study (n=134) to provide additional evidence of a durable effect. This data is not expected to be available before November 2021.

One year of follow-up of all patients in the study is expected to be completed in November and the company will announce the one-year top-line data in the first quarter of 2021. BioMarin withdrew the Marketing Authorization Application (MAA) in the EU and will re-submit the MAA with

complete one-year phase III data to the EMA in the second quarter of 2021.

Recent News

AI Collaboration with Deep Genomics – Nov 17

BioMarin announced a collaboration with Deep Genomics to identify oligonucleotide drug candidates in four rare disease indications leveraging the latter's artificial intelligence drug discovery platform.

Expanding Vosoritide Program – Nov 9

BioMarin announced that it is initiating two new phase II studies on vosoritide. The first BioMarin sponsored study will investigate the safety of vosoritide in infants with achondroplasia at risk of life-threatening foramen magnum compression. The second study will evaluate vosoritide in children with selected genetic forms of short stature. The second study will be an investigator-initiated study sponsored by Children's National Hospital in Washington, D.C.

FDA Accepts Vosoritide NDA – Nov 2

BioMarin announced that the FDA has accepted its new drug application (NDA) for vosoritide to treat children with achondroplasia, the most common form of dwarfism. The FDA said it will not hold an advisory committee meeting for the NDA and is expected to give its decision on Aug 20, 2021.

Gets FDA Approval for Higher Dose of Palynziq – Oct 7

BioMarin announced that the FDA has approved its supplemental biologics license application (sBLA), seeking to increase the maximum allowable dose of Palynziq (pegvaliase-pqpz) injection to 60 mg for the treatment of adults with Phenylketonuria (PKU).

Palynziq injection, which is indicated to reduce blood phenylalanine (Phe) levels in PKU patients, was approved for 40 mg dose until now. Importantly, 19% of participants in the phase III PRISM studies required a 60 mg dose to achieve the adequate response to Palynziq.

Per the company, the approval for higher dose also includes the addition of longer-term efficacy data on Palynziq's label, which demonstrated sustained Phe lowering out to three years and more than six years of data, further supporting the safety profile of Palynziq.

Valuation

BioMarin's shares are down 8.9% in the year-to-date period and 3.5% over the trailing 12-month period. Stocks in the Zacks sub-industry are down 1.3% while that in the sector is up 0.1% in the year-to-date period. Over the past year, the Zacks sub-industry and sector are up 1.2% and 2.2%, respectively

The S&P 500 Index is up 10.7% in the year-to-date period and 14.0% in the past year.

The stock is currently trading at 8.18X trailing 12-month sales per share, which compares to 2.94X for the Zacks sub-industry, 3.21X for the Zacks sector and 4.51X for the S&P 500 Index. Our Neutral recommendation indicates that the stock will perform in-line with the market. Our $81 price target reflects 8.6X trailing 12-month sales per share.

The table below shows summary valuation data for BMRN

Valuation Multiples - BMRN

		Stock	Sub-Industry	Sector	S&P 500
P/S TTM	Current	8.18	2.94	3.21	4.51
	5-Year High	20.55	4.55	3.69	4.6
	5-Year Low	7.03	2.27	2.31	2.81
	5-Year Median	11.8	3.22	3.19	3.86
P/B TTM	Current	3.45	2.75	3.98	6.04
	5-Year High	8.59	5.57	5.09	6.17
	5-Year Low	3.25	2.1	2.97	3.74
	5-Year Median	5.54	3.81	4.29	4.91

As of 11/23/2020 *Source: Zacks Investment Research*

Industry Analysis **Zacks Industry Rank:** Bottom 22% (198 out of 254)

Source: Zacks Investment Research

Top Peers

Company (Ticker)	Rec	Rank
Ascendis Pharma AS **(ASND)**	Neutral	3
Editas Medicine, Inc. **(EDIT)**	Neutral	3
Senesco Technologies Inc. **(ELOX)**	Neutral	3
Amicus Therapeutics, Inc. **(FOLD)**	Neutral	3
Ultragenyx Pharmaceutical Inc. **(RARE)**	Neutral	3
Reata Pharmaceuticals, Inc. **(RETA)**	Neutral	3
REGENXBIO Inc. **(RGNX)**	Neutral	3
Sangamo Therapeutics, Inc. **(SGMO)**	Neutral	3

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

Industry Comparison Industry: Medical - Biomedical And Genetics

	BMRN	X Industry	S&P 500	Industry Peers: ASND	ELOX	RETA
Zacks Recommendation (Long Term)	Neutral	-	-	Neutral	Neutral	Neutral
Zacks Rank (Short Term)	3	-	-	3	3	3
VGM Score	B	-	-	F	C	F
Market Cap	13.99 B	310.17 M	25.83 B	8.47 B	118.45 M	5.54 B
# of Analysts	10	3	14	8	2	5
Dividend Yield	0.00%	0.00%	1.49%	0.00%	0.00%	0.00%
Value Score	C	-	-	F	D	D
Cash/Price	0.11	0.23	0.07	0.13	0.26	0.10
EV/EBITDA	424.22	-4.23	14.64	-31.32	-1.91	-17.25
PEG F1	0.93	1.45	2.76	NA	NA	NA
P/B	3.45	4.01	3.55	7.53	7.85	29.83
P/CF	120.91	15.46	13.80	NA	NA	NA
P/E F1	49.03	21.56	21.67	NA	NA	NA
P/S TTM	7.51	16.46	2.79	843.67	NA	652.31
Earnings Yield	2.06%	-13.22%	4.40%	-5.04%	-31.53%	-4.81%
Debt/Equity	0.26	0.00	0.70	0.00	0.52	0.00
Cash Flow ($/share)	0.64	-1.12	6.92	-5.62	-1.25	-8.67
Growth Score	B	-	-	F	B	F
Historical EPS Growth (3-5 Years)	NA%	18.53%	9.72%	NA	NA	NA
Projected EPS Growth (F1/F0)	70.65%	15.35%	0.42%	-52.07%	30.97%	17.53%
Current Cash Flow Growth	200.25%	11.33%	5.29%	55.11%	6.63%	268.02%
Historical Cash Flow Growth (3-5 Years)	27.84%	6.94%	8.33%	NA	NA	NA
Current Ratio	3.20	6.16	1.38	14.80	3.23	12.98
Debt/Capital	20.95%	0.00%	41.99%	0.00%	34.16%	0.00%
Net Margin	45.74%	-230.34%	10.40%	-4,042.79%	NA	-4,340.72%
Return on Equity	4.34%	-58.07%	14.99%	-55.72%	-163.87%	-163.42%
Sales/Assets	0.36	0.18	0.50	0.01	NA	0.01
Projected Sales Growth (F1/F0)	8.93%	5.47%	0.23%	-37.57%	NA	-72.65%
Momentum Score	A	-	-	A	C	B
Daily Price Change	1.44%	0.00%	1.06%	1.27%	1.72%	0.53%
1-Week Price Change	-2.03%	0.58%	0.21%	-5.54%	5.07%	-7.30%
4-Week Price Change	0.21%	3.76%	8.26%	-0.08%	3.15%	42.75%
12-Week Price Change	-1.27%	-3.20%	9.20%	6.95%	-4.38%	55.91%
52-Week Price Change	-3.54%	9.62%	5.26%	32.86%	-38.41%	-21.78%
20-Day Average Volume (Shares)	1,364,758	256,805	2,312,054	179,895	41,674	322,702
EPS F1 Estimate 1-Week Change	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
EPS F1 Estimate 4-Week Change	59.29%	0.00%	0.96%	-6.52%	5.13%	6.03%
EPS F1 Estimate 12-Week Change	75.00%	0.00%	3.72%	-21.47%	5.13%	6.03%
EPS Q1 Estimate Monthly Change	-328.75%	0.00%	0.00%	7.44%	10.42%	9.19%

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	B
Momentum Score	A
VGM Score	B

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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This material represents an assessment of the market and economic environment at a specific point in time and is not intended to be a forecast of future events, or a guarantee of future results. Forward-looking statements are subject to certain risks and uncertainties. Any statements that refer to expectations, projections or characterizations of future events or circumstances, including any underlying assumptions, are forwardlooking statements. Actual results, performance, or achievements may differ materially from those expressed or implied.

Returns quoted represent past performance which is no guarantee of future results. Investment returns and principal value will fluctuate so that when shares are redeemed, they may be worth more or less than their original cost. Current performance may be higher or lower than the performance shown.

Investing involves risk; principal loss is possible. There is no guarantee that companies that can issue dividends will declare, continue to pay or increase dividends.

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 mediumterm 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 mostrecent 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.