

Bio-Rad (BIO)	Long Term: 6-12 Months	Zacks Recommendation:	Neutral
\$388.73 (As of 01/09/20)		(Since: 04/30/19)	
\$300.73 (AS 01 01/09/20)		Prior Recommendation: Outperform	
Price Target (6-12 Months): \$408.00	Short Term: 1-3 Months	Zacks Rank: (1-5)	3-Hold
		Zacks Style Scores:	VGM:B
		Value: D Growth: A Mon	nentum: C

Summary

Over the past three months, Bio-Rad has outperformed its industry. It posted solid revenue growth at both operating segments. Further, strength in many of its key product lines across major geographic regions buoys optimism. Solid expansions in both margins were also impressive. Clinical Diagnostics has been witnessing solid revenue growth in the past few quarters, mainly driven by solid growth in Quality Controls, Immunology and Blood Typing product lines across all three geographies. The FDA approved BioPlex Lyme disease panel buoys optimism. Bio-Rad had put up a robust show in the third quarter of 2019, with better-than-expected earnings and in-line revenues. However, the weighed down revenues at the Clinical Diagnostics segment in Europe is worrying. Constant foreign-exchange woes and operation in a highly competitive market raise concern.

Data Overview

P/S TTM

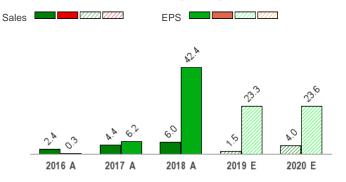
52 Week High-Low	\$391.22 - \$233.18
20 Day Average Volume (sh)	193,194
Market Cap	\$11.6 B
YTD Price Change	5.1%
Beta	1.17
Dividend / Div Yld	\$0.00 / 0.0%
Industry	Medical - Products
Zacks Industry Rank	Top 42% (107 out of 254)

Last EPS Surprise	18.4%
Last Sales Surprise	-0.1%
EPS F1 Est- 4 week change	0.0%
Expected Report Date	02/27/2020
Earnings ESP	0.0%
P/E TTM	55.9
P/E F1	43.7
PEG F1	2.9

Price, Consensus & Surprise



Sales and EPS Growth Rates (Y/Y %)



Sales Estimates (millions of \$)

	Q1	Q2	Q3	Q4	Annual*
2020	583 E	594 E	580 E	661 E	2,417 E
2019	554 A	573 A	561 A	637 E	2,324 E
2018	552 A	576 A	545 A	618 A	2,290 A

EPS Estimates

	Q1	Q2	Q3	Q4	Annual*
2020	\$2.03 E	\$2.52 E	\$2.03 E	\$2.32 E	\$8.90 E
2019	\$1.65 A	\$1.57 A	\$1.61 A	\$2.46 E	\$7.20 E
2018	\$1.17 A	\$1.64 A	\$0.91 A	\$2.13 A	\$5.84 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 01/09/2020. The reports text is as of 01/10/2020.

5.1

Overview

Headquartered in Hercules, CA, Bio-Rad Laboratories is a manufacturer and global supplier of clinical diagnostics and life science research products in the healthcare, analytical chemistry life science research and other markets. It offers a wide portfolio of products and systems which allow the separation of complex chemical and biological materials and discovery, analysis and purification of their components.

Bio-Rad has extensive and direct distribution channels in over 35 countries outside the United States through subsidiaries which focus on sales, customer service and product distribution.

The company operates through two reportable segments. Together, these segments offer over 9,000 different products and services. The details are as follows:

Life Science (37.6% of total revenues in 2018; underlying growth rate was 9.7% from 2017): This segment designs, manufactures, markets and services reagents, apparatus and instruments utilized for biological research. The products manufactured are marketed in university and medical school laboratories, pharmaceutical and biotechnology companies, food testing laboratories and government and industrial research facilities. The company believes Life Science Segment represents a global market opportunity of approximately \$9 billion annually.





Clinical Diagnostics (61.7%; up 3.8%): This business markets and distributes products to reference laboratories, hospital laboratories, state newborn screening facilities, physicians' office laboratories, transfusion laboratories as well as insurance and forensic testing laboratories. It designs, manufactures, distributes and services automated test systems, informatics systems, test kits and specialized quality controls for the healthcare market. According to Bio-Rad, the Clinical Diagnostics segment presents an annual global market opportunity of roughly \$12 billion.



Reasons To Buy:

▲ Share Price Performance: Over the past three months, Bio-Rad has outperformed its industry. The stock has gained 17.4% in comparison with the industry's 6.1% rise. Strong revenue growth in Life Sciences and Clinical Diagnostics segments in the third quarter was encouraging. Improvement in the Life Sciences segment was primarily driven by solid growth in Droplet Digital PCR and Food Safety products across all three geographies (the Americas, Asia and Europe). Geographically, impressive improvement of the Clinical Diagnostics segment's revenues was driven by growth in Quality Controls, Immunology and Blood Typing product lines in the Americas and Asia. However, growth was hampered by the macroeconomic environment in Europe.

Bio-Rad continues to gain ground on solid prospects in the blood typing market. The company's strong focus on geographic expansion is also encouraging.

Excluding process media, solid currency-neutral revenue growth within the Life Sciences segment buoys optimism. We are also upbeat about the company continuing to benefit from the earlier-received FDA approval of its QXDx AutoDG ddPCR System which uses Bio-Rad's Droplet Digital PCR technology, and the QXDx BCR-ABL %IS Kit.

- ▲ Focus on International Markets: In recent times, Bio-Rad has been deriving more than 60% of its net sales globally. Europe happens to be the largest international market for the company. Even though revenue growth in some parts of Asia and Europe was slightly sluggish at the beginning of the year, but each of the key product segments of the company has registered overall growth across the three major geographies of America, EMEA and Asia.
- ▲ Segmental Growth: Bio-Rad witnessed constant currency sales growth across all channels in the third quarter. Currency-neutral revenue growth within the Life Sciences segment reflects robust sales in the droplet Digital PCR and food safety product lines. The company also witnessed strong demand within Gene Expression and Western Blotting product lines. On a geographic basis, Life Sciences' sales were strong in all three regions. The FDA approved QXDx AutoDG ddPCR System (which uses Bio-Rad's Droplet Digital PCR technology) and QXDx BCR-ABL %IS Kit contributed to the segment's revenues in the third quarter. The company expects to launch QX ONE in November, which is a fully integrated system that allows the customers to automate the Droplet Digital PCR workflow and increase the multiplexing capability.

Within the Clinical Diagnostics segment, the upside in the currency-neutral sales was driven by growth within Quality Controls and Immunology product lines across the Americas and Asia.

▲ Solid Prospects in Blood Typing Market: Bio-Rad offers a broad range of platforms, reagents, data management and connectivity solutions to cater to various blood typing demands, offering efficient and reliable results for blood grouping, phenotyping, crossmatching, antibody screening and identification, direct antiglobulin tests, and single antigen typing. The company has also been actively expanding its portfolio for the blood typing market. Performance of the company in the Blood typing market continues to be robust in the third quarter of 2019. New product adoption in the United States has been impressive with the recent 510(k) clearance of the IH-Reader 24, a semi-automated blood typing instrument designed for medium- to small-volume laboratories. With the FDA approval of the IH500 in April 2019, growth within this segment is expected to improve further. According to Bio-Rad, the medium volume market was the largest part within the United States and IH500 is particularly well suited for that. Hence Bio-Rad's business prospects within this market hold promise.

The company continues to see strong global market adoption of both IH-1000 and IH-500.

Going by a MarketsAndMarkets report, the blood group typing market is projected to reach a worth of \$3.12 billion by 2021, at a CAGR of 9.8% from 2016 to 2021. Taking this into account, we view the developmental steps undertaken by the company as progressive and strategically aligned.

Reasons To Sell:

▼ Tough Competitive Pressure: Bio-Rad operates in a highly competitive environment dominated by firms varying from large multinational corporations with significant resources to start-ups. Also, the competitive and regulatory conditions in the markets where the company operates limit Bio-Rad's ability to switch to strategies like price increases and other drivers of cost increases. Further, the extension of the public tender commitments to multiple years by the government, resulting in reduced number of annual tenders, has led to aggressive tender pricing by Bio-Rad's competitors. Thus, Bio-Rad faces pricing pressure resulting from increased competition which makes it difficult for the company to efficiently manage its operational, financial and business conditions.

Unfavorable macroeconomic conditions continue to weigh heavily on Bio-Rad's stocks. Also, competitive headwinds and currency fluctuations continue to pose a threat on the stock's value.

In the Life Science segment, Bio-Rad primarily competes with Becton Dickinson, GE Biosciences, Merck Millipore and Thermo Fisher Scientific. Again, some prominent competitors in the Clinical Diagnostics segment are Roche, Abbott Laboratories, Siemens, Danaher, Thermo Fisher, Becton Dickinson and DiaSorin.

- ▼ Global ERP System Implementation Process Tough & Lengthy: Bio-Rad has been involved in a multi-year implementation of a new global enterprise resource planning system (ERP). Through the ERP system, the company expects to effectively manage its books and record and make important business-related information available to management in a timely manner. Per the company, the successful implementation of ERP will depend on significant human and financial resource investments. Further, any shortfall in the design or implementation of ERP might have a detrimental impact on the company's abilities to process and dispatch orders, sending invoices and tracking payments, meeting contractual obligations or maintaining normal business operations. For example, Bio-Rad progressed with the third deployment of ERP in Western Europe last April. In the process, the company faced several issues like lower productivity levels, adverse impact of the timing of payment of vendor invoices, delays in product availability and shipments, all of which dented sales in the second and third quarter of 2017. Thus, Bio-Rad continues to be at risk of failing to cope with the tough and lengthy ERP implementation process.
- ▼ Exposure to Foreign Currency: Bio-Rad derives more than 50% of its revenues from the international market, which exposes it to the effects of fluctuations in foreign currency. In the past several years, the company's earnings were significantly affected by foreign exchange.
- ▼ Economic Uncertainty Continues to Hamper Growth: Bio-Rad's business largely depends on global economic conditions. Weaker global economic conditions may lead to reduced demand for the company's products, increased competition, pressure on prices, declining supply and lengthier sales cycle. Moreover, a number of countries in Western Europe are facing liquidity crunch. Bio-Rad had to experience difficulty in collecting receivables in these and certain other regions facing similar economic conditions. The company is also exposed to the risk of a slowdown in the Chinese economy along with some other emerging markets, particularly the oil-producing nations which get impacted by a drop in oil prices. Further, the company is closely monitoring the adverse possible impacts on its business following the United Kingdom's decision to exit the European Union. We are particularly cautious as growth could moderate further if the economic scenario worsens.
- ▼ Reduced Reimbursement Rates: Bio-Rad's Clinical Diagnostics business is exposed to changing reimbursement rates for clinical tests from third-party payors like Medicare and Medicaid in the United States. Payment for several diagnostic tests furnished to Medicare fee-for-service beneficiaries is dependent on the Medicare Clinical Laboratory Fee Schedule (CLFS) in the United States. Notably, CLFS is a fee schedule that is managed by the Centers for Medicare and Medicaid Services (CMS). Further, the Patient Protection and Affordable Care Act, as amended by the Health Care and Education Reconciliation Act (PPACA) and the Middle Class Tax Relief and Job Creation Act of 2012, has lowered payments for clinical laboratory services paid under the CLFS. Additionally, the Protecting Access to Medicare Act of 2014 (PAMA) rule has led to lower reimbursement rates and mode of payment for clinical laboratory services by Medicare.
- ▼ Difficult Pricing Scenario: Bio-Rad is exposed to the effects of changes in the healthcare industry in the United States and Europe. The changing trend toward managed care, healthcare reform of the delivery system in the United States, efforts to reform in Europe, along with increasing consolidations among healthcare providers have resulted in increased pricing burden.

Zacks Equity Research: www.zacks.com Page 4 of 8

Last Earnings Report

Bio-Rad Q3 Earnings Beat Estimates on All-Line Growth

Bio-Rad posted third-quarter 2019 adjusted earnings per share of \$1.61, which beat the Zacks Consensus Estimate by 18.4%. The bottom line also jumped 76.9% from the prior-year quarter.

The company incurred a loss of \$8.68 per share in the quarter against earnings per share (on GAAP basis) of \$8.89 a year ago.

Quarter Ending	09/2019		
Report Date	Oct 31, 2019		
Sales Surprise	-0.14%		
EPS Surprise	18.38%		
Quarterly EPS	1.61		
Annual EPS (TTM)	6.96		

Revenues in Detail

Meanwhile, revenues of \$560.6 million in the quarter closely met the Zacks Consensus Estimate. Revenues moved up 2.8% from the year-ago quarter (up 4.5% at constant exchange rate or CER).

Solid demand in many of Bio-Rad's key product lines led to growth across most geographical regions.

Segmental Analysis

Sales at the Life Sciences segment in the third quarter totaled \$215.7 million, up 4.5% year over year and up 5.7% at CER. Droplet Digital PCR and Food Safety products saw double-digit growth in the quarter. The company also witnessed strong demand within Gene Expression and Western Blotting product lines.

Net sales at the Clinical Diagnostics segment totaled \$341.8 million, up 2.4% on a year-over-year basis and up 4.3% at CER. The upside was primarily driven by solid growth in Quality Controls, Immunology and Blood Typing product lines across all three geographies.

Margins

Gross profit in the reported quarter totaled \$307 million, up 7.1% from the prior-year quarter. Moreover, adjusted gross margin was 56%, expanding 250 basis points (bps). Additionally, adjusted operating margin was 12%, up 380 bps.

2019 Guidance Reaffirmed

For 2019, the company reiterated revenue growth guidance at 4-4.5% (CER). The Zacks Consensus Estimate for the same is pegged at \$2.35 billion. The company expects adjusted operating margin of 12.5-13% for the year.

Valuation

Bio-Rad shares are up 25.2% in the six months period and up 61% in the trailing 12-month periods. Stocks in the Zacks sub-industry are up 2.4% while the Zacks Medical sector rose 5.4% in the six months period. Over the past year, the Zacks sub-industry is up 17.7% and sector is up 4.9%.

The S&P 500 index is up 9.8% in the six months period and increased 25.3% in the past year.

The stock is currently trading at 43.7X Forward 12-months earnings, which compares to 25X for the Zacks sub-industry, 21.5X for the Zacks sector and 18.8X for the S&P 500 index.

Over the past five years, the stock has traded as high as 92.8X and as low as 29.3X, with a 5-year median 41.1X. Our Neutral recommendation indicates that the stock will perform in-line with the market. Our \$408 price target reflects 45.8x forward 12-months earnings.

The table below shows summary valuation data for BIO

		Stock	Sub-Industry	Sector	S&P 500
	Current	43.68	25.03	21.49	18.82
P/E F12M	5-Year High	92.81	25.31	21.49	19.34
	5-Year Low	29.28	17.01	15.91	15.17
	5-Year Median	41.05	19.53	18.98	17.44
	Current	4.82	3.96	2.82	3.49
P/S F12M	5-Year High	4.82	3.96	3.80	3.49
	5-Year Low	1.52	2.88	2.42	2.54
	5-Year Median	2.93	3.22	2.93	3.00
	Current	2.27	3.12	4.50	4.44
P/B TTM	5-Year High	2.84	4.30	5.01	4.45
	5-Year Low	1.35	2.21	3.42	2.85
	5-Year Median	1.86	2.77	4.27	3.61

As of 01/09/2020

Industry Analysis Zacks Industry Rank: Top 42% (107 out of 254)

■ Industry Price Industry Price 170 -

Top Peers

Becton, Dickinson and Company (BDX)	Neutral
Bruker Corporation (BRKR)	Neutral
Danaher Corporation (DHR)	Neutral
Illumina, Inc. (ILMN)	Neutral
PerkinElmer, Inc. (PKI)	Neutral
QIAGEN N.V. (QGEN)	Neutral
Bio-Techne Corp (TECH)	Neutral
Thermo Fisher Scientific Inc. (TMO)	Neutral

Industry Comparison Industry: Medical - Products			Industry Peers			
	BIO Neutral	X Industry	S&P 500	BRKR Neutral	ILMN Neutral	TMO Neutra
VGM Score	В	-	-	C	С	C
Market Cap	11.64 B	317.39 M	23.94 B	7.89 B	49.19 B	132.17 E
# of Analysts	1	2	13	6	8	8
Dividend Yield	0.00%	0.00%	1.78%	0.31%	0.00%	0.23%
Value Score	D	-	-	D	D	С
Cash/Price	0.09	0.08	0.04	0.04	0.07	0.0
EV/EBITDA	21.02	0.31	13.97	26.35	40.86	26.64
PEG Ratio	2.87	2.57	2.03	2.23	2.26	1.94
Price/Book (P/B)	2.27	4.12	3.33	9.23	11.08	4.50
Price/Cash Flow (P/CF)	65.57	20.33	13.73	28.13	45.97	19.58
P/E (F1)	43.12	25.46	18.79	27.98	47.43	24.26
Price/Sales (P/S)	5.05	5.30	2.64	3.89	14.22	5.24
Earnings Yield	2.29%	0.82%	5.32%	3.57%	2.11%	4.12%
Debt/Equity	0.12	0.11	0.72	0.67	0.41	0.56
Cash Flow (\$/share)	5.93	-0.00	6.94	1.82	7.28	16.84
Growth Score	A	-	-	В	С	В
Hist. EPS Growth (3-5 yrs)	16.50%	10.04%	10.56%	16.52%	18.45%	13.25%
Proj. EPS Growth (F1/F0)	23.61%	14.63%	7.49%	12.72%	9.32%	10.22%
Curr. Cash Flow Growth	43.36%	5.10%	14.83%	11.27%	37.69%	16.70%
Hist. Cash Flow Growth (3-5 yrs)	9.81%	9.81%	9.00%	8.40%	22.75%	17.85%
Current Ratio	4.72	2.79	1.23	2.23	6.82	1.80
Debt/Capital	10.94%	13.16%	42.99%	40.84%	29.10%	35.83%
Net Margin	16.14%	-10.65%	11.08%	10.20%	28.14%	14.24%
Return on Equity	4.30%	-7.21%	17.16%	28.02%	22.05%	17.16%
Sales/Assets	0.34	0.64	0.55	0.89	0.49	0.45
Proj. Sales Growth (F1/F0)	4.01%	11.84%	4.20%	5.89%	12.84%	5.84%
Momentum Score	С	-	-	В	C	D
Daily Price Chg	1.82%	0.27%	0.53%	0.53%	0.73%	0.64%
1 Week Price Chg	-0.43%	0.00%	-0.30%	-1.10%	-2.88%	-1.14%
4 Week Price Chg	7.18%	2.76%	1.92%	3.37%	3.92%	3.21%
12 Week Price Chg	13.18%	3.66%	6.54%	17.44%	7.74%	17.05%
52 Week Price Chg	61.39%	0.29%	22.58%	56.87%	8.02%	37.99%
20 Day Average Volume	193,194	132,427	1,580,816	359,047	734,669	980,742
(F1) EPS Est 1 week change	0.00%	0.00%	0.00%	0.09%	0.00%	-0.01%
(F1) EPS Est 4 week change	0.00%	0.00%	0.00%	0.09%	-0.32%	0.02%
F1) EPS Est 12 week change	-1.11%	-1.28%	-0.50%	-0.67%	0.05%	0.22%
(Q1) EPS Est Mthly Chg	0.00%	0.00%	0.00%	0.00%	0.00%	-0.22%

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 have an excellent 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.

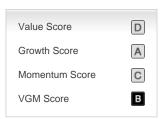
Zacks Rank

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.



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

Disclosures

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

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

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

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

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

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