

Regeneron Pharma (REGN)

\$574.62 (As of 07/01/21)

Price Target (6-12 Months): **\$603.00**

Long Term: 6-12 Months

Zacks Recommendation:

Outperform

(Since: 07/01/21)

Prior Recommendation: Neutral

Short Term: 1-3 Months

Zacks Rank: (1-5)

1-Strong Buy

Zacks Style Scores:

VGM:F

Value: C

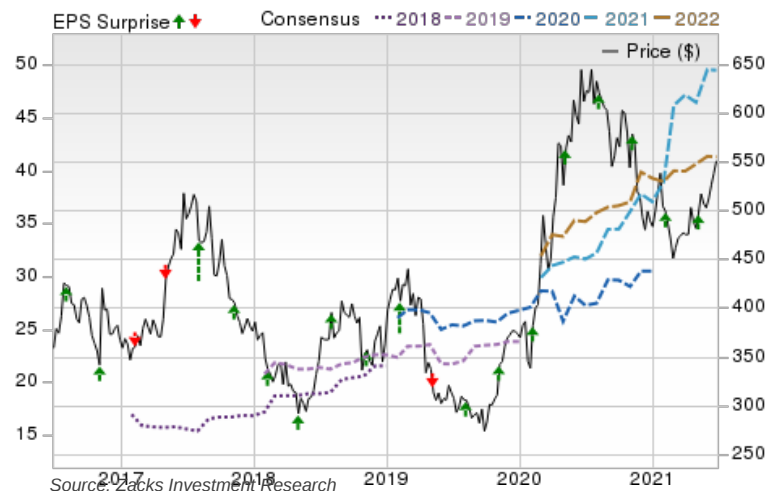
Growth: F

Momentum: F

Summary

Regeneron maintains strong performance on the back of a revival in demand for lead drug, Eylea, and solid performance from asthma drug, Dupixent (in collaboration with Sanofi). Incremental contribution from antibody cocktail, REGEN-COV, for COVID-19 boosted the top line and should propel sales as the pandemic continues. The approval of Libtayo in the lucrative indications of lung cancer and skin cancer and potential development in additional indications should boost sales further. Continued growth in approved drugs through further penetration in existing indications and a promising late-stage pipeline set the momentum for growth, going ahead. However, Regeneron relies on Eylea for a major bulk of its sales and the drug is likely to face stiff competition from the recently-approved therapies. Shares have outperformed the industry in the year so far.

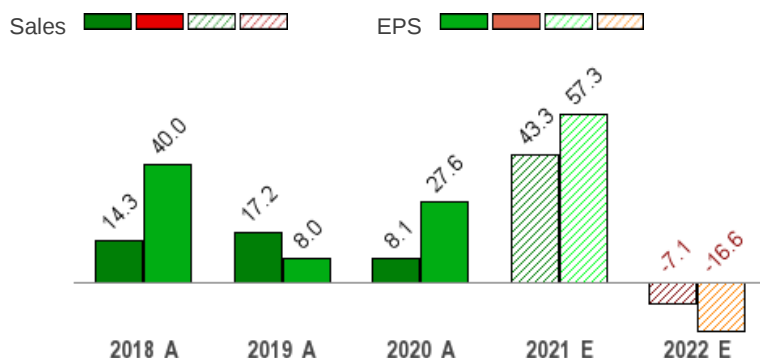
Price, Consensus & Surprise



Data Overview

52-Week High-Low	\$664.64 - \$441.00
20-Day Average Volume (Shares)	886,251
Market Cap	\$61.2 B
Year-To-Date Price Change	18.9%
Beta	0.19
Dividend / Dividend Yield	\$0.00 / 0.0%
Industry	Medical - Biomedical and Genetics
Zacks Industry Rank	Bottom 20% (202 out of 251)

Sales and EPS Growth Rates (Y/Y %)



Last EPS Surprise	12.5%
Last Sales Surprise	-2.0%
EPS F1 Estimate 4-Week Change	-1.2%
Expected Report Date	08/04/2021
Earnings ESP	-6.0%

Sales Estimates (millions of \$)

	Q1	Q2	Q3	Q4	Annual*
2022	2,599 E	2,701 E	2,844 E	2,865 E	11,304 E
2021	2,529 A	3,859 E	2,888 E	2,829 E	12,174 E
2020	1,828 A	1,952 A	2,294 A	2,423 A	8,497 A

EPS Estimates

	Q1	Q2	Q3	Q4	Annual*
2022	\$9.27 E	\$9.89 E	\$10.59 E	\$10.64 E	\$41.30 E
2021	\$9.89 A	\$19.65 E	\$10.82 E	\$9.72 E	\$49.51 E
2020	\$6.60 A	\$7.16 A	\$8.36 A	\$9.53 A	\$31.47 A

*Quarterly figures may not add up to annual.

P/E TTM	16.5
P/E F1	11.6
PEG F1	0.6
P/S TTM	6.7

The data in the charts and tables, including the Zacks Consensus EPS and sales estimates, is as of 07/01/2021. The report's text and the

analyst-provided price target are as of 07/02/2021.

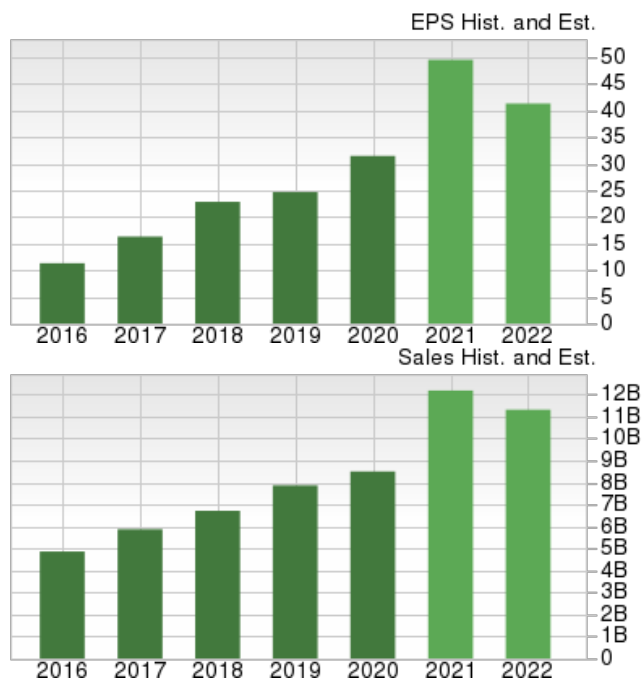
Overview

Tarrytown, NY-based Regeneron is a biotechnology company focused on the discovery, development and commercialization of treatments targeting serious medical conditions. The company's portfolio boasts nine marketed drugs — Eylea (for several eye diseases), Dupixent (asthma, atopic dermatitis, and chronic rhinosinusitis with nasal polyposis), Praluent (heterozygous familial hypercholesterolemia), Kevzara (moderately-to-severely active rheumatoid arthritis), Libtayo (metastatic or locally advanced cutaneous squamous cell carcinoma, locally advanced first-line non-small cell lung cancer ("NSCLC"), and locally advanced basal cell carcinoma ("BCC")), Evkeeza (homozygous familial hypercholesterolemia, Inmazeb (Ebola) Arcalyst and Zaltrap.

While Regeneron has co-developed Eylea with Bayer's HealthCare unit, Praluent was co-developed with Sanofi. Recently, the company restructured its agreement with Sanofi for the development of two candidates. In the United States, Regeneron is now solely responsible for the development and commercialization of Praluent and records net product sales.

Regeneron has been actively collaborating with other companies to fortify its portfolio. It collaborated with Bayer for the joint development and commercialization of co-formulated combinations of Eylea, rinucumab and nesvacumab for the treatment of ocular diseases or disorders outside the United States. Also, Regeneron has an immuno-oncology agreement with Sanofi. In September 2016, Regeneron and Teva announced a global agreement for the development and commercialization of the former's experimental nerve growth factor (NGF) antibody, fasinumab. Regeneron recently initiated an underwritten public secondary offering of its common stock, whereby its long-standing partner Sanofi offload its stake in the former.

Regeneron's revenues comprise collaboration revenues, net product sales and technology licensing and other revenues. Total revenues of \$8.5 billion in 2020 were up 30% from sales in 2019. Eylea sales came in at \$4.9 billion in the United States in 2020 as compared to \$4.6 billion in 2019.



Reasons To Buy:

▲ **Share Price Performance:** Regeneron's stock has outperformed the industry in the year so far.

▲ **Impressive Performance by Eylea:** Regeneron's key growth driver, Eylea, continues to generate revenues for the company on consistent label expansions. Eylea is approved in the United States, EU, Japan and other countries for the treatment of neovascular age-related macular degeneration (wet AMD), diabetic macular edema (DME), and macular edema following retinal vein occlusion that includes macular edema following central retinal vein occlusion and macular edema following branch retinal vein occlusion. Growth in the U.S. markets is being driven by demographic trends with an aging population and an overall increase in the prevalence of diabetes. Meanwhile, Regeneron is working on expanding the drug's label into additional indications which will further boost sales. The FDA approved a 12-week dosing interval of Eylea injection in patients with wet AMD based on physician's assessment. Consequently, it is now the only anti-VEGF drug for the treatment of wet AMD that offers the flexibility to optimally treat patients, regardless of whether they require fixed-interval dosing of 4, 8 or 12 weeks. The drug was also approved for the treatment of diabetic retinopathy. Regeneron plans to submit a supplemental Biologics License Application (sBLA) for an every-16-weeks dosing regimen in patients with moderate to severe non-proliferative diabetic retinopathy (NPDR) later this year. Label expansion into additional indications will give Eylea access to a higher patient population and increase its commercial potential.

Regeneron's Eylea and Dupixent have been performing well. Label expansion into additional indications should further increase the commercial potential of the drugs.

▲ **Strong Uptake of Dupixent:** We are impressed by Regeneron's efforts to bring additional products to the market following its success with Eylea. Kevzara (sarilumab), an anti-interleukin (IL)-6 receptor monoclonal antibody was approved in the United States for the treatment of adult patients with moderate to severely active rheumatoid arthritis, who have an inadequate response to or intolerance to one or more biologic or non-biologic Disease-Modifying Anti-Rheumatic Drugs. In September 2018, the FDA approved Libtayo for the treatment of patients with metastatic or locally advanced cutaneous squamous cell carcinoma (CSCC) who are not candidates for curative surgery or curative radiation. The initial uptake of the drug is strong and Regeneron is working to expand its label further, which should boost sales. Its label was recently expanded with the approval of monotherapy for certain patients with advanced non-small cell lung cancer (NSCLC) whose tumors have high PD-L1 expression in the United States and European Union. Libtayo was also approved as the first immunotherapy indicated for patients with basal cell carcinoma (BCC) previously treated with a hedgehog pathway inhibitor (HHI) or for whom an HHI is not appropriate. In October 2020, the FDA approved Inmazeb (REGN-EB3) for the treatment of infection caused by Zaire ebolavirus in adult and pediatric patients, including newborns of mothers who have tested positive for the infection. In February 2021, the FDA approved Evkeeza for the treatment of adults and adolescents with HoFH.

▲ **New Drug Approvals To Boost Sales:** We are impressed by Regeneron's efforts to bring additional products to the market following its success with Eylea. Kevzara (sarilumab), an anti-interleukin (IL)-6 receptor monoclonal antibody was approved in the United States for the treatment of adult patients with moderate to severely active rheumatoid arthritis, who have an inadequate response to or intolerance to one or more biologic or non-biologic Disease-Modifying Anti-Rheumatic Drugs. In September 2018, the FDA approved Libtayo for the treatment of patients with metastatic or locally advanced cutaneous squamous cell carcinoma (CSCC) who are not candidates for curative surgery or curative radiation. The initial uptake of the drug is strong and Regeneron is working to expand its label further, which should boost sales. Its label was recently expanded with the approval of monotherapy for certain patients with advanced non-small cell lung cancer (NSCLC) whose tumors have high PD-L1 expression in the United States. The FDA also recently approved the use of Libtayo as the first immunotherapy indicated for patients with basal cell carcinoma (BCC) previously treated with a hedgehog pathway inhibitor (HHI) or for whom an HHI is not appropriate. In October 2020, the FDA approved Inmazeb (REGN-EB3) for the treatment of infection caused by Zaire ebolavirus in adult and pediatric patients, including newborns of mothers who have tested positive for the infection. In February 2021, the FDA approved Evkeeza for the treatment of adults and adolescents with HoFH.

▲ **Developing Treatments For Coronavirus:** The FDA has given Emergency Use Authorization (EUA) to Regeneron's antibody cocktail, casirivimab and imdevimab, administered together (REGEN-COV). REGEN-COV is a cocktail of two monoclonal antibodies (casirivimab and imdevimab, also known as REGN10933 and REGN10987, respectively) and was designed specifically to block the infectivity of SARS-CoV-2, the virus that causes COVID-19. The FDA grants EUA to medicines that may help diagnose, treat or prevent a life-threatening disease when adequate and approved alternatives are not available. The antibody cocktail is authorized for the treatment of mild to moderate COVID-19 in adults, as well as pediatric patients at least 12 years of age and weighing at least 40 kg, who have received positive results of direct SARS-CoV-2 viral testing and are at high risk for progressing to severe COVID-19 and/or hospitalization. The authorization adds a new stream of revenues to Regeneron's top line and demand is expected to be strong as the pandemic gathers steam again particularly in emerging nations. The FDA recently updated the EUA for REGEN-COV, lowering the dose to 1,200 mg (600 mg casirivimab and 600 mg imdevimab), which is half the dose originally authorized. Regeneron is in discussions with the FDA to expand the current EUA to other populations, including prevention and hospitalized patient settings.

▲ **Deals and Collaborations:** We are encouraged by Regeneron's strategy of signing deals to boost its portfolio and pipeline. The company is collaborating with Bayer for the global development and commercialization of Eylea outside the United States. Bayer markets and records revenue on sales of Eylea outside the United States, and in countries other than Japan, the companies share profits and losses equally from Eylea's sales. Regeneron has a global strategic collaboration with Sanofi for the discovery, development and commercialization of fully human monoclonal antibodies. Under the agreement, Regeneron has exercised the option to co-promote Praluent, Dupixent and Kevzara in the United States. While profits and losses on sales within the United States will be shared equally, Regeneron is entitled to receive sales

milestone payments.

The company also collaborated with Alnylam Pharmaceuticals, Inc. to discover, develop and commercialize new RNA interference (RNAi) therapeutics for a broad range of diseases by addressing disease targets expressed in the eye and central nervous system (CNS), in addition to a select number of targets expressed in the liver. The collaboration with Alnylam will give Regeneron an option to have a pipeline based on RNAi technology. The company recently restructured its agreement with Sanofi for the development of two candidates. In September 2016, Regeneron and Teva struck a collaboration agreement for the development and commercialization of fasinumab globally. The deal saw Regeneron receiving an upfront payment of \$250 million. Regeneron is further eligible to receive development and regulatory milestone payments, plus additional payments based on net sales.

The company also expanded its existing collaboration with Intellia Therapeutics, Inc. Per the terms, the companies will co-develop potential hemophilia A and B treatments using their jointly-owned targeted transgene insertion capabilities. Regeneron will gain rights to develop products for additional in vivo CRISPR/Cas9-based therapeutic targets.

▲ **Favorable Debt Profile:** As of Mar 31, 2021, Regeneron's total debt to total capital ratio stood at 14.2%, which compares favorably with the industry's 50.4%. A lower ratio indicates reduced financial risk and vice versa. The company enjoys a sound cash position with cash, equivalents and marketable securities worth \$7 billion and a long-term debt of \$2 billion.

Risks

- **Overdependence on Eylea:** With Eylea accounting for the majority of revenues, Regeneron relies heavily on the drug for growth. Moreover, it is likely to face stiff competition from Novartis' Beovu. Sub-par performance of the product will hurt the stock as Eylea is Regeneron's key growth driver.
 - **Pipeline Setbacks:** Regeneron is no stranger to pipeline setbacks and has in fact suffered a string of pipeline setbacks. In Sep 2016, Regeneron reported disappointing top-line data from a phase II study (CAPELLA) evaluating Eylea, in combination with rinucumab, in patients with wet AMD. In Oct 2016, Regeneron and Sanofi suffered a regulatory setback with the FDA issuing a complete response letter (CRL) for sarilumab. Similar setbacks will weigh on the company's shares.
 - **Competition May Affect Sales:** Regeneron's key product, Eylea, faces competition from other drugs like Novartis/Roche's Lucentis and Roche's Avastin (off-label). Competitors are also developing eye-drop formulations, oral therapies and gene/cell therapies for various indications that, if approved, may weigh on Eylea sales in the future. Although Praluent is the first PCSK9 drug for hypercholesterolemia to get FDA approval, Amgen's Repatha is also approved in the United States, the EU and Japan. Dupixent faces competition from Eucrisa, Xolair and Fasenra, among others. Kevzara faces competition from Actemra and Orencia, among others. Competition is also stiff for Libtayo from many bigwigs.
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Last Earnings Report

Regeneron Q1 Earnings Beat on Strong Eylea & Dupixent

Regeneron reported strong growth in earnings and sales in the first quarter of 2021 on broad-based portfolio growth. Evidently, shares are up in pre-market trading following the strong results.

Regeneron reported first-quarter earnings of \$9.89 per share, comfortably beating the Zacks Consensus Estimate of \$8.79. Earnings jumped 50% from \$6.60 in the year-ago quarter.

Total revenues in the reported quarter increased 38% year over year to \$2.52 billion but missed the Zacks Consensus Estimate by 1.96%. The year-over-year growth was driven by incremental contribution from the antibody cocktail, REGEN-COV (a cocktail of two monoclonal antibodies — casirivimab and imdevimab), for COVID-19. Total revenues, excluding REGEN-COV, increased 20% to \$2.2 billion.

Quarterly Highlights

Net product sales in the United States increased to \$1.7 billion, up from \$1.2 in the year-ago quarter. Lead drug Eylea's sales in the United States were \$1.3 billion compared with \$1.2 billion in the year-ago quarter.

We note that Regeneron co-developed Eylea with the HealthCare unit of Bayer AG. The company is solely responsible for sales of this eye drug and entitled to profits in the United States. However, it shares profits and losses from the ex-U.S. Eylea sales equally with Bayer, except in Japan where the former receives a royalty on net sales.

Total revenues also included collaboration revenues of \$754.4 million from Sanofi, Bayer and Roche, up from \$528.3 million in the year-ago quarter. Sanofi's collaboration revenues amounted to \$364.8 million, up from \$246.9 million in the year-ago quarter. Bayer's collaboration revenues came in at \$322.8 million, up from \$281.4 million in the year-ago quarter. Roche's collaboration revenues for REGEN-COV came in at \$66.8 million.

Notably, Sanofi records global net product sales of Dupixent, Kevzara and ZALTRAP. Regeneron records its share of profits/losses in connection with global sales of Dupixent and Kevzara, and Sanofi pays the company a percentage of net sales of ZALTRAP. Regeneron records net product sales of Libtayo in the United States and Sanofi records the same outside the United States.

Dupixent's sales surged to \$1.3 billion, up from \$855.2 million in the year-ago quarter. Libtayo sales came in at \$100.8 million, up from \$74.8 million in the year-ago quarter. Kevzara recorded sales of \$69.1 million, up from \$60.1 million in the year-earlier quarter.

Praluent's global net sales totaled \$104.6 million in the reported quarter, up from \$79.8 million in the prior-year quarter. Effective Apr 1, 2020, Regeneron records net product sales of Praluent in the United States and Sanofi records the same outside the United States and pays the former a royalty on such sales.

REGEN-COV, its antibody cocktail for COVID-19, recorded sales of \$438.8 million in the quarter.

R&D expenses increased to \$673.2 million from \$527.2 million, while SG&A expenses grew to \$354.8 million during the quarter from \$306.8 million in the year-ago quarter.

REGEN-COV Updates

The phase III treatment study in high-risk COVID-19 outpatients met its primary endpoint, showing that REGEN-COV significantly reduced the risk of hospitalization or death by approximately 70% with both REGEN-COV doses (1,200 mg and 2,400 mg) compared to placebo. The trial also met key secondary endpoints. Based on these results, Regeneron submitted a request to the FDA to update the Emergency Use Authorization (EUA) to the lower 1,200 mg dose.

The phase III COVID-19 prevention trial in uninfected household contacts of SARS-CoV-2 infected individuals also met its primary and key secondary endpoints.

Pipeline and Regulatory Update

The FDA accepted for review a supplemental biologics license application (sBLA) seeking approval for Dupixent in children aged 6 to 11 years with moderate-to-severe asthma. The agency has set a target action date of Oct 21, 2021.

In February 2021, the FDA approved Libtayo for the first-line treatment of patients with advanced non-small cell lung cancer (NSCLC) and metastatic or locally advanced basal cell carcinoma (BCC). The FDA also approved Evkeeza for the treatment of adults and adolescents with homozygous familial hypercholesterolemia (HoFH).

Quarter Ending	03/2021
Report Date	May 06, 2021
Sales Surprise	-1.96%
EPS Surprise	12.51%
Quarterly EPS	9.89
Annual EPS (TTM)	34.94

Recent News

Data on NTLA-2001 – Jun 26

Regeneron and Intellia announced interim data from an ongoing phase I study of their lead in vivo genome editing candidate, NTLA-2001, an investigational CRISPR therapy for transthyretin (ATTR) amyloidosis. The candidate is being evaluated in people living with hereditary transthyretin amyloidosis with polyneuropathy (ATTRv-PN).

Treatment with NTLA-2001 led to dose-dependent reductions in serum TTR, with mean reductions of 52% among the three patients in the 0.1 mg/kg dose group, and 87% among the three patients in the 0.3 mg/kg dose group, including one patient with a 96% reduction. NTLA-2001 was generally well-tolerated at both dose levels by the six patients in the interim analysis, with no serious adverse events and no liver findings by day 28.

Libtayo Label Expansion – Jun 25

Regeneron and partner Sanofi announced that the European Commission (EC) has approved their PD-1 inhibitor, Libtayo (cemiplimab), for two additional indications. The EC approved Libtayo for the first-line treatment of adults with non-small cell lung cancer (NSCLC) whose tumor cells have ≥50% PD-L1 expression and no EGFR, ALK or ROS1 aberrations. The EC also approved the drug for the treatment of adults with locally advanced or metastatic basal cell carcinoma (BCC) who have progressed on or are intolerant to a hedgehog pathway inhibitor (HPI). BCC is a common type of skin cancer.

Data on REGEN-COV – Jun 16

Regeneron announced positive results from the RECOVERY trial in the U.K. on antibody cocktail, REGEN-COV (casirivimab and imdevimab), for COVID-19.

The phase III trial results showed that REGEN-COV reduced the risk of death by 20% in patients hospitalized with COVID-19 who had not mounted their own immune response (primary outcome for the primary analysis population). The trial was conducted at a time when most patients had not been fully vaccinated.

FDA Authorizes Lower Dose of Cocktail – June 4

Regeneron announced that the FDA has authorized the lower dose of 1,200 mg intravenous and subcutaneous dose of REGEN-COV (casirivimab and 600 mg imdevimab) antibody cocktail to treat patients with COVID-19.

Valuation

Regeneron's shares are up 18.9% in the year-to-date period but down 7.7% over the trailing 12-month period. Stocks in the Zacks sub-industry and sector are up 2.3% and 2.8%, respectively in the year-to-date period. Over the past year, the Zacks sub-industry is down 0.8% while the sector is up 6.4%. The S&P 500 Index is up 15.6% in the year-to-date period and up 39.9% in the past year.

The stock is currently trading at 13.48X forward 12-month earnings per share which compares to 48.74X for the Zacks sub-industry, 23.86X for the Zacks sector and 21.85X for the S&P 500 Index.

Over the past five years, the stock has traded as high as 57.57X and as low as 11.14X, with a 5-year median of 19.87X. Our Neutral recommendation indicates that the stock will perform in-line with the market. Our \$603.00 price target reflects 14.14X forward 12-month earnings per share.

The table below shows summary valuation data for REGN

Valuation Multiples -REGN					
		Stock	Sub-Industry	Sector	S&P 500
P/E F12M	Current	13.48	48.74	23.86	21.85
	5-Year High	57.57	58.45	23.86	23.83
	5-Year Low	11.14	21.09	15.82	15.31
	5-Year Median	19.87	42.93	19.38	18.2
P/S F12M	Current	5.18	2.16	2.74	4.75
	5-Year High	9.64	2.95	3.17	4.75
	5-Year Low	3.69	1.83	2.27	3.21
	5-Year Median	6.01	2.31	2.76	3.73
P/B TTM	Current	5.11	3.46	4.59	7.17
	5-Year High	11.5	4.79	5.05	7.17
	5-Year Low	2.87	2	3.03	3.84
	5-Year Median	5.42	3.69	4.35	5.03

	5 Year Median CAGR	5.1%	5.1%	5.1%	5.1%
As of 07/01/2021					

Industry Analysis Zacks Industry Rank: Bottom 20% (202 out of 251)



Top Peers

Company (Ticker)	Rec	Rank
BioMarin Pharmaceutical Inc. (BMRN)	Outperform	1
Alexion Pharmaceuticals, Inc. (ALXN)	Neutral	3
CSL Limited Sponsored ADR (CSLLY)	Neutral	3
Illumina, Inc. (ILMN)	Neutral	2
Incyte Corporation (INCY)	Neutral	3
Novartis AG (NVS)	Neutral	4
SINO PHARMACEUT (SBMFF)	Neutral	3
Vertex Pharmaceuticals Incorporated (VRTX)	Neutral	3

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

Industry Comparison Industry: Medical - Biomedical And Genetics				Industry Peers		
	REGN	X Industry	S&P 500	ALXN	NVS	VRTX
Zacks Recommendation (Long Term)	Outperform	-	-	Neutral	Neutral	Neutral
Zacks Rank (Short Term)	1	-	-	3	4	3
VGM Score	F	-	-	A	B	B
Market Cap	61.22 B	366.02 M	30.67 B	40.91 B	209.76 B	52.35 B
# of Analysts	9	3	12	5	5	11
Dividend Yield	0.00%	0.00%	1.32%	0.00%	2.27%	0.00%
Value Score	C	-	-	A	A	B
Cash/Price	0.06	0.25	0.06	0.09	0.02	0.14
EV/EBITDA	14.55	-5.41	17.30	13.03	13.71	13.99
PEG F1	0.63	1.42	2.10	0.89	2.25	1.52
P/B	5.11	3.70	4.16	3.29	4.15	5.83
P/CF	17.20	20.61	17.60	8.11	10.88	21.12
P/E F1	11.61	23.49	21.12	13.33	14.62	18.02
P/S TTM	6.66	20.70	3.46	6.53	4.30	8.16
Earnings Yield	8.62%	-12.28%	4.65%	7.50%	6.84%	5.55%
Debt/Equity	0.17	0.00	0.66	0.19	0.51	0.06
Cash Flow (\$/share)	33.40	-0.94	6.86	22.82	8.43	9.57
Growth Score	F	-	-	A	B	B
Historical EPS Growth (3-5 Years)	35.30%	20.82%	9.59%	31.63%	4.73%	151.01%
Projected EPS Growth (F1/F0)	57.32%	6.17%	21.04%	10.98%	9.04%	8.72%
Current Cash Flow Growth	33.99%	16.16%	1.02%	93.08%	7.83%	103.13%
Historical Cash Flow Growth (3-5 Years)	28.54%	6.84%	7.34%	34.21%	2.26%	50.36%
Current Ratio	3.12	7.62	1.38	4.52	0.74	4.39
Debt/Capital	14.18%	0.00%	41.48%	16.12%	33.73%	5.58%
Net Margin	43.53%	-186.45%	12.06%	10.89%	16.31%	43.06%
Return on Equity	35.43%	-52.09%	16.63%	23.43%	24.15%	29.61%
Sales/Assets	0.56	0.17	0.51	0.35	0.38	0.57
Projected Sales Growth (F1/F0)	43.28%	10.54%	9.72%	10.43%	7.22%	11.57%
Momentum Score	F	-	-	F	D	F
Daily Price Change	2.88%	0.35%	0.52%	0.76%	0.45%	0.29%
1-Week Price Change	2.35%	1.10%	1.25%	1.13%	-0.56%	3.45%
4-Week Price Change	13.64%	1.55%	3.03%	5.30%	2.62%	-4.23%
12-Week Price Change	20.63%	-6.31%	5.44%	19.83%	5.36%	-3.84%
52-Week Price Change	-7.68%	5.04%	38.02%	64.83%	4.66%	-30.54%
20-Day Average Volume (Shares)	886,251	431,890	1,969,078	1,731,219	1,661,930	3,346,487
EPS F1 Estimate 1-Week Change	-1.22%	0.00%	0.00%	0.00%	0.00%	0.00%
EPS F1 Estimate 4-Week Change	-1.22%	0.00%	0.00%	0.00%	-0.98%	0.00%
EPS F1 Estimate 12-Week Change	10.34%	0.00%	3.81%	9.23%	-2.70%	-2.76%

Past performance is no guarantee of future results. Please see important disclosures and definitions at the end of this report.

EPS Q1 Estimate Monthly Change	3.01%	0.00%	0.00%	0.00%	0.00%	0.00%
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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	F
Momentum Score	F
VGM Score	F

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.

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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 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.