

**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549
FORM 10-Q**

(Mark One)

☒ **QUARTERLY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the quarterly period ended June 30, 2020

or

☐ **TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the transition period from _____ to _____

Commission file number 1-7928

BIO-RAD LABORATORIES, INC.

(Exact name of registrant as specified in its charter)

Delaware

94-1381833

(State or other jurisdiction of incorporation or organization)

(I.R.S. Employer Identification No.)

1000 Alfred Nobel Drive, Hercules, California

94547

(Address of principal executive offices)

(Zip Code)

(510) 724-7000

(Registrant's telephone number, including area code)

No Change

(Former name, former address and former fiscal year, if changed since last report.)

Securities registered pursuant to Section 12(b) of the Act:

Title of each class	Trading Symbol(s)	Name of each exchange on which registered
Class A Common Stock, Par Value \$0.0001 per share	BIO	New York Stock Exchange
Class B Common Stock, Par Value \$0.0001 per share	BIOb	New York Stock Exchange

Indicate by check mark whether the registrant: (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days.

Yes ☒

No ☐

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit files).

Yes ☒

No ☐

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company, or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company," and "emerging growth company" in Rule 12b-2 of the Exchange Act. (Check one):

Large accelerated filer ☒

Accelerated filer ☐

Non-accelerated filer ☐

Smaller reporting company ☐

Emerging growth company ☐

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. ☐

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act).

Yes ☐

No ☒

Indicate the number of shares outstanding of each of the issuer's classes of common stock, as of the latest practicable date.

Common Shares Outstanding at July 23, 2020:

Class A - 24,586,408

Class B - 5,091,968

BIO-RAD LABORATORIES, INC.

FORM 10-Q JUNE 30, 2020

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INFORMATION RELATING TO FORWARD-LOOKING STATEMENTS

Other than statements of historical fact, statements made in this report include forward-looking statements, such as statements with respect to our future financial performance, operating results, plans and objectives that involve risk and uncertainties. These forward-looking statements may also include statements regarding the impact of the COVID-19 pandemic on Bio-Rad's results and operations and steps governments, universities, hospitals and private industry, including diagnostic laboratories, are taking or may take as a result of the pandemic. Forward-looking statements generally can be identified by the use of forward-looking terminology, such as "believe," "expect," "anticipate," "may," "will," "intend," "estimate," "continue," or similar expressions or the negative of those terms or expressions. Such statements involve risks and uncertainties, which could cause actual results to vary materially from those expressed in or indicated by the forward-looking statements. We have based these forward-looking statements on our current expectations and projections about future events. However, actual results may differ materially from those currently anticipated depending on a variety of risk factors including, but not limited to, those identified under "Part II, Item 1A, Risk Factors" of this Quarterly Report on Form 10-Q. We caution you not to place undue reliance on forward-looking statements, which reflect an analysis only and speak only as of the date hereof. We undertake no obligation to publicly update or revise any forward-looking statements, whether as a result of new information, future events, or otherwise, except as required by law.

PART I – FINANCIAL INFORMATION

[Item 1. Financial Statements](#)

BIO-RAD LABORATORIES, INC.
Condensed Consolidated Balance Sheets
(In thousands, except share data)

	June 30, 2020	December 31, 2019
ASSETS:	(Unaudited)	
Cash and cash equivalents	\$ 607,584	\$ 660,672
Short-term investments	424,226	453,973
Restricted investments	5,560	5,560
Accounts receivable, less allowance for doubtful accounts of \$20,337 at 2020 and \$20,205 at 2019	360,854	392,672
Inventories:		
Raw materials	130,283	109,570
Work in process	149,542	146,131
Finished goods	348,576	298,306
Total inventories	628,401	554,007
Prepaid expenses	91,797	102,331
Other non-trade receivables	8,913	3,814
Other current assets	5,249	7,126
Total current assets	2,132,584	2,180,155
Property, plant and equipment	1,385,430	1,382,172
Less: accumulated depreciation and amortization	(904,000)	(882,833)
Property, plant and equipment, net	481,430	499,339
Operating lease right-of-use assets	197,588	201,868
Goodwill, net	291,504	264,131
Purchased intangibles, net	211,367	145,525
Other investments	6,703,039	4,638,205
Other assets	79,795	79,636
Total assets	\$ 10,097,307	\$ 8,008,859

The accompanying notes are an integral part of these condensed consolidated financial statements.

BIO-RAD LABORATORIES, INC.
Condensed Consolidated Balance Sheets
(continued)
(In thousands, except share data)

	June 30, 2020	December 31, 2019
	(Unaudited)	
LIABILITIES AND STOCKHOLDERS' EQUITY:		
Accounts payable	\$ 130,905	\$ 107,014
Accrued payroll and employee benefits	156,388	180,084
Current maturities of long-term debt and notes payable	426,502	426,172
Income and other taxes payable	32,019	36,285
Current operating lease liabilities	33,941	35,365
Other current liabilities	147,140	120,575
Total current liabilities	926,895	905,495
Long-term debt, net of current maturities	12,233	13,579
Deferred income taxes	1,456,653	997,787
Operating lease liabilities	173,103	176,018
Other long-term liabilities	175,021	160,923
Total liabilities	2,743,905	2,253,802
Stockholders' equity:		
Class A common stock, shares issued 25,007,469 and 24,966,035 at 2020 and 2019, respectively; shares outstanding 24,586,408 and 24,835,804 at 2020 and 2019, respectively	2	2
Class B common stock, shares issued and outstanding, 5,091,968 at 2020 and 5,089,532 at 2019	1	1
Additional paid-in capital	429,485	410,020
Class A treasury stock at cost, 421,061 at 2020 and 130,231 shares at 2019	(138,037)	(38,397)
Retained earnings	7,123,093	5,470,779
Accumulated other comprehensive loss	(61,142)	(87,348)
Total stockholders' equity	7,353,402	5,755,057
Total liabilities and stockholders' equity	\$ 10,097,307	\$ 8,008,859

The accompanying notes are an integral part of these condensed consolidated financial statements.

BIO-RAD LABORATORIES, INC.
Condensed Consolidated Statements of Income
(In thousands, except per share data)
(Unaudited)

	Three Months Ended June 30,		Six Months Ended June 30,	
	2020	2019	2020	2019
Net sales	\$ 536,880	\$ 572,619	\$ 1,108,524	\$ 1,126,598
Cost of goods sold	243,892	264,850	498,168	507,067
Gross profit	292,988	307,769	610,356	619,531
Selling, general and administrative expense	189,262	201,257	382,954	408,838
Research and development expense	51,984	50,122	101,287	97,697
Income from operations	51,742	56,390	126,115	112,996
Interest expense	5,740	5,841	11,430	11,827
Foreign currency exchange losses, net	774	1,233	1,702	2,513
Change in fair market value of equity securities	(1,183,488)	(716,389)	(2,011,159)	(1,775,619)
Other (income) expense, net	(17,229)	(3,896)	(20,502)	(22,592)
Income before income taxes	1,245,945	769,601	2,144,644	1,896,867
Provision for income taxes	(279,516)	(170,791)	(492,303)	(432,862)
Net income	\$ 966,429	\$ 598,810	\$ 1,652,341	\$ 1,464,005
Basic earnings per share:				
Net income per basic share	\$ 32.59	\$ 20.08	\$ 55.52	\$ 49.12
Weighted average common shares - basic	29,652	29,814	29,759	29,807
Diluted earnings per share:				
Net income per diluted share	\$ 32.15	\$ 19.86	\$ 54.84	\$ 48.60
Weighted average common shares - diluted	30,058	30,154	30,131	30,125

The accompanying notes are an integral part of these condensed consolidated financial statements.

BIO-RAD LABORATORIES, INC.
Condensed Consolidated Statements of Comprehensive Income
(In thousands)
(Unaudited)

	Three Months Ended June 30,		Six Months Ended June 30,	
	2020	2019	2020	2019
Net income	\$ 966,429	\$ 598,810	\$ 1,652,341	\$ 1,464,005
Other comprehensive income (loss):				
Foreign currency translation adjustments, net of income taxes	84,475	29,846	22,465	(6,556)
Foreign other post-employment benefits adjustments, net of income taxes	(141)	(217)	590	142
Net unrealized holding gain on available-for-sale (AFS) debt investments, net of income taxes	3,479	1,763	3,151	3,799
Other comprehensive income (loss), net of income taxes	87,813	31,392	26,206	(2,615)
Comprehensive income	\$ 1,054,242	\$ 630,202	\$ 1,678,547	\$ 1,461,390

The accompanying notes are an integral part of these condensed consolidated financial statements.

BIO-RAD LABORATORIES, INC.
Condensed Consolidated Statements of Cash Flows
(In thousands, unaudited)

	Six Months Ended June 30,	
	2020	2019
Cash flows from operating activities:		
Cash received from customers	\$ 1,127,141	\$ 1,143,222
Cash paid to suppliers and employees	(959,300)	(932,009)
Interest paid, net	(10,847)	(11,085)
Income tax payments, net	(10,005)	(24,016)
Investment proceeds and miscellaneous receipts, net	6,092	24,093
Proceeds from (payments for) forward foreign exchange contracts, net	1,849	(1,860)
Net cash provided by operating activities	154,930	198,345
Cash flows from investing activities:		
Capital expenditures	(39,707)	(45,843)
Proceeds from dispositions of property, plant and equipment	33	86
Proceeds from divestiture of a division	12,240	—
Payments for acquisitions, net of cash received	(96,889)	(16,083)
(Payments for) recovery of purchases of intangible assets	(100)	7,383
Payments for purchases of marketable securities and investments	(172,663)	(171,615)
Proceeds from sales of marketable securities and investments	62,894	50,044
Proceeds from maturities of marketable securities and investments	133,197	138,244
Net cash used in investing activities	(100,995)	(37,784)
Cash flows from financing activities:		
Payments on long-term borrowings	(1,597)	(359)
Payments for credit agreement renewal fees	—	(458)
Payments of contingent consideration	(1,265)	(1,433)
Proceeds from issuances of common stock for share-based compensation	8,202	3,912
Tax payments from net share settlement	(6,931)	(3,976)
Proceeds from reissuances of treasury stock for share-based compensation, net	—	3,831
Payments for purchases of treasury stock	(100,005)	(15,001)
Net cash used in financing activities	(101,596)	(13,484)
Effect of foreign exchange rate changes on cash	(2,858)	2,127
Net (decrease) increase in cash, cash equivalents, and restricted cash	(50,519)	149,204
Cash, cash equivalents, and restricted cash at beginning of period	662,651	434,164
Cash, cash equivalents, and restricted cash at end of period	\$ 612,132	\$ 583,368

The following table provides a reconciliation of cash, cash equivalents, and restricted cash reported within the condensed consolidated balance sheets that agrees to the same amounts shown in the condensed consolidated statements of cash flows (in thousands):

	June 30, 2020	June 30, 2019
Cash and cash equivalents	\$ 607,584	\$ 580,684
Restricted cash included in Other current assets	3,575	114
Restricted cash included in Other assets	973	2,570
Total cash, cash equivalents, and restricted cash shown in the condensed consolidated statements of cash flows	\$ 612,132	\$ 583,368

These restricted cash items are primarily related to performance guarantees and other restricted deposits.

The accompanying notes are an integral part of these condensed consolidated financial statements.

BIO-RAD LABORATORIES, INC.
Condensed Consolidated Statements of Changes in Stockholders' Equity
(In thousands)
(Unaudited)

	Common Stock	Additional Paid-in Capital	Treasury Stock	Retained Earnings	Accumulated Other Comprehensive Income (Loss)	Total Stockholders' Equity
Balance at December 31, 2019	\$ 3	\$ 410,020	\$ (38,397)	\$ 5,470,779	\$ (87,348)	\$ 5,755,057
Net income	—	—	—	685,912	—	685,912
Other comprehensive loss, net of tax	—	—	—	—	(61,607)	(61,607)
Issuance of common stock	—	4,068	—	—	—	4,068
Stock compensation expense	—	9,654	—	—	—	9,654
Purchase of treasury stock	—	—	(100,005)	—	—	(100,005)
Balance at March 31, 2020	\$ 3	\$ 423,742	\$ (138,402)	\$ 6,156,691	\$ (148,955)	\$ 6,293,079
Net income	—	—	—	966,429	—	966,429
Other comprehensive income, net of tax	—	—	—	—	87,813	87,813
Issuance of common stock	—	(2,797)	—	—	—	(2,797)
Stock compensation expense	—	8,878	—	—	—	8,878
Reissuance of treasury stock	—	(338)	365	(27)	—	—
Balance at June 30, 2020	\$ 3	\$ 429,485	\$ (138,037)	\$ 7,123,093	\$ (61,142)	\$ 7,353,402

	Common Stock	Additional Paid-in Capital	Treasury Stock	Retained Earnings	Accumulated Other Comprehensive Income (Loss)	Total Stockholders' Equity
Balance at December 31, 2018	\$ 3	\$ 394,342	\$ (49,129)	\$ 3,722,073	\$ (46,958)	\$ 4,020,331
Net income	—	—	—	865,195	—	865,195
Other comprehensive loss, net of tax	—	—	—	—	(34,007)	(34,007)
Stock compensation expense	—	8,505	—	—	—	8,505
Reissuance of treasury stock	—	—	5,398	(1,567)	—	3,831
Balance at March 31, 2019	\$ 3	\$ 402,847	\$ (43,731)	\$ 4,585,701	\$ (80,965)	\$ 4,863,855
Net income	—	—	—	598,810	—	598,810
Other comprehensive income, net of tax	—	—	—	—	31,392	31,392
Issuance of common stock	—	(64)	—	—	—	(64)
Stock compensation expense	—	7,818	—	—	—	7,818
Purchase of treasury stock	—	—	(15,001)	—	—	(15,001)
Balance at June 30, 2019	\$ 3	\$ 410,601	\$ (58,732)	\$ 5,184,511	\$ (49,573)	\$ 5,486,810

The accompanying notes are an integral part of these condensed consolidated financial statements.

BIO-RAD LABORATORIES, INC

Notes to Condensed Consolidated Financial Statements (Unaudited)

1. BASIS OF PRESENTATION AND USE OF ESTIMATES

Basis of Presentation

In this report, “Bio-Rad,” “we,” “us,” “the Company” and “our” refer to Bio-Rad Laboratories, Inc. and its subsidiaries. The accompanying unaudited condensed consolidated financial statements of Bio-Rad have been prepared in accordance with accounting principles generally accepted in the United States of America (GAAP) and reflect all adjustments which are, in the opinion of management, necessary to fairly state the results of the interim periods presented. All such adjustments are of a normal recurring nature. Results for the interim period are not necessarily indicative of the results for the entire year. The condensed consolidated balance sheet at December 31, 2019 has been derived from the audited consolidated financial statements at that date but does not include all of the information and footnotes required by GAAP for complete financial statements. The condensed consolidated financial statements should be read in conjunction with the notes to the consolidated financial statements contained in our Annual Report on Form 10-K for the year ended December 31, 2019.

We evaluate subsequent events and the evidence they provide about conditions existing at the date of the balance sheet as well as conditions that arose after the balance sheet date but through the date the financial statements are issued. The effects of conditions that existed at the balance sheet date are recognized in the financial statements. Events and conditions arising after the balance sheet date but before the financial statements are issued are evaluated to determine if disclosure is required to keep the financial statements from being misleading. To the extent such events and conditions exist, disclosures are made regarding the nature of events and the estimated financial effects of those events and conditions.

Use of Estimates

The preparation of the condensed consolidated financial statements requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and the disclosure of contingencies at the date of the financial statements as well as the reported amounts of revenues and expenses during the reporting periods. Bio-Rad bases its estimates on historical experience and on various other market-specific and other relevant assumptions that are believed to be reasonable under the circumstances, the results of which form the basis for making judgments about the carrying values of assets and liabilities that are not readily apparent from other sources. Actual results could differ materially from those estimates.

Revenue Recognition

We recognize revenue from operations through the sale of products, services, and rental of instruments. Revenue from contracts with customers is recognized upon transfer of control of promised products or services to customers in an amount that reflects the consideration we expect to receive in exchange for those products or services. We enter into contracts that can include various combinations of products and services, which are generally accounted for as distinct performance obligations. Revenue is recognized net of any taxes collected from customers (sales tax, value added tax, etc.), which are subsequently remitted to government authorities.

Our contracts from customers often include promises to transfer multiple products and services to a customer. Determining whether products and services are considered distinct performance obligations that should be accounted for separately versus together may require significant judgment, and may or may not impact the timing of revenue recognition. Revenue associated with equipment that requires factory installation is not recognized until installation is complete and customer acceptance, if required, has occurred. Certain equipment requires installation due to the fact that the instruments are being operated in a clinical/laboratory environment, and the installation services could result in modification of the equipment in order to ensure that the instruments are working according to customer specifications, which are subject to validation tests upon completion of the installation. In these arrangements, which require factory installation, the delivery of the equipment and the installation are separate performance obligations. We will recognize the transaction price allocated to the equipment only upon customer acceptance, as the transfer of control in relation to the equipment has occurred at that point as the customer has the ability to direct the use of and obtain substantially all of the remaining benefits from the asset. The transaction price allocated to the installation services is also recognized upon customer acceptance because without the completion of the installation services and related customer acceptance the customer cannot receive any of the benefits of the service.

At the time revenue is recognized, a provision is recorded for estimated product returns as this right is considered variable consideration. Accordingly, when product revenues are recognized, the transaction price is reduced by the estimated amount of product returns.

Service revenues on extended warranty contracts are recognized ratably over the life of the service agreement as a stand-ready performance obligation. For arrangements that include a combination of products and services, the transaction price is allocated to each performance obligation based on stand-alone selling prices. The method used to determine the stand-alone selling prices for product and service revenues is based on the observable prices when the product or services have been sold separately.

The primary purpose of our invoicing terms is to provide customers with simple and predictable methods of purchasing our products and services, not to either provide or receive financing to or from our customers. We record contract liabilities when cash payments are received or due in advance of our performance.

We do not disclose the value of unsatisfied performance obligations for contracts with an original expected length of one year or less. Our payment terms vary by the type and location of our customer, and the products and services offered. The term between invoicing and when payment is due is not significant.

Reagent Rental Agreements

Reagent rental agreements are a diagnostic industry sales method that provides use of an instrument and consumables (reagents) to a customer on a per test basis. These agreements may also include maintenance of the instruments placed at customer locations as well as initial training. We initially determine if a reagent rental arrangement contains a lease at contract commencement. Where we have determined that such an arrangement contains a lease, we next must ascertain its lease classification for purposes of applying appropriate accounting treatment as an operating, sales-type or direct financing lease. For purposes of determining the lease term used in performing the lease classification test, we include the noncancellable period of the lease together with those periods covered by the option to extend the lease if the customer is reasonably certain to exercise that option, the periods covered by an option to terminate the lease if the customer is reasonably certain not to exercise that option, and the periods covered by the option to extend (or not to terminate) the lease in which exercise of the option is controlled by the Company. While most of our reagent rental arrangements contain either the option for a lessee to extend and/or cancel, the period in which the contract is enforceable is a very short period and therefore the lease term has been limited to the noncancellable period. Generally these arrangements do not contain an option for the lessee to purchase the underlying asset.

We concluded that the use of the instrument (referred to as “lease elements”) is not within the guidance of ASC 606 but rather ASC 842. Accordingly, we first allocate the transaction price between the lease elements and the non-lease elements based on relative standalone selling prices. The determination of the transaction price requires judgment and consideration of any fixed/minimum payments as well as estimates of variable consideration. After allocation, the amount of variable payments allocated to lease components will be recognized as income under ASC 842, while the amount of variable payments allocated to non-lease components will be recognized as income in accordance with ASC 606.

Upon our adoption of ASC 842 in 2019, the maintenance services, along with the reagents, are now allocated to the non-lease elements and will be recognized as income in accordance with ASC 606. This change is in accordance with the requirements of ASC 842, and has resulted in a decrease in the amount of rental income and a corresponding increase in the amount of maintenance service revenue that is included in Net sales in our condensed consolidated statements of income. Generally, the terms of the arrangements result in the transfer of control for reagents upon either (i) when the consumables are delivered or (ii) when the consumables are consumed by the customer.

Our reagent rental arrangements are predominantly comprised of variable lease payments that fluctuate depending on the volume of reagents purchased, as very few of such arrangements contain any fixed/minimum lease payments. Further, our reagent rental arrangements are predominantly classified as operating leases, and any sales-type leases represent in aggregate an immaterial amount of lease income. Our reported lease income is primarily variable in nature and is recognized upon delivery or as the reagents are consumed by the customer. Revenue allocated to the lease elements of these reagent rental arrangements represents approximately 3% of total revenue for both the three and six months ended June 30, 2020, and June 30, 2019, and is included as part of Net sales in our condensed consolidated statements of income.

Contract costs:

As a practical expedient, we expense as incurred costs to obtain contracts as the amortization period would have been one year or less. These costs include our internal sales force and certain partner sales incentive programs and are recorded within Selling, general and administrative expense in our condensed consolidated statements of income.

Disaggregation of Revenue:

The following table presents our revenues disaggregated by geographic region based primarily on the location of the use of the product or service (in millions, unaudited):

	Three Months Ended		Six Months Ended	
	June 30,		June 30,	
	2020	2019	2020	2019
Europe	\$ 174.0	\$ 188.2	\$ 369.7	\$ 374.1
Asia	129.0	127.3	240.4	233.7
United States	205.4	222.1	434.9	448.2
Other (primarily Canada and Latin America)	28.5	35.0	63.5	70.6
Total net sales	<u>\$ 536.9</u>	<u>\$ 572.6</u>	<u>\$ 1,108.5</u>	<u>\$ 1,126.6</u>

The disaggregation of our revenue by industry segment sources is presented in our Segment Information footnote (see Note 11).

Deferred revenues primarily represents unrecognized fees billed or collected for extended service arrangements. The deferred revenue balance at June 30, 2020 and December 31, 2019 was \$51.0 million and \$45.8 million, respectively. The short-term deferred revenue balance at June 30, 2020 and December 31, 2019 was \$38.1 million and \$33.7 million, respectively.

We warrant certain equipment against defects in design, materials and workmanship, generally for a period of one year. We estimate the cost of warranties at the time the related revenue is recognized based on historical experience, specific warranty terms and customer feedback. These costs are recorded within Cost of Goods Sold in our condensed consolidated statements of income.

Warranty liabilities are included in Other current liabilities and Other long-term liabilities in the condensed consolidated balance sheets. Change in our warranty liability for the six month period ended June 30, 2020 and 2019 were as follows (in millions):

	Six Months Ended	
	June 30,	
	2020	2019
Balance at beginning of period	\$ 9.0	\$ 10.1
Provision for warranty	2.9	4.8
Actual warranty costs	(4.0)	(5.4)
Balance at end of period	<u>\$ 7.9</u>	<u>\$ 9.5</u>

Allowance for Doubtful Accounts

We record trade accounts receivable at the net invoice value and such receivables are non-interest bearing. We consider receivables past due based on the contractual payment terms. We review our exposure to accounts receivable and reserve for amounts if collectability is no longer reasonably assured based on an assessment of various factors including historical loss rates and expectations of forward-looking loss estimates.

Any adjustments made to our historical loss experience reflect current differences in asset-specific risk characteristics, including, for example, accounts receivable by customer type (public or government entity versus private entity) and by geographic location of customer.

Changes in our allowance for doubtful accounts were as follows (in millions):

December 31, 2019	\$ 20.2
Provision for expected credit losses	1.2
Write-offs charged against the allowance	(1.2)
Recoveries collected	0.1
June 30, 2020	<u>\$ 20.3</u>

Implementation Costs for Cloud Computing Arrangements

The balance of capitalized implementation costs for cloud computing arrangements, net of accumulated amortization, was \$4.2 million and \$3.1 million at June 30, 2020 and December 31, 2019, respectively. These costs were primarily for implementing business analytics software and were recorded in Other current assets and Other assets in the condensed consolidated balance sheets.

Recent Accounting Pronouncements Adopted

In May 2020, the SEC issued Final Rule Release No. 33-10786, "Amendments to Financial Disclosures About Acquired and Disposed Businesses" that amends financial statement requirements for acquisitions and dispositions of businesses, and related pro forma financial information. Among other changes, the final rule modifies the significance tests and improves disclosure requirements. We early adopted this final rule as of April 1, 2020, which did not have a material effect on our condensed consolidated financial statements.

In March 2020, the FASB issued ASU No. 2020-04, Facilitation of the Effects of Reference Rate Reform on Financial Reporting (Topic 848). The ASU provides optional expedients and exceptions for applying GAAP to transactions affected by reference rate (e.g., LIBOR) reform if certain criteria are met, for a limited period of time to ease the potential burden in accounting for (or recognizing the effects of) reference rate reform on financial reporting. The ASU is effective as of March 12, 2020 through December 31, 2022. We will evaluate transactions or contract modifications occurring as a result of reference rate reform and determine whether to apply the optional guidance on an ongoing basis. The ASU is currently not expected to have a material impact on our condensed consolidated financial statements. In August 2018, the FASB issued ASU 2018-13, "Fair Value Measurement (Topic 820): Disclosure Framework - Changes to the Disclosure Requirements for Fair Value Measurements" (ASU 2018-13), which aims to improve the overall usefulness of disclosures to financial statement users and reduce unnecessary costs to companies when preparing fair value measurement disclosures. We adopted this standard effective January 1, 2020 the adoption of ASU 2018-02 did not have a material impact on our condensed consolidated financial statements.

In June 2016, the FASB issued ASU 2016-13, "Measurement of Credit Losses on Financial Instruments." ASU 2016-13 replaces the incurred loss approach with an expected loss model for instruments measured at amortized cost and requires entities to record allowances for available-for-sale debt securities rather than reduce the carrying amount as done under the former other-than-temporary impairment model. We adopted ASU 2016-13 as of January 1, 2020 using the cumulative effect transition method. We have evaluated our impacted instruments for credit quality indicators, and have determined that there is no cumulative effect transition adjustment to retained earnings as of our adoption date. ASU 2016-13 had an insignificant impact to our condensed consolidated financial statements for the six months ended June 30, 2020. See also Note 3, Fair Value Measurements, and the section above under the caption "Allowance for Doubtful Accounts."

Recent Accounting Pronouncements to be Adopted

In January 2020, the FASB issued ASU 2020-01, Clarifying the Interactions between Topic 321 Investments—Equity Securities, Topic 323 Investments—Equity Method and Joint Ventures, and Topic 815 Derivatives and Hedging. ASU 2020-01 clarifies that a company should consider observable transactions that require a company to either apply or discontinue the equity method of accounting under Topic 323 for the purposes of applying the measurement alternative in accordance with Topic 321 immediately before applying or upon discontinuing the equity method. ASU 2020-01 also clarifies that, when determining the accounting for certain forward contracts and purchased options a company should not consider, whether upon settlement or exercise, if the underlying securities would be accounted for under the equity method or fair value option. ASU 2020-01 is effective for fiscal years beginning after December 15, 2020. Early adoption is permitted, including interim periods for which financial statements have not been issued. We are currently evaluating the effect of ASU 2020-01.

In December 2019, the FASB issued ASU 2019-12, "Simplifying the Accounting for Income Taxes," which eliminates certain exceptions within ASC 740, Income Taxes, and clarifies other aspects of the current guidance to promote consistency among reporting entities. ASU 2019-12 is effective for fiscal years beginning after December 15, 2020 and early adoption is permitted in any interim or annual period, with any adjustments reflected as of the beginning of the fiscal year of adoption. We are currently evaluating the effect of adopting this pronouncement on our financial statements and disclosures.

In August 2018, the FASB issued ASU 2018-14, "Disclosure Framework - Changes to the Disclosure Requirements for Defined Benefit Plans." ASU 2018-14 eliminates and adds certain disclosures for defined benefit plans. ASU 2018-14 is effective for fiscal years ending after December 15, 2020 using a retrospective approach. Early adoption is permitted. We are currently evaluating the disclosures but do not expect ASU 2018-14 to have a material impact to our disclosures for defined benefit plans.

2. ACQUISITIONS AND DIVESTITURES

ACQUISITIONS

Celsee Acquisition:

On April 1, 2020 (the "Acquisition Date"), we acquired all equity interests of Celsee, Inc. ("Celsee") for total consideration of \$99.5 million (as described in the table below), including the estimated fair value of contingent consideration. The contingent consideration of up to \$60.0 million is payable in cash, upon the achievement of certain net revenues for the period beginning on January 1, 2021 and ending on December 31, 2022.

Celsee is a manufacturer of instruments and consumables for the isolation, detection, and analysis of single cells. We believe this acquisition will complement our Life Science product offerings. The acquisition was included in our Life Science segment's results of operations from the Acquisition Date.

Celsee met the definition of a business, and therefore is accounted for as a business combination.

The fair value of consideration transferred for the Celsee acquisition consists of the following (in millions):

Purchase price (cash)	\$	99.4
Fair value of contingent consideration (earn-out)		0.1
Fair value of total consideration transferred	\$	99.5

The following table summarizes the preliminary estimated fair values of the assets acquired and liabilities assumed at the Acquisition Date (in millions):

	Preliminary Fair Value
Cash and cash equivalents	\$ 0.6
Intangible assets	79.9
Deferred tax assets	8.7
Deferred tax liabilities	(19.4)
Other identifiable assets acquired, net	0.3
Net identifiable assets acquired	70.1
Goodwill	29.4
Net assets acquired	\$ 99.5

Goodwill related to the acquisition is primarily attributable to opportunities and economies of scale from combining the operations and technologies of Bio-Rad and Celsee, and is not deductible for tax purposes.

The following table summarizes the preliminary estimated fair values and estimated useful lives of the components of identifiable intangible assets acquired as of the Acquisition Date (in millions):

	Preliminary Fair Value	Estimated Useful Life (years)
Developed product technology	\$ 70.3	18.9
Customer relationships	3.6	4.0
Covenants not to compete	1.4	3.0
In-process research and development	4.6	
Total identifiable intangible assets acquired	\$ 79.9	

Intangible assets acquired as a result of the Celsee acquisition are being amortized over their estimated useful lives using the straight-line method of amortization, which materially approximates the distribution of the economic value of the identified intangible assets. Amortization of acquired developed technology of \$0.9 million during the three months ended June 30, 2020 is included in Cost of goods sold in the condensed consolidated statements of income. Amortization of the acquired customer relationships and covenants not to compete of \$0.2 million and \$0.1 million, respectively, during the three months ended June 30, 2020 are included in Selling, general and administrative expense in the condensed consolidated statements of income.

In-process research and development (IPR&D) is accounted for as an indefinite-lived asset. Once the project is completed, the carrying value of the IPR&D will be amortized over the estimated useful life of the asset. IPR&D is assessed for impairment on an annual basis until the project is completed.

We believe the values of acquired intangible assets reported above represent their fair values and approximate the amounts a market participant would pay for these intangible assets as of the Acquisition Date.

As additional information becomes available, such as finalization of the estimated fair value of the assets acquired and liabilities assumed, and working capital adjustments that may affect the total consideration transferred, we may revise the preliminary estimates of fair values of the tangible and intangible assets acquired and liabilities assumed during the remainder of the measurement period (which will not exceed 12 months from the Acquisition Date). Any such revisions or changes may be material as we finalize the fair values of those tangible and intangible assets acquired and liabilities assumed.

We included Celsee's estimated fair value of assets acquired and liabilities assumed in our condensed consolidated balance sheets beginning on the Acquisition Date. The results of operations for Celsee subsequent to the Acquisition Date have been included in, but are immaterial to, our condensed consolidated statements of income for the three and six months ended June 30, 2020. Pro forma results of operations for the Celsee acquisition have not been presented because they are not material to the condensed consolidated statements of income.

Distributor Acquisition:

In October 2019, we acquired all the issued and outstanding shares of a foreign distributor for approximately \$4.2 million, which included cash payments at closing, net of closing cash, of \$3.6 million, and \$0.6 million in contingent consideration potentially payable to the sellers. In addition, we recorded a net gain of \$0.4 million for the settlement of preexisting conditions concurrent with the acquisition that was recorded in Selling, general and administrative expense. The acquisition was included in our Clinical Diagnostics segment's results of operations from the acquisition date and was accounted for as a business combination. The amount of acquisition-related costs was minimal as Bio-Rad primarily represented itself during the acquisition process. Pro forma financial statements are not provided as the acquisition is immaterial to Bio-Rad taken as a whole for the periods presented.

The final allocation of the payments was \$3.4 million to customer relationships, a definite-lived intangible, \$0.2 million to deferred tax asset, \$0.8 million to deferred tax liability related to the purchased intangible and \$1.4 million to acquired net assets. The final allocation of payments was unchanged from our preliminary allocation for the period ended December 31, 2019.

DIVESTITURE

Informatics Divestiture:

In April 2020, we received \$12.2 million for the sale of our Informatics division, which focused on providing and developing comprehensive, high-quality spectral databases and associated software. The division was part of our Other Operations segment. In connection with this sale, we recorded an \$11.7 million gain in Other (income) expense, net, in the condensed consolidated statements of income for the three months ended June 30, 2020.

3. FAIR VALUE MEASUREMENTS

We determine the fair value of an asset or liability based on the assumptions that market participants would use in pricing the asset or liability in an orderly transaction between market participants at the measurement date. The identification of market participant assumptions provides a basis for determining what inputs are to be used for pricing each asset or liability. A fair value hierarchy has been established which gives precedence to fair value measurements calculated using observable inputs over those using unobservable inputs. This hierarchy prioritizes the inputs into three broad levels as follows:

- Level 1: Quoted prices in active markets for identical instruments
- Level 2: Other significant observable inputs (including quoted prices in active markets for similar instruments)
- Level 3: Significant unobservable inputs (including assumptions in determining the fair value of certain investments)

Financial assets and liabilities carried at fair value and measured on a recurring basis as of June 30, 2020 are classified in the hierarchy as follows (in millions):

	Level 1	Level 2	Level 3	Total
Financial assets carried at fair value:				
Cash equivalents:				
Commercial paper	\$ —	\$ 67.7	\$ —	\$ 67.7
Asset-backed securities	—	0.1	—	0.1
U.S. government sponsored agencies	—	0.7	—	0.7
Time deposits	26.5	10.0	—	36.5
Money market funds	115.9	—	—	115.9
Total cash equivalents (a)	142.4	78.5	—	220.9
Restricted investments (b)	6.6	—	—	6.6
Equity securities (c)	6,724.1	—	—	6,724.1
Available-for-sale investments:				
Corporate debt securities	—	173.9	—	173.9
U.S. government sponsored agencies	—	118.0	—	118.0
Foreign government obligations	—	5.6	—	5.6
Other foreign obligations	—	2.1	—	2.1
Municipal obligations	—	14.8	—	14.8
Asset-backed securities	—	61.1	—	61.1
Total available-for-sale investments (d)	—	375.5	—	375.5
Forward foreign exchange contracts (e)	—	0.6	—	0.6
Total financial assets carried at fair value	\$ 6,873.1	\$ 454.6	\$ —	\$ 7,327.7
Financial liabilities carried at fair value:				
Forward foreign exchange contracts (f)	\$ —	\$ 0.2	\$ —	\$ 0.2
Contingent consideration (g)	—	—	2.7	2.7
Total financial liabilities carried at fair value	\$ —	\$ 0.2	\$ 2.7	\$ 2.9

Financial assets and liabilities carried at fair value and measured on a recurring basis as of December 31, 2019 are classified in the hierarchy as follows (in millions):

	Level 1	Level 2	Level 3	Total
Financial assets carried at fair value:				
Cash equivalents:				
Commercial paper	\$ —	\$ 42.9	\$ —	\$ 42.9
Time deposits	31.2	10.0	—	41.2
Asset-backed securities	—	0.1	—	0.1
Money market funds	69.9	—	—	69.9
Total cash equivalents (a)	101.1	53.0	—	154.1
Restricted investments (b)	5.6	—	—	5.6
Equity securities (c)	4,664.4	—	—	4,664.4
Available-for-sale investments:				
Corporate debt securities	—	204.5	—	204.5
U.S. government sponsored agencies	—	106.1	—	106.1
Foreign government obligations	—	4.7	—	4.7
Other foreign obligations	—	3.1	—	3.1
Municipal obligations	—	11.6	—	11.6
Asset-backed securities	—	72.9	—	72.9
Total available-for-sale investments (d)	—	402.9	—	402.9
Forward foreign exchange contracts (e)	—	0.9	—	0.9
Total financial assets carried at fair value	\$ 4,771.1	\$ 456.8	\$ —	\$ 5,227.9
Financial liabilities carried at fair value:				
Forward foreign exchange contracts (f)	\$ —	\$ 1.0	\$ —	\$ 1.0
Contingent consideration (g)	—	—	4.9	4.9
Total financial liabilities carried at fair value	\$ —	\$ 1.0	\$ 4.9	\$ 5.9

(a) Cash equivalents are included in Cash and cash equivalents in the condensed consolidated balance sheets.

(b) Restricted investments are included in the following accounts in the condensed consolidated balance sheets (in millions):

	June 30, 2020	December 31, 2019
Restricted investments	\$ 5.6	\$ 5.6
Other investments	1.0	—
Total	\$ 6.6	\$ 5.6

(c) Equity securities are included in the following accounts in the condensed consolidated balance sheets (in millions):

	June 30, 2020	December 31, 2019
Short-term investments	\$ 49.0	\$ 51.0
Other investments	6,675.1	4,613.4
Total	\$ 6,724.1	\$ 4,664.4

The unrealized gains on our equity securities for the three and six months ended June 30, 2020 were \$1,183.5 million and \$2,011.2 million, respectively, and were primarily due to our investment in Sartorius AG and are recorded in our condensed consolidated statements of income.

We own shares of ordinary voting stock of Sartorius AG (Sartorius), of Goettingen, Germany, a process technology supplier to the biotechnology, pharmaceutical, chemical and food and beverage industries. We own approximately 37% of the outstanding voting shares (excluding treasury shares) of Sartorius as of June 30, 2020. The Sartorius family trust and Sartorius family members hold a controlling interest of the outstanding voting shares. We do not have any representative or designee on Sartorius' board of directors, nor do we have the ability to exercise significant influence over the operating and financial policies of Sartorius.

(d) Available-for-sale investments are included in the following accounts in the condensed consolidated balance sheets (in millions):

	June 30, 2020	December 31, 2019
Short-term investments	\$ 375.4	\$ 402.8
Other investments	0.1	0.1
Total	<u>\$ 375.5</u>	<u>\$ 402.9</u>

(e) Forward foreign exchange contracts in an asset position are included in Other current assets in the condensed consolidated balance sheets.

(f) Forward foreign exchange contracts in a liability position are included in Other current liabilities in the condensed consolidated balance sheets.

(g) Contingent consideration liability is included in the following accounts in the condensed consolidated balance sheets (in millions):

	June 30, 2020	December 31, 2019
Other current liabilities	\$ 2.6	\$ 3.3
Other long-term liabilities	0.1	1.6
Total	<u>\$ 2.7</u>	<u>\$ 4.9</u>

During the first quarter of 2016, we recognized a contingent consideration liability upon our acquisition of a high performance analytical flow cytometer platform from Propel Labs. At the acquisition date, the amount of contingent consideration was determined based on a probability-weighted income approach related to the achievement of sales milestones, ranging from 39% to 20% for the calendar years 2017 through 2020. The sales milestones could potentially range from \$0 to an unlimited amount. In the first quarter of 2020, we paid \$1.3 million per the purchase agreement. The contingent consideration was accrued at its estimated fair value of \$2.0 million as of June 30, 2020.

During the fourth quarter of 2019, we recognized a contingent consideration liability for earn-out targets related to our acquisition of a foreign distributor. The first earn-out payment of \$0.7 million was paid by the acquisition date and the remaining payment is due in the second half of 2020. The maximum earn-out payment due is \$1.4 million. The contingent consideration was accrued at its estimated fair value of \$0.6 million as of June 30, 2020.

During the second quarter of 2020, we recognized a contingent consideration liability upon our acquisition of Celsee, Inc. which represents the future potential earn-out payments of up to \$60.0 million payable in cash upon the achievement of certain net revenues for the period beginning on January 1, 2021 and ending on December 31, 2022.

The fair value of the earn-out as of the Acquisition Date was approximately \$0.1 million which was determined by using a Black-Scholes-Merton option-pricing valuation model that includes significant assumptions and unobservable inputs such as the projected revenues of Celsee over the earn-out period and the probability of the earn-out threshold being met. The fair value of the contingent consideration is remeasured at each reporting period based on the assumptions and inputs on the date of remeasurement. The fair value of the earn-out was approximately \$0.1 million as of June 30, 2020.

The following table provides a reconciliation of the Level 3 contingent consideration liabilities measured at estimated fair value (in millions):

December 31, 2019	\$	4.9
<u>Analytical flow cytometer platform:</u>		
Payment of sales milestone		(1.3)
Decrease in estimated fair value of contingent consideration included in Selling, general and administrative expense		(1.0)
<u>Foreign distributor:</u>		
Change in estimated fair value of contingent consideration included in Selling, general and administrative expense		—
<u>Celsee, Inc.:</u>		
Fair value of contingent consideration		0.1
June 30, 2020	\$	<u>2.7</u>

To estimate the fair value of Level 2 debt securities as of June 30, 2020, our primary pricing provider uses Reuters as the primary pricing source. Our pricing process allows us to select a hierarchy of pricing sources for securities held. If Reuters does not price a Level 2 security that we hold, then the pricing provider will utilize our custodian supplied pricing as the secondary pricing source.

For all commercial paper as of June 30, 2020, our primary pricing provider uses Reuters in the hierarchy to determine pricing.

Available-for-sale investments consist of the following (in millions):

	June 30, 2020				
	Amortized Cost	Unrealized Gains	Unrealized Losses	Allowances for Credit Losses	Fair Value
Short-term investments:					
Corporate debt securities	\$ 171.0	\$ 3.0	\$ (0.1)	\$ —	\$ 173.9
Municipal obligations	14.6	0.2	—	—	14.8
Asset-backed securities	60.6	0.5	(0.1)	—	61.0
U.S. government sponsored agencies	115.2	2.8	—	—	118.0
Foreign government obligations	5.5	0.1	—	—	5.6
Other foreign obligations	2.1	—	—	—	2.1
	369.0	6.6	(0.2)	—	375.4
Long-term investments:					
Asset-backed securities	0.1	—	—	—	0.1
	0.1	—	—	—	0.1
Total	\$ 369.1	\$ 6.6	\$ (0.2)	\$ —	\$ 375.5

The following is a summary of the amortized cost and estimated fair value of our debt securities at June 30, 2020 by contractual maturity date (in millions):

	Amortized Cost	Estimated Fair Value
Mature in less than one year	\$ 187.8	\$ 188.7
Mature in one to five years	128.6	131.5
Mature in more than five years	52.7	55.3
Total	\$ 369.1	\$ 375.5

Available-for-sale investments consist of the following (in millions):

	December 31, 2019			
	Amortized Cost	Unrealized Gains	Unrealized Losses	Estimated Fair Value
Short-term investments:				
Corporate debt securities	\$ 203.2	\$ 1.4	\$ (0.1)	\$ 204.5
Municipal obligations	11.5	0.1	—	11.6
Asset-backed securities	72.7	0.2	(0.1)	72.8
U.S. government sponsored agencies	105.6	0.7	(0.2)	106.1
Foreign government obligations	4.7	—	—	4.7
Other foreign obligations	3.1	—	—	3.1
	400.8	2.4	(0.4)	402.8
Long-term investments:				
Asset-backed securities	0.1	—	—	0.1
	0.1	—	—	0.1
Total	\$ 400.9	\$ 2.4	\$ (0.4)	\$ 402.9

The following is a summary of investments with gross unrealized losses and the associated fair value (in millions):

Description of securities:	June 30, 2020					
	Less than 12 months		Greater than 12 months		Total	
	Fair Value	Unrealized Losses	Fair Value	Unrealized Losses	Fair Value	Unrealized Losses
Corporate debt securities	\$ 23.2	\$ 0.1	\$ —	\$ —	\$ 23.2	\$ 0.1
Asset-backed securities	12.7	0.1	—	—	12.7	0.1
Total	\$ 35.9	\$ 0.2	\$ —	\$ —	\$ 35.9	\$ 0.2

Description of securities:	December 31, 2019					
	Less than 12 months		Greater than 12 months		Total	
	Fair Value	Unrealized Losses	Fair Value	Unrealized Losses	Fair Value	Unrealized Losses
Corporate debt securities	\$ 46.5	\$ 0.1	\$ 2.1	\$ —	\$ 48.6	\$ 0.1
Asset-backed securities	17.9	—	7.0	0.1	24.9	0.1
U.S government sponsored agencies	27.5	0.2	10.8	—	38.3	0.2
Total	\$ 91.9	\$ 0.3	\$ 19.9	\$ 0.1	\$ 111.8	\$ 0.4

The unrealized losses of \$0.2 million as of June 30, 2020 are due to a number of factors, including changes in interest rates, changes in economic conditions and changes in market outlook for various industries, among others.

As outlined in Note 1, we adopted ASU 2016-13 as of January 1, 2020. ASU 2016-13 replaced the incurred loss approach with an expected loss model for instruments measured at amortized cost and requires entities to record allowances for available-for-sale debt securities rather than reduce the carrying amount as done under the former other-than-temporary impairment model.

The factors we considered in our evaluation included the extent to which the fair value is less than the amortized cost basis, adverse conditions specifically related to the debt security, an industry or geographic area, and any changes in the rating of a security by a rating agency. Credit loss impairments are limited to the amount that the fair value of an instrument is less than its amortized cost basis.

At June 30, 2020, we have concluded that all payments related to our available-for-sale investments are expected to be made in full and on time at par value. The diminution of value in the intervening period is due to market conditions such as illiquidity and interest rate movements and not due to significant, inherent credit concerns surrounding the issuer. As a result, we have no allowances for credit losses on our available-for-sale investments portfolio as of June 30, 2020.

Included in Other current assets are \$1.7 million and \$2.0 million of interest receivable as of June 30, 2020 and December 31, 2019, respectively, primarily associated with securities in our available-for-sale investments portfolio. Associated interest on these securities is typically payable semi-annually. Due to the short-term nature of our interest receivable asset, we have made an accounting policy election not to measure an allowance for credit losses for accrued interest receivable. We consider any uncollected interest receivable that is overdue greater than one year to be impaired for purposes of write-off. For the three and six months ended June 30, 2020, we have not written-off any uncollected interest receivable.

As part of distributing our products, we regularly enter into intercompany transactions. We enter into forward foreign exchange contracts to manage foreign exchange risk of future movements in foreign exchange rates that affect foreign currency denominated intercompany receivables and payables. We do not use derivative financial instruments for speculative or trading purposes. We do not seek hedge accounting treatment for these contracts. As a result, these contracts, generally with maturity dates of 90 days or less and denominated primarily in currencies of industrial countries, are recorded at their fair value at each balance sheet date. The notional principal amounts provide one measure of the transaction volume outstanding as of June 30, 2020 and do not represent the amount of Bio-Rad's exposure to loss. The estimated fair value of these contracts was derived using the spot rates from Reuters on the last business day of the quarter and the points provided by counterparties. The resulting gains or losses offset exchange gains or losses on the related receivables and payables, both of which are included in Foreign currency exchange losses, net in the condensed consolidated statements of income.

The following is a summary of our forward foreign exchange contracts (in millions):

	June 30, 2020
Contracts maturing in July through September 2020 to sell foreign currency:	
Notional value	\$ 65.0
Unrealized gain or loss	\$ —
Contracts maturing in July through September 2020 to purchase foreign currency:	
Notional value	\$ 226.9
Unrealized gain	\$ 0.3

The estimated fair value of our current maturities of long-term debt, excluding leases, as of June 30, 2020 and December 31, 2019 that is not recognized at fair value in the condensed consolidated balance sheets has an estimated fair value based on quoted market prices for the same or similar issues.

The estimated fair value of our long-term debt and the level of the fair value hierarchy within which the fair value measurement is categorized are as follows (in millions):

	June 30, 2020			December 31, 2019		
	Carrying Amount	Estimated Fair Value	Fair Value Hierarchy Level	Carrying Amount	Estimated Fair Value	Fair Value Hierarchy Level
Current maturities of long-term debt, excluding leases	\$ 424.7	\$ 432.1	2	\$ 424.4	\$ 435.5	2

Included in Other Investments in the condensed consolidated balance sheets are investments without readily determinable fair value measured at cost with adjustments for observable price changes in price or impairments. The carrying value of these investments was \$0.5 million and \$0.3 million as of June 30, 2020 and December 31, 2019, respectively.

4. **GOODWILL AND OTHER PURCHASED INTANGIBLE ASSETS**

Changes to goodwill by segment were as follows (in millions):

	Life Science	Clinical Diagnostics	Total
Balances as of December 31, 2019:			
Goodwill	\$ 250.1	\$ 349.2	\$ 599.3
Accumulated impairment losses	(41.8)	(293.4)	(335.2)
Goodwill, net	208.3	55.8	264.1
Acquisitions (*)	29.4	—	29.4
Other adjustments (**)	(2.0)	—	(2.0)
Balances as of June 30, 2020:			
Goodwill	277.5	349.2	626.7
Accumulated impairment losses	(41.8)	(293.4)	(335.2)
Goodwill, net	\$ 235.7	\$ 55.8	\$ 291.5

* Acquisitions consist of \$29.4 million recorded for Celsee, Inc. (see Note 2, "Acquisitions and Divestitures").

** Goodwill decreased by \$2.0 million due to the release from an escrow account setup during our acquisition of a small U.S. private company, which should have been classified as a prepaid asset in its opening balance sheet as of our March 2, 2019 acquisition date.

Information regarding our identifiable purchased intangible assets with definite and indefinite lives is as follows (in millions):

	June 30, 2020			
	Weighted-Average Remaining Amortization Period (years)	Purchase Price	Accumulated Amortization	Net Carrying Amount
Customer relationships/lists	5.85	\$ 109.9	\$ (77.4)	\$ 32.5
Know how	5.25	188.7	(165.3)	23.4
Developed product technology	14.40	213.0	(97.6)	115.4
Licenses	8.25	66.0	(36.2)	29.8
Tradenames	8.17	6.4	(3.8)	2.6
Covenants not to compete	4.30	4.5	(1.6)	2.9
Other	—	0.1	(0.1)	—
Total definite-lived intangible assets		588.6	(382.0)	206.6
In-process research and development		4.8	—	4.8
Total purchased intangible assets		\$ 593.4	\$ (382.0)	\$ 211.4

December 31, 2019

	Weighted-Average Remaining Amortization Period (years)	Purchase Price	Accumulated Amortization	Net Carrying Amount
Customer relationships/lists	6.36	\$ 107.2	\$ (74.3)	\$ 32.9
Know how	5.71	188.5	(162.6)	25.9
Developed product technology	8.31	144.2	(93.9)	50.3
Licenses	8.74	76.0	(44.4)	31.6
Tradenames	8.50	6.4	(3.6)	2.8
Covenants not to compete	6.01	3.2	(1.4)	1.8
Other	—	0.1	(0.1)	—
Total definite-lived intangible assets		525.6	(380.3)	145.3
In-process research and development		0.2	—	0.2
Total purchased intangible assets		<u>\$ 525.8</u>	<u>\$ (380.3)</u>	<u>\$ 145.5</u>

Amortization expense related to purchased intangible assets is as follows (in millions):

	Three Months Ended June 30,		Six Months Ended June 30,	
	2020	2019	2020	2019
Amortization expense	\$ 7.2	\$ 5.6	\$ 13.1	\$ 11.1

5. SUPPLEMENTAL CASH FLOW INFORMATION

The reconciliation of net income to net cash provided by operating activities is as follows (in millions):

	Six Months Ended	
	June 30, 2020	June 30, 2019
Net income	\$ 1,652.3	\$ 1,464.0
Adjustments to reconcile net income to net cash provided by operating activities:		
Depreciation and amortization	68.3	66.1
Reduction in the carrying amount of right-of-use assets	18.7	19.8
Share-based compensation	18.5	16.3
Gains on dispositions of securities	(0.6)	—
Other-than-temporary impairment losses on investment	4.6	1.6
Changes in fair market value of equity securities	(2,011.2)	(1,775.6)
Losses on dispositions of fixed assets	—	0.2
Gain on divestiture of a division	(11.7)	—
Changes in fair value of contingent consideration	(1.1)	(0.6)
Payments for operating lease liabilities	(18.3)	(18.4)
Decrease in accounts receivable	24.7	14.6
Increase in inventories	(79.8)	(8.0)
(Increase) decrease in other current assets	(18.6)	37.6
Increase (decrease) in accounts payable and other current liabilities	29.7	(23.0)
Increase in income taxes payable	27.8	8.6
Increase in deferred income taxes	437.4	395.8
Increase in other long term liabilities	15.5	4.4
Other	(1.3)	(5.1)
Net cash provided by operating activities	<u>\$ 154.9</u>	<u>\$ 198.3</u>
Non-cash investing activities:		
Purchased property, plant and equipment	<u>\$ 5.8</u>	<u>\$ 6.2</u>
Purchased marketable securities and investments	<u>\$ 0.1</u>	<u>\$ 1.8</u>

6. LONG-TERM DEBT

The principal components of long-term debt are as follows (in millions):

	June 30, 2020	December 31, 2019
4.875% Senior Notes due 2020 principal amount	\$ 425.0	\$ 425.0
Less unamortized discount and debt issuance costs	(0.3)	(0.6)
4.875% Senior Notes less unamortized discount and debt issuance costs	424.7	424.4
Finance leases and other debt	14.0	15.4
	438.7	439.8
Less current maturities	(426.5)	(426.2)
Long-term debt	\$ 12.2	\$ 13.6

Senior Notes due 2020

In December 2010, Bio-Rad sold \$425.0 million principal amount of Senior Notes due December 2020 (4.875% Notes). The sale yielded net cash proceeds of \$422.6 million at an effective rate of 4.946%. The 4.875% Notes pay a fixed rate of interest of 4.875% per year. We have the option to redeem any or all of the 4.875% Notes at any time at a redemption price of 100% of the principal amount (plus a specified make-whole premium as defined in the indenture governing the 4.875% Notes) and accrued and unpaid interest thereon to the redemption date. Our obligations under the 4.875% Notes are not secured and rank equal in right of payment with all of our existing and future unsubordinated indebtedness. Certain covenants apply at each year end to the 4.875% Notes including limitations on the following: liens, sale and leaseback transactions, mergers, consolidations or sales of assets and other covenants. We were in compliance with these covenants as of June 30, 2020. There are no restrictive covenants relating to total indebtedness, interest coverage, stock repurchases, recapitalizations, dividends and distributions to shareholders or current ratios.

Credit Agreement

In April 2019, Bio-Rad entered into a \$200.0 million unsecured revolving credit facility ("Credit Agreement"). Borrowings under the Credit Agreement are on a revolving basis and can be used to make permitted acquisitions, for working capital and for other general corporate purposes. We had no outstanding borrowings under the Credit Agreement as of June 30, 2020; however, \$0.2 million was utilized for domestic standby letters of credit that reduced our borrowing availability as of June 30, 2020. The Credit Agreement matures in April 2024. If we had borrowed against our Credit Agreement, the borrowing rate would have been 1.425% at June 30, 2020, which is based on the 3-month LIBOR.

The Credit Agreement requires Bio-Rad to comply with certain financial ratios and covenants, among other things. These ratios and covenants include a leverage ratio test and an interest coverage test, as well as restrictions on our ability to declare or pay dividends, incur debt, guarantee debt, enter into transactions with affiliates, merge or consolidate, sell assets, make investments and create liens. We were in compliance with all of these ratios and covenants as of June 30, 2020.

7. ACCUMULATED OTHER COMPREHENSIVE INCOME (LOSS)

Accumulated other comprehensive income included in our condensed consolidated balance sheets consists of the following components (in millions):

	Foreign currency translation adjustments	Foreign other post-employment benefits adjustments	Net unrealized holding gains on available-for-sale investments	Total accumulated other comprehensive income (loss)
Balances as of January 1, 2020:	\$ (72.4)	\$ (22.2)	\$ 7.2	\$ (87.4)
Other comprehensive income (loss), before reclassifications	22.0	(0.3)	4.7	26.4
Amounts reclassified from Accumulated other comprehensive income	—	0.7	(0.6)	0.1
Income tax effects	0.4	0.2	(0.9)	(0.3)
Other comprehensive income, net of income taxes	22.4	0.6	3.2	26.2
Balances as of June 30, 2020:	\$ (50.0)	\$ (21.6)	\$ 10.4	\$ (61.2)
	Foreign currency translation adjustments	Foreign other post-employment benefits adjustments	Net unrealized holding gains on available-for-sale investments	Total accumulated other comprehensive income (loss)
Balances as of January 1, 2019:	\$ (35.5)	\$ (14.8)	\$ 3.3	\$ (47.0)
Other comprehensive (loss) income, before reclassifications	(6.5)	(0.3)	4.4	(2.4)
Amounts reclassified from Accumulated other comprehensive income	—	0.4	(0.1)	0.3
Income tax effects	—	—	(0.5)	(0.5)
Other comprehensive (loss) income, net of income taxes	(6.5)	0.1	3.8	(2.6)
Balances as of June 30, 2019:	\$ (42.0)	\$ (14.7)	\$ 7.1	\$ (49.6)

The reclassification adjustments are calculated using the specific identification method.

The impact to income before taxes for amounts reclassified out of Accumulated other comprehensive income into the condensed consolidated statements of income, with presentation location, were as follows (in millions):

	Three Months Ended June 30,		Six Months Ended June 30,		Location
Components of Comprehensive income	2020	2019	2020	2019	
Amortization of foreign other post-employment benefit items	\$ (0.4)	\$ (0.2)	\$ (0.7)	\$ (0.4)	Other (income) expense, net
Net holding gains on equity securities and available-for-sale investments	\$ 0.2	\$ 0.1	\$ 0.6	\$ 0.1	Other (income) expense, net

8. EARNINGS PER SHARE

Basic earnings per share is computed by dividing net income attributable to Bio-Rad by the weighted average number of common shares outstanding for that period. Diluted earnings per share takes into account the effect of dilutive instruments, such as stock options and restricted stock, and uses the average share price for the period in determining the number of potential common shares that are to be added to the weighted average number of shares outstanding. Potential common shares are excluded from the diluted earnings per share calculation if the effect of including such securities would be anti-dilutive.

The weighted average number of common shares outstanding used to calculate basic and diluted earnings per share, and the anti-dilutive shares that are excluded from the diluted earnings per share calculation are as follows (in thousands):

	Three Months Ended June 30,		Six Months Ended June 30,	
	2020	2019	2020	2019
Basic weighted average shares outstanding	29,652	29,814	29,759	29,807
Effect of potentially dilutive stock options and restricted stock awards	406	340	372	318
Diluted weighted average common shares	30,058	30,154	30,131	30,125
Anti-dilutive shares	3	41	40	217

9. OTHER INCOME AND EXPENSE, NET

Other (income) expense, net includes the following components (in millions):

	Three Months Ended June 30,		Six Months Ended June 30,	
	2020	2019	2020	2019
Interest and investment income	\$ (10.0)	\$ (3.8)	\$ (12.8)	\$ (23.3)
Net realized gains on investments	(0.2)	—	(0.6)	—
Other-than-temporary impairment losses on investments	4.6	—	4.6	1.6
Gain on divestiture of a division	(11.7)	—	(11.7)	—
Other expense (income)	0.1	(0.1)	—	(0.9)
Other (income) expense, net	\$ (17.2)	\$ (3.9)	\$ (20.5)	\$ (22.6)

Other-than-temporary impairment losses on equity method investments were recorded in light of the investees' financial condition.

10. INCOME TAXES

Our effective income tax rate was 22.4% and 22.2% for the three months ended June 30, 2020 and 2019, respectively. Our effective income tax rate was 23.0% and 22.8% for the six months ended June 30, 2020 and 2019, respectively.

The realization of deferred tax assets is dependent upon the generation of sufficient taxable income of the appropriate character in future periods. We regularly assess our ability to realize our deferred tax assets and establish a valuation allowance if it is more likely than not that some portion, or all, of our deferred tax assets will not be realized. In assessing the realizability of our deferred tax assets, we weigh all available positive and negative evidence. Due to the weight of objectively verifiable negative evidence, we believe that it is more likely than not that our California and certain foreign deferred tax assets will not be realized as of June 30, 2020, and have maintained a valuation allowance on such deferred tax assets.

Our income tax returns are routinely audited by U.S. federal, state and foreign tax authorities. We are currently under examination by many of these tax authorities. There are differing interpretations of tax laws and regulations, and as a result, significant disputes may arise with these tax authorities involving issues around the timing and amount of deductions and allocations of income among various tax jurisdictions. We evaluate our exposures associated with our tax filing positions on a quarterly basis.

We record liabilities for unrecognized tax benefits related to uncertain tax positions. We do not believe any currently pending uncertain tax positions will have a material adverse effect on our condensed consolidated financial statements, although an adverse resolution of one or more of these uncertain tax positions in any period may have a material impact on the results of operations for that period.

Our gross unrecognized tax benefits were \$53.0 million and \$39.2 million as of June 30, 2020 and December 31, 2019, respectively. The net increase to our gross unrecognized tax benefits of \$13.8 million is primarily the result of a reassessment of a tax position taken in a prior period as a result of new information obtained during the current year.

As of June 30, 2020, based on the expected outcome of certain examinations or as a result of the expiration of statutes of limitations for certain jurisdictions, we believe that within the next 12 months it is reasonably possible that our previously unrecognized tax benefits could decrease by up to \$4.5 million primarily related to various foreign jurisdictions.

11. SEGMENT INFORMATION

Information regarding operating segments for the three months ended June 30, 2020 and 2019 is as follows (in millions):

			Life Science	Clinical Diagnostics	Other Operations
Segment net sales	2020	\$	252.1	\$ 283.2	\$ 1.6
	2019	\$	212.4	\$ 357.1	\$ 3.1
Segment net profit (loss)	2020	\$	32.7	\$ 16.6	\$ (0.1)
	2019	\$	11.4	\$ 42.4	\$ (0.5)

Information regarding operating segments for the six months ended June 30, 2020 and 2019 is as follows (in millions):

		Life Science	Clinical Diagnostics	Other Operations
Segment net sales	2020	\$ 479.2	\$ 623.4	\$ 5.9
	2019	\$ 428.1	\$ 691.1	\$ 7.4
Segment net profit (loss)	2020	\$ 58.0	\$ 62.8	\$ 0.7
	2019	\$ 34.3	\$ 73.2	\$ (0.6)

Segment results are presented in the same manner as we present our operations internally to make operating decisions and assess performance. Net corporate operating and other expense for segment results consists of receipts and expenditures that are not the primary responsibility of segment operating management and therefore are not allocated to the segments for performance assessment by our chief operating decision maker. Interest expense is charged to segments based on the carrying amount of inventory and receivables employed by that segment. The following reconciles total segment profit to consolidated income before income taxes (in millions):

	Three Months Ended June 30,		Six Months Ended June 30,	
	2020	2019	2020	2019
Total segment profit	\$ 49.2	\$ 53.3	\$ 121.5	\$ 106.9
Foreign currency exchange losses, net	(0.8)	(1.2)	(1.7)	(2.5)
Net corporate operating and other expense not allocated to segments	(3.2)	(2.8)	(6.9)	(5.7)
Change in fair market value of equity securities	1,183.5	716.4	2,011.2	1,775.6
Other income (expense), net	17.2	3.9	20.5	22.6
Consolidated income before income taxes	\$ 1,245.9	\$ 769.6	\$ 2,144.6	\$ 1,896.9

12. LEGAL PROCEEDINGS

We are a party to various claims, legal actions and complaints arising in the ordinary course of business. We cannot at this time reasonably estimate a range of exposure, if any, of the potential liability with respect to these matters. While we do not believe, at this time, that any ultimate liability resulting from any of these other matters will have a material adverse effect on our results of operations, financial position or liquidity, we cannot give any assurance regarding the ultimate outcome of these other matters and their resolution could be material to our operating results for any particular period, depending on the level of income for the period.

13. RESTRUCTURING COSTS

In December 2018, we announced the closure of a small manufacturing facility outside Paris, France. From December 2018 to June 30, 2020, total expenses were \$4.0 million. Restructuring charges for the facility closure are included in our Clinical Diagnostics segment's results of operations. The liability of \$2.2 million as of June 30, 2020 was recorded in Accrued payroll and employee benefits in the condensed consolidated balance sheets.

The following table summarizes the activity for the facility closure restructuring reserves for severance and exit costs (in millions):

Balances as of December 31, 2019:	\$	3.2
Cash payments		(1.0)
Balances as of June 30, 2020:	\$	2.2

In November 2019, we announced our strategy-driven restructuring plan. We expect that a significant portion of the net savings resulting from this restructuring plan will be repurposed in alignment with our portfolio strategy.

The restructuring plan includes a workforce reduction in Europe, the United States and Canada, and is expected to be incurred through 2020. The liability of \$9.8 million as of June 30, 2020 was recorded in Accrued payroll and employee benefits in the condensed consolidated balance sheets. The amounts reflected in Cost of goods sold, Selling, general and administrative expense and Research and development expense were \$(1.1) million and \$(3.5) million in the condensed consolidated statements of income for the three and six months ended June 30, 2020, respectively. From November 2019 to June 30, 2020, total expenses were \$21.8 million.

The following table summarizes the activity of our European and North American reorganization restructuring reserves for severance (in millions):

	Life Science	Clinical Diagnostics	Total
Balances as of December 31, 2019:	\$ 6.2	\$ 19.1	\$ 25.3
Adjustment to expense	(0.4)	(3.1)	(3.5)
Cash payments	(3.5)	(8.4)	(11.9)
Foreign currency translation gains	—	(0.1)	(0.1)
Balances as of June 30, 2020:	\$ 2.3	\$ 7.5	\$ 9.8

In June 2020, we announced a restructuring plan to consolidate certain finance and administrative activities in Europe and the United States. The restructuring plan is expected to be completed by March 2021. The liability of \$3.8 million as of June 30, 2020 was recorded in Accrued payroll and employee benefits in the condensed consolidated balance sheets. The amounts recorded were reflected in Selling, general and administrative expense of \$3.8 million for the three and six months ended June 30, 2020.

The following table summarizes the restructuring activities related to the finance and administrative reorganization (in millions):

	Life Science	Clinical Diagnostics	Total
Balances as of December 31, 2019:	\$ —	\$ —	\$ —
Charged to expense	1.5	2.3	3.8
Balances as of June 30, 2020:	\$ 1.5	\$ 2.3	\$ 3.8

14. LEASES: FINANCE, AND OPERATING WHERE WE ACT AS LESSEE

For operating leases where we act as lessor in reagent rental agreements, see Note 1. We have operating leases and to a lesser extent finance leases, for buildings, vehicles and equipment. For operating leases, we have elected not to separate lease and non-lease components for buildings, vehicles and equipment. Our leases have remaining lease terms of 1 year to 19 years, which includes our determination to exercise renewal options.

We determine if an arrangement is a lease at inception. Right-of-use (ROU) assets represent our right to use an underlying asset for the lease term and lease liabilities represent our obligation to make lease payments arising from the lease. Operating lease ROU assets and liabilities are recognized at the commencement date based on the present value of lease payments over the lease term. As our leases do not provide an implicit rate, we use our incremental borrowing rate based on the information available at the commencement date in determining the present value of lease payments. Operating lease ROU assets also include any lease payments made and excludes lease incentives. Our lease terms may include options to extend or terminate the lease. For purposes of determining the lease term

used in the measurement of operating lease ROU assets and operating lease liabilities, we include the noncancellable period of the lease together with those periods covered by the option to extend the lease if we are reasonably certain to exercise that option, the periods covered by an option to terminate the lease if we are reasonably certain not to exercise that option, and the periods covered by the option to extend (or to not terminate) the lease in which exercise of the option is controlled by the lessor. Lease expense for lease payments is recognized on a straight-line basis over the lease term.

The components of lease expense were as follows (in millions):

	Three Months Ended		Six Months Ended	
	June 30,		June 30,	
	2020	2019	2020	2019
Operating lease cost	\$ 12.4	\$ 12.1	\$ 25.0	\$ 24.5
Finance lease cost:				
Amortization of right-of-use assets	\$ 0.1	\$ 0.2	\$ 0.3	\$ 0.4
Interest on lease liabilities	0.2	0.3	0.4	0.5
Total finance lease cost	\$ 0.3	\$ 0.5	\$ 0.7	\$ 0.9
Sublease income	\$ 0.7	\$ 0.7	\$ 1.5	\$ 1.5

The sublease is for a building with a term that ends in 2025, with no options to extend or renew.

Operating lease cost includes original reduction in the carrying amount of ROU assets, the impact of remeasurements, modifications, impairments and abandonments.

Our short-term leases are expensed as incurred, reflecting leases with a lease term of one year or less, and are not significant for both the three and six months ended June 30, 2020 and 2019. Operating lease variable cost is primarily comprised of reimbursed actual common area maintenance, property taxes and insurance, which are immaterial for both the three and six months ended June 30, 2020 and 2019.

Supplemental cash flow information related to leases was as follows (in millions):

	Three Months Ended		Six Months Ended	
	June 30,		June 30,	
	2020	2019	2020	2019
Cash paid for amounts included in the measurement of lease liabilities:				
Operating cash flows from operating leases	\$ 10.9	\$ 11.3	\$ 22.2	\$ 22.9
Operating cash flows from finance leases	\$ 0.2	\$ 0.3	\$ 0.4	\$ 0.5
Financing cash flows from finance leases	\$ 0.1	\$ 0.1	\$ 0.3	\$ 0.4
Right-of-use assets obtained in exchange for new lease obligations:				
Operating leases	\$ 2.2	\$ 4.5	\$ 7.6	\$ 5.8
Finance leases	\$ 0.1	\$ —	\$ 0.1	\$ —

Supplemental balance sheet information related to leases was as follows (in millions):

	June 30, 2020	December 31, 2019
Operating Leases		
Operating lease right-of-use assets	\$ 197.6	\$ 201.9
Current operating lease liabilities	\$ 33.9	\$ 35.4
Operating lease liabilities	173.1	176.0
Total operating lease liabilities	\$ 207.0	\$ 211.4

Finance leases are included in Property, plant and equipment, Current maturities of long-term debt, and Long-term debt, net of current maturities.

	June 30, 2020	December 31, 2019
Finance Leases		
Property, plant and equipment, gross	\$ 11.5	\$ 11.4
Less: accumulated depreciation and amortization	(4.4)	(4.2)
Property, plant and equipment, net	\$ 7.1	\$ 7.2
Current maturities of long-term debt and notes payable	\$ 0.5	\$ 0.5
Long-term debt, net of current maturities	11.1	11.2
Total finance lease liabilities	\$ 11.6	\$ 11.7

	June 30, 2020	December 31, 2019
Weighted Average Remaining Lease Term		
Operating leases - in years	9	9
Finance leases - in years	18	18
Weighted Average Discount Rate		
Operating leases	4.1 %	4.2 %
Finance leases	6.6 %	6.5 %

Maturities of lease liabilities were as follows (in millions):

Year Ending December 31,	Operating Leases	Finance Leases
2020 (excluding the six months ended June 30, 2020)	\$ 21.0	\$ 1.3
2021	38.7	1.2
2022	31.7	1.2
2023	26.8	1.1
2024	23.6	1.1
Thereafter	107.3	14.6
Total lease payments	249.1	20.5
Less imputed interest	(42.1)	(8.9)
Total	\$ 207.0	\$ 11.6

As of June 30, 2020, operating leases that have not commenced are not material.

15. SUBSEQUENT EVENT

In November 2017, the Board of Directors authorized a new share repurchase program, granting Bio-Rad authority to repurchase, on a discretionary basis, up to \$250.0 million of outstanding shares of our common stock ("Share Repurchase Program"). As of June 30, 2020, \$73.1 million remained under the Share Repurchase Program. In July 2020, the Board of Directors authorized increasing the Share Repurchase Program to allow the Company to repurchase up to an additional \$200.0 million of stock.

Repurchases under the Share Repurchase Program may be made at management's discretion from time to time on the open market or through privately negotiated transactions. The authorization has no expiration.

Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations

This discussion should be read in conjunction with the information contained in both our consolidated financial statements for the year ended December 31, 2019 and the condensed consolidated financial statements for the three and six months ended June 30, 2020.

Overview. We are a multinational manufacturer and worldwide distributor of our own life science research and clinical diagnostics products. Our business is organized into two reportable segments, Life Science and Clinical Diagnostics, with the mission to provide scientists with specialized tools needed for biological research and clinical diagnostics.

We sell more than 9,000 products and services to a diverse client base comprised of scientific research, healthcare, education and government customers worldwide. We do not disclose quantitative information about our different products and services as it is impractical to do so based primarily on the numerous products and services that we sell and the global markets that we serve.

We manufacture and supply our customers with a range of reagents, apparatus and equipment to separate complex chemical and biological materials and to identify, analyze and purify components. Because our customers require standardization for their experiments and test results, much of our revenues are recurring.

We are impacted by the support of many governments for both research and healthcare. The current global economic outlook is still uncertain as the need to control government social spending by many governments limits opportunities for growth. Adding to this uncertainty was the referendum in the United Kingdom to withdraw from the European Union. Approximately 39% of our year-to-date 2020 consolidated net sales are derived from the United States and approximately 61% are derived from international locations, with Europe being our largest international region. The international sales are largely denominated in local currencies such as the Euro, Swiss Franc, Japanese Yen, Chinese Yuan and British Sterling. As a result, our consolidated net sales expressed in dollars benefit when the U.S. dollar weakens and suffer when the dollar strengthens. When the U.S. dollar strengthens, we benefit from lower cost of sales from our own international manufacturing sites as well as non-U.S. suppliers, and from lower international operating expenses. We regularly discuss our changes in revenue and expense categories in terms of both changing foreign exchange rates and in terms of a currency neutral basis, if notable, to explain the impact currency has on our results.

COVID-19

The full impact of the COVID-19 pandemic is inherently uncertain at the time of this report. The COVID-19 pandemic has negatively impacted and, we expect, will continue to disrupt our business operations, impacting our financial conditions and results of operations in a variety of ways. Governments in the countries in which we operate are passing legislation intended to alleviate the economic burdens of the COVID-19 pandemic. We are continuing to evaluate the impact of these governmental incentives to our customers, operations and financial condition. For more discussions on COVID-19, please see Item 1A. Risk Factors to this Form 10-Q.

Cyberattack

As we previously disclosed on December 9, 2019 on a Form 8-K filed with the Securities and Exchange Commission (SEC), we detected a cyberattack on our network on the evening of December 5, 2019 PST and immediately took affected systems offline as part of our comprehensive response to contain the activity (“December 2019 Cyberattack”). The virus was targeted at Windows-based systems and did not attack our global ERP system (SAP) and other non-Windows-based systems. Critical systems were back online within a few days of the incident. As part of our in-depth investigation into this incident, we engaged outside cyber security experts to assist us with investigation and remediation efforts. To date, we have found no evidence of unauthorized transfer or misuse of personal data, and there is no indication that customer systems were affected.

We have insurance coverage for costs resulting from cyberattacks. We have not recorded any estimated proceeds resulting from an insurance claim regarding this incident as we have not yet settled with the insurance provider on the nature of the costs that are eligible and the extent of coverage. We did not pay a ransom in connection with this incident.

Acquisition

On April 1, 2020, we acquired all equity interests of Celsee, Inc. for total consideration of \$99.5 million, including the estimated fair value of contingent consideration. The contingent consideration of up to \$60.0 million is payable in cash, upon the achievement of certain net revenues for the period beginning on January 1, 2021 and ending on December 31, 2022.

Celsee is a manufacturer of instruments and consumables for the isolation, detection, and analysis of single cells. We believe this acquisition will complement our Life Science product offerings. The acquisition was included in our Life Science segment's results of operations from the acquisition date.

Informatics Divestiture

In April 2020, we received \$12.2 million for the sale of our Informatics division, which focused on providing and developing comprehensive, high-quality spectral databases and associated software. The division was part of our Other Operations segment. In connection with this sale, we recorded an \$11.7 million gain in Other (income) expense, net, in the condensed consolidated statements of income for the three months ended June 30, 2020.

Restructuring

In June 2020, we announced a restructuring plan to consolidate certain finance and administrative activities in Europe and the United States. The restructuring plan is expected to be completed by March 2021. The liability of \$3.8 million as of June 30, 2020 was recorded in Accrued payroll and employee benefits in the condensed consolidated balance sheets. The amounts recorded were reflected in Selling, general and administrative expense of \$3.8 million for the three and six months ended June 30, 2020.

Results of Operations

The following shows cost of goods sold, gross profit, expense items, change in fair market value of equity securities, and net income as a percentage of net sales:

	Three Months Ended June 30,		Six Months Ended June 30,	
	2020	2019	2020	2019
Net sales	100.0 %	100.0 %	100.0 %	100.0 %
Cost of goods sold	45.4	46.3	44.9	45.0
Gross profit	54.6	53.7	55.1	55.0
Selling, general and administrative expense	35.3	35.1	34.5	36.3
Research and development expense	9.7	8.8	9.1	8.7
Change in fair market value of equity securities	220.4	125.1	181.4	157.6
Net income	180.0	104.6	149.1	129.9

Critical Accounting Policies and Estimates

An accounting policy is deemed to be critical if it requires an accounting estimate to be made based on assumptions about matters that are highly uncertain at the time the estimate is made, if different estimates reasonably could have been used, or if changes in the estimate that are reasonably likely to occur could materially impact the financial statements. Management believes that there have been no significant changes during the six months ended June 30, 2020 to the items that we disclosed as our critical accounting policies and estimates in Management's Discussion and Analysis of Financial Condition and Results of Operations in our Annual Report on Form 10-K for the fiscal year ended December 31, 2019.

Other than the recent accounting pronouncement adoptions as discussed in Note 1 to the condensed consolidated financial statements, there have been no substantial changes in our significant accounting policies during the six months ended June 30, 2020, compared with the significant accounting policies described in our Annual Report on Form 10-K for the year ended December 31, 2019.

Three Months Ended June 30, 2020 Compared to Three Months Ended June 30, 2019

Results of Operations -- Sales, Margins and Expenses

Percentage sales growth in currency neutral amounts are calculated by translating prior period sales in each local currency using the current period monthly average foreign exchange rates for that currency and comparing that to current period sales.

Net sales (sales) for the second quarter of 2020 were \$536.9 million compared to \$572.6 million in the second quarter of 2019, a decrease of 6.2%. Excluding the impact of foreign currency, second quarter 2020 sales decreased by approximately 4.4% compared to the same period in 2019. Currency neutral sales decreased in the Americas and Europe, partially offset with an increase in Asia.

The Life Science segment sales for the second quarter of 2020 were \$252.1 million, an increase of 18.7% compared to the same period last year. On a currency neutral basis, sales increased 20.0% compared to the second quarter in 2019. The currency neutral sales increase was primarily driven by growth in our PCR, Droplet Digital PCR, and Process Media products. Currency neutral sales increases occurred in Asia and Europe. Sales for the second quarter of 2020 benefited from product lines used for COVID-19 testing and research, offsetting a global slowness due to temporary lab closures related to the COVID-19 pandemic. Sales in North America and sales in other product lines were negatively impacted due to customer lab closures resulting from the COVID-19 pandemic.

The Clinical Diagnostics segment sales for the second quarter of 2020 were \$283.2 million, a decrease of 20.7% compared to the same period last year. On a currency neutral basis, sales decreased 18.7% compared to the second quarter in 2019. The currency neutral sales decrease was across all regions and product lines, and was impacted negatively due to COVID-19.

Consolidated gross margins were 54.6% for the second quarter of 2020 compared to 53.7% for the second quarter of 2019. Life Science segment gross margins for the second quarter of 2020 increased from the prior year period by approximately 0.9 percentage points primarily due to more favorable product mix related to the PCR, Droplet Digital PCR, and Process Media products, partially offset by a customs duty charge of \$8.3 million taken in the quarter relating to products shipped primarily in prior years. Clinical Diagnostics segment gross margins for the second quarter of 2020 decreased by approximately 0.3 percentage points from the same period last year, driven primarily by higher excess and obsolete inventory costs, and freight charges, partially offset by improved manufacturing utilization in key plants and product mix.

Selling, general and administrative expenses (SG&A) decreased to \$189.3 million or 35.3% of sales for the second quarter of 2020 compared to \$201.3 million or 35.1% of sales for the second quarter of 2019. Decreases to SG&A were primarily related to lower travel, marketing and communication expenses of \$11.6 million mostly due to COVID-19, employee related expenses of \$2.2 million, and the strengthening of the U.S. dollar on foreign denominated expenses. These expenses were partially offset primarily by increases to bad debt of \$4.7 million, software expenses of \$3.2 million and facility costs of \$2.3 million.

Research and development expense (R&D) increased to \$52.0 million or 9.7% of sales in the second quarter of 2020 compared to \$50.1 million or 8.8% of sales in the second quarter of 2019. Life Science segment R&D increased in the second quarter of 2020 compared to the prior year period. The increase was primarily driven by increased spending to accelerate innovation in key investment areas, as well as expenses related to the newly acquired Celsee business, partially offset by lower spending for lab supplies. Clinical Diagnostics segment R&D decreased in the second quarter of 2020 from the prior year period primarily due to lower employee related expenses as a result of lower actual expenses compared to the initial accrual for our restructuring program announced in 2019, and lower activities due to COVID-19.

Results of Operations – Non-operating

Interest expense for the second quarter of 2020 and 2019 was \$5.7 million and \$5.8 million, respectively.

Foreign currency exchange gains and losses consist primarily of foreign currency transaction gains and losses on intercompany net receivables and payables and the change in fair value of our forward foreign exchange contracts used to manage our foreign currency exchange risk. Foreign currency exchange net losses were \$0.8 million for the second quarter of 2020 compared to \$1.2 million for the second quarter of 2019. Gains and losses are primarily due to the estimating process inherent in the timing of product shipments and intercompany debt payments, market volatility, and the change in the fair value of our foreign exchange contracts.

Change in fair market value of equity securities was a gain of \$1.18 billion and \$716.4 million for the second quarter of 2020 and 2019, respectively, primarily resulting from the recognition of holding gains on our investment in Sartorius AG.

Other (income) expense, net for the second quarter of 2020 was \$17.2 million of income compared to \$3.9 million of income for the second quarter of 2019. The increase of \$13.3 million of income was primarily due to an increase of \$8.9 million of Sartorius AG dividends as the dividends in the prior year were declared in the first quarter of 2019. In the second quarter of 2020, we also had a gain of \$11.7 million on the sale of our Informatics division, partially offset by investment losses of \$3.4 million compared to investment gains of \$3.8 million in the second quarter of 2019.

Our effective income tax rate was 22.4% and 22.2% for the three months ended June 30, 2020 and 2019, respectively. Our income tax returns are routinely audited by U.S. federal, state and foreign tax authorities. We are currently under examination by many of these tax authorities. There are differing interpretations of tax laws and regulations, and as a result, significant disputes may arise with these tax authorities involving issues around the timing and amount of deductions and allocations of income among various tax jurisdictions. We do not believe any currently pending uncertain tax positions will have a material adverse effect on our condensed consolidated financial statements, although an adverse resolution of one or more of these uncertain tax positions in any period may have a material impact on the results of operations for that period.

Six Months Ended June 30, 2020 Compared to **Six Months Ended June 30, 2019**

Results of Operations -- Sales, Margins and Expenses

Percentage sales growth in currency neutral amounts are calculated by translating prior period sales in each local currency using the current period monthly average foreign exchange rates for that currency and comparing that to current period sales.

Net sales (sales) for the first half of 2020 were \$1.11 billion compared to \$1.13 billion in the first half of 2019, a decrease of 1.6%. Excluding the impact of foreign currency, for the first half of 2020 sales decreased by approximately 0.1% compared to the same period in 2019. Currency neutral sales decreased in the Americas and Europe, partially offset by an increase in Asia.

The Life Science segment sales for the first half of 2020 were \$479.2 million, an increase of 11.9% compared to the same period last year. On a currency neutral basis, sales increased 12.9% compared to the first half of 2019. The currency neutral sales increase was primarily driven by growth in our PCR, Droplet Digital PCR, and Process Media products. Currency neutral sales increases occurred in Europe and Asia. Sales for the first half of 2020 benefited from the carryover related to the December 2019 Cyberattack primarily in Asia. Sales for the first half of 2020 also benefited from product lines used for COVID-19 testing and research. Sales were impacted negatively in other product lines and in North America due to the customer lab closures resulting from the COVID-19 pandemic.

The Clinical Diagnostics segment sales for the first half of 2020 were \$623.4 million, a decrease of 9.8% compared to the same period last year. On a currency neutral basis, sales decreased 8.0% compared to the first half of 2019. The currency neutral sales decrease was across all regions. Sales decreased across all product lines, with the exception of quality controls. Sales for the first half of 2020 benefited from the carryover related to the December 2019 Cyberattack. Sales in all regions were impacted negatively due to the impact of COVID-19 on our customer's operations.

Consolidated gross margins were 55.1% for the first half of 2020 compared to 55.0% for the first half of 2019. Life Science segment gross margins for the first half of 2020 decreased from the prior year period by approximately 1.0 percentage points primarily due to the \$7.4 million cost of sales benefit in the first quarter of 2019 from an escrow release related to an acquisition from 2011, incremental costs from the Celsee acquisition that occurred in 2020, and a charge for customs duty of \$8.3 million relating to products shipped primarily in prior years. Clinical Diagnostics segment gross margins for the first half of 2020 increased by approximately 0.1 percentage points from the same period last year, driven primarily by product mix, improved manufacturing utilization in key plants, and reduced overhead expenses, partially offset by higher freight charges, and excess and obsolete inventory costs.

SG&A decreased to \$383.0 million or 34.5% of sales for the first half of 2020 compared to \$408.8 million or 36.3% of sales for the first half of 2019. Decreases in SG&A were primarily related to lower travel, marketing and communications expenses of \$17.4 million mostly due to COVID-19, professional fees of \$3.1 million, employee related expenses of \$3.4 million and the strengthening of the U.S. dollar on foreign denominated expenses. These expenses were partially offset primarily by increases to facility costs of \$5.9 million, software expenses of \$5.2 million, and bad debt expense of \$4.7 million.

R&D increased to \$101.3 million or 9.1% of sales for the first half of 2020 compared to \$97.7 million or 8.7% of sales for the first half of 2019. Life Science segment R&D increased for the first half of 2020 compared to the prior year period. The increase was primarily driven by increased spending to accelerate innovation in key investment areas, as well as expenses related to the newly acquired Celsee business, partially offset by lower lab supply expenses. Clinical Diagnostics segment R&D decreased for the first half of 2020 from the prior year period primarily due to lower employee related expenses as a result of lower actual expenses compared to the initial accrual for our restructuring program announced in 2019, and lower activities due to COVID-19.

Results of Operations – Non-operating

Interest expense for the first half of 2020 and 2019 was \$11.4 million and \$11.8 million, respectively.

Foreign currency exchange net losses were \$1.7 million for the first half of 2020 compared to \$2.5 million for the first half of 2019. Gains and losses are primarily due to the estimating process inherent in the timing of product shipments and intercompany debt payments, market volatility, and the change in the fair value of our foreign exchange contracts.

Change in fair market value of equity securities was a gain of \$2.01 billion and \$1.78 billion for the first half of 2020 and 2019, respectively, primarily resulting from the recognition of holding gains on our investment in Sartorius AG.

Other (income) expense, net for the first half of 2020 was \$20.5 million of income compared to \$22.6 million of income for the first half of 2019. The decrease of \$2.1 million was primarily due to higher investment income and Sartorius AG dividend income in 2019 compared to the gain on the sale of the Informatics division and Sartorius AG dividend income in 2020.

Our effective income tax rate was 23.0% and 22.8% for the six months ended June 30, 2020 and 2019, respectively.

Our income tax returns are routinely audited by U.S. federal, state and foreign tax authorities. We are currently under examination by many of these tax authorities. There are differing interpretations of tax laws and regulations, and as a result, significant disputes may arise with these tax authorities involving issues around the timing and amount of deductions and allocations of income among various tax jurisdictions. We do not believe any currently pending uncertain tax positions will have a material adverse effect on our condensed consolidated financial statements, although an adverse resolution of one or more of these uncertain tax positions in any period may have a material impact on the results of operations for that period.

Liquidity and Capital Resources

Bio-Rad operates and conducts business globally, primarily through subsidiary companies established in the markets in which we trade.

Goods are manufactured in a small number of locations, and are then shipped to local distribution facilities around the world. Our product mix is diversified, and certain products compete largely on product efficacy, while others compete on price. Gross margins are generally sufficient to exceed normal operating costs, and funding for research and development of new products, as well as routine outflows of capital expenditures, interest and taxes. In addition to the annual positive cash flow from operating activities, additional liquidity is readily available via the sale of short-term investments and access to our \$200.0 million unsecured revolving credit facility (Credit Agreement) that we entered into in April 2019, and to a lesser extent international lines of credit. Borrowings under the 2019 Credit Agreement are available on a revolving basis and can be used to make permitted acquisitions, for working capital and for other general corporate purposes. We had no outstanding borrowings under the 2019 Credit Agreement as of June 30, 2020, however, \$0.2 million was utilized for domestic standby letters of credit that reduced our borrowing availability. Management believes that this availability, together with cash flow from operations, will be adequate to meet our current objectives for operations, research and development, capital additions for manufacturing and distribution, plant and equipment, information technology systems and acquisitions of reasonable proportion to our existing total available capital. We have outstanding \$425.0 million principal amount of Senior Notes that are due in December 2020 (4.875% Notes). We are currently assessing our options and believe we have adequate resources to repay the 4.875% Notes and meet our current obligations whether we choose to refinance or not.

At June 30, 2020, we had available \$1.03 billion in cash, cash equivalents and short-term investments, of which approximately 26% was held in our foreign subsidiaries. We believe that our holdings of cash, cash equivalents and short-term investments in the U.S. and in our foreign subsidiaries are sufficient to meet both the current and long-term needs of our global operations and repay our 4.875% Notes. The amount of funds held in the United States can fluctuate due to the timing of receipts and payments in the ordinary course of business and due to other reasons, such as business-development activities. As part of our ongoing liquidity assessments, we regularly monitor the mix of domestic and foreign cash flows (both inflows and outflows).

It is generally our intention to repatriate certain foreign earnings to the extent that such repatriations are not restricted by local laws or accounting rules, and there are no substantial incremental costs.

Demand for our products and services could change more dramatically in the short-term than in previous years due to the outbreak of COVID-19 related constraints, as well as due to funding, reimbursement constraints and support levels from government, universities, hospitals and private industry, including diagnostic laboratories. The need for certain sovereign nations with large annual deficits to curtail spending, international trade disputes and increased regulation could lead to slower growth of, or even a decline in, our business. Sovereign nations either delaying payment for goods and services or renegotiating their debts could impact our liquidity.

Cash Flows from Operations

Net cash provided by operations was \$154.9 million compared to \$198.3 million for the six months ended June 30, 2020 and 2019, respectively. The decrease in operating cash flows was primarily due to higher cash paid to suppliers and employees resulting primarily from supplies needed for COVID-19 products and to a lesser extent for employee restructuring programs. The decrease also consisted of lower investment income and, lower cash received from customers that reflected the effects of COVID-19. The decrease was partially offset by an increase of operating cash flows for lower income taxes paid primarily due to lower international tax payments, and to a lesser extent proceeds received in 2020 compared to payments in 2019 for forward foreign exchange contracts.

Cash Flows from Investing Activities

Net cash used in investing activities was \$101.0 million compared to \$37.8 million for the six months ended June 30, 2020 and 2019, respectively.

Capital expenditures totaled \$39.7 million and \$45.8 million for the six months ended June 30, 2020 and 2019, respectively. Capital expenditures represent the addition and replacement of production machinery and research equipment, ongoing manufacturing and facility additions for expansion, regulatory, environmental and compliance. Also included in capital expenditures are investments in business systems and data communication upgrades and enhancements, including the remaining phases of the global enterprise resource planning (ERP) platform. Capital expenditures also include equipment placed with Clinical Diagnostics segment customers who then contract to purchase our reagents for use.

In April 2020, we acquired all equity interests of Celsee, Inc. for \$99.5 million, and we received \$12.2 million for the sale of our Informatics division, which focused on providing and developing comprehensive, high-quality spectral databases and associated software. See Note 2 to the condensed consolidated financial statements.

In March 2019, we completed the acquisition of all the issued and outstanding stock of a small U.S. private company for approximately \$20.0 million. Cash payments, net of closing cash, consisted of \$4.0 million paid in November 2018 and the remaining \$16.0 million paid in March 2019.

During the first quarter of 2019, we received \$7.4 million from an escrow release related to an acquisition from 2011 within the Life Science Group.

Our investment objective is to maintain liquidity to meet anticipated operational and other corporate requirements in which capital is preserved and increased through investing in low risk, high quality securities with commensurate returns, consistent with our risk tolerance level.

We continue to review possible acquisitions, including early stage businesses, to expand both our Life Science and Clinical Diagnostics segments.

Cash Flows from Financing Activities

Net cash used in financing activities was \$101.6 million compared to \$13.5 million for the six months ended June 30, 2020 and 2019, respectively. Net cash used in the six months ended June 30, 2020 was primarily due to the \$100.0 million cash outflow to repurchase 291,941 shares of our common stock under our share repurchase program, compared to \$15.0 million to repurchase 51,398 shares of our common stock under our share repurchase program for the six months ended June 30, 2019. For the six months ended June 30, 2020, we received proceeds from the issuance of common stock for share-based compensation of \$8.2 million compared to \$3.9 million in 2019. For the six months ended June 30, 2019 we received net proceeds of \$3.8 million from the issuance of treasury stock to fulfill our Employee Stock Purchase Plan purchases.

Treasury Shares

During the second quarter of 2020, 1,111 shares of Class A treasury stock with an aggregate total cost of \$0.4 million were reissued to fulfill annual grants to employees under our restricted stock program. Upon reissuing the Class A treasury stock, a loss of \$0.03 million was incurred as they were reissued at a lower price than their average cost, which reduced Retained earnings, while \$0.3 million reduced Additional paid-in capital. These reissues did not require cash payments or receipts and therefore did not affect liquidity.

During the first quarter of 2020, we repurchased 291,941 shares of Class A common stock for \$100.0 million under our repurchase program compared to the repurchase of 51,398 shares of our common stock for \$15.0 million in 2019. We designated these repurchased shares as treasury stock.

During the first quarter of 2019, 19,755 shares of Class A treasury stock with an aggregate total cost of \$5.4 million were reissued to fulfill our Employee Stock Purchase Plan purchases. A loss of \$1.6 million was incurred upon reissuing the Class A treasury stock as they were reissued at a lower price than their average cost, which reduced Retained earnings and resulted in net proceeds of \$3.8 million.

As of June 30, 2020, \$73.1 million remained under the Share Repurchase Program. In July 2020, the Board of Directors authorized increasing the Share Repurchase Program to allow the Company to repurchase up to an additional \$200.0 million of stock.

Recent Accounting Pronouncements Adopted and to be Adopted

See Note 1 to the condensed consolidated financial statements for recent accounting pronouncements adopted and to be adopted.

Item 3. Quantitative and Qualitative Disclosures about Market Risk

During the six months ended June 30, 2020, there have been no material changes from the disclosures about market risk provided in our Annual Report on Form 10-K for the year ended December 31, 2019.

Item 4. Controls and Procedures

Disclosure Controls and Procedures

We maintain “disclosure controls and procedures,” as such term is defined in Rules 13a-15(e) and 15d-15(e) under the Securities Exchange Act of 1934, as amended (“Exchange Act”), that are designed to ensure that information required to be disclosed by us in reports that we file or submit under the Exchange Act is recorded, processed, summarized, and reported within the time periods specified in Securities and Exchange Commission rules and forms, and that such information is accumulated and communicated to our management, including our Chief Executive Officer (“CEO”) and Chief Financial Officer (“CFO”), as appropriate, to allow for timely decisions regarding required disclosure. In designing and evaluating our disclosure controls and procedures, management recognized that disclosure controls and procedures, no matter how well conceived and operated, can provide only reasonable, not absolute, assurance that the objectives of the disclosure controls and procedures are met. Additionally, in designing disclosure controls and procedures, our management necessarily was required to apply its judgment in evaluating the cost-benefit relationship of possible disclosure controls and procedures. The design of any disclosure controls and procedures also is based in part upon certain assumptions about the likelihood of future events, and there can be no assurance that any design will succeed in achieving its stated goals under all potential future conditions.

Subject to the limitations noted above, our management, with the participation of our CEO and CFO, has evaluated the effectiveness of the design and operation of our disclosure controls and procedures as of the period covered by this Quarterly Report on Form 10-Q. Based on that evaluation, the CEO and CFO have concluded that, as of such date, our disclosure controls and procedures were effective to meet the objective for which they were designed and operate at the reasonable assurance level.

Changes to Internal Control Over Financial Reporting

We identified no changes in internal control over financial reporting that occurred during our quarter ended June 30, 2020 that have materially affected, or that are reasonably likely to materially affect, our internal control over financial reporting.

PART II – OTHER INFORMATION

Item 1. Legal Proceedings

See Note 12, “Legal Proceedings” in the Notes to condensed consolidated financial statements of Part I, Item 1 of this Quarterly Report on Form 10-Q.

Item 1A. Risk Factors

Pandemics or disease outbreaks, such as the COVID-19 pandemic, could materially adversely affect our business, operations, financial condition, and results of operations.

The COVID-19 pandemic is having and is expected to continue to have an adverse effect on the United States and global economies, as well as on our operations and those of third parties on whom we rely. The COVID-19 pandemic has negatively impacted and, we expect, will continue to negatively impact our business, operations, financial conditions and results of operations in a variety of ways.

Although demand has increased for certain of our products being used in fighting the COVID-19 pandemic, we are experiencing more broadly an overall drop-off in product demand with reduced sales activity and customer orders. Many of our customers are sheltering in place, resulting in labs, universities and other customers' facilities being closed or opened at reduced capacity, hospital visits have declined as people delay elective surgeries and avoid non-essential trips to the hospital, and routine diagnostic testing has slowed dramatically. It is not known how long these declines will continue, and it is uncertain what impact these declines will have on future sales and customer orders once conditions begin to improve.

On the supply side, we are experiencing challenges with the supply of raw materials and components used in the production of our products, with suppliers sheltering in place or opened at reduced capacity and otherwise unable to meet our increased demand for raw materials and inputs to manufacture our products being used in fighting the COVID-19 pandemic. In addition, we are experiencing transportation challenges in moving goods across regions, including reduced freight availability as many airlines have significantly scaled back flight operations and increased freight surcharges due to reduced freight capacity. Countries have closed their borders and imposed travel restrictions and may continue to impose measures that restrict the movement of our goods. The invocation by the U.S federal government of the Defense Production Act of 1950 with respect to our manufacturing operations, or the enforcement of comparable laws by other governmental entities, could disrupt our manufacturing and distribution operations..

With respect to our personnel, as a critical health care supplier, we continue to keep certain essential production, distribution and service teams onsite working in manufacturing and supply chain facilities throughout the world. Although we are adhering to government mandated and Environmental, Health and Safety protocols, an outbreak of COVID-19 at one or more of our facilities could nonetheless cause shutdowns of facilities and a reduction in our workforce, which could dramatically affect our ability to operate our business and our financial results.

The duration of the COVID-19 pandemic is unknown, and it is difficult to predict the full extent of potential impacts the pandemic will have in the future on our business, operations, and financial results, or on our customers, suppliers, logistics providers, or on the global economy as a whole. We expect that the COVID-19 pandemic will negatively affect our revenue growth and net income, and it is uncertain how materially the COVID-19 pandemic will affect our global operations, particularly if the effects continue or get worse over an extended period of time. Any or all of these effects would have an adverse effect on our operations, business, financial condition and results of operations.

Our international operations expose us to additional costs and legal and regulatory risks, which could have a material adverse effect on our business, results of operations and financial condition.

We have significant international operations. We have direct distribution channels in over 35 countries outside the United States, and during the first half of 2020 our foreign entities generated 61% of our net sales. Compliance with complex foreign and U.S. laws and regulations that apply to our international operations increases our cost of doing business. These numerous and sometimes conflicting laws and regulations include, among others, data privacy requirements, labor relations laws, tax laws, anti-competition regulations, import and trade restrictions, tariffs, duties, quotas and other trade barriers, export requirements, U.S. laws such as the Foreign Corrupt Practices Act and other U.S. federal laws and regulations established by the office of Foreign Asset Control, foreign laws such as the UK Bribery Act 2010 or other foreign laws which prohibit corrupt payments to governmental officials or certain payments or remunerations to customers. In addition, changes in laws or regulations potentially could be disruptive to our operations and business relationships in the affected regions. For example, the United Kingdom's withdrawal from the European Union (commonly referred to as "Brexit") could disrupt the free movement of goods, services and people between the United Kingdom and the European Union and result in increased regulatory, legal, labor and tax complexities.

Given the high level of complexity of the foreign and U.S. laws and regulations that apply to our international operations, there is a risk that we may inadvertently breach some provisions, for example, through fraudulent or negligent behavior of individual employees, our failure to comply with certain formal documentation requirements, or otherwise. Our success depends, in part, on our ability to anticipate these risks and manage these challenges through policies, procedures and internal controls. However, we have a dispersed international sales organization, and we use distributors and agents in many of our international operations. This structure makes it more difficult for us to ensure that our international selling operations comply with laws and regulations, and our global policies and procedures.

Violations of these laws and regulations could result in fines, criminal sanctions against us, our officers or our employees, requirements to obtain export licenses, cessation of business activities in sanctioned countries, implementation of compliance programs, and prohibitions on the conduct of our business. Violations of laws and regulations also could result in prohibitions on our ability to offer our products in one or more countries and could materially damage our reputation, our brand, our international expansion efforts, our ability to attract and retain employees, or our business, results of operations and financial condition. See also our risk factors regarding the COVID-19 pandemic above and regarding government regulations and global economic conditions below.

The industries and market segments in which we operate are highly competitive, and we may not be able to compete effectively.

The life science and clinical diagnostics markets are each highly competitive. Some of our competitors have merged, and some of our competitors have greater financial resources than we do, making them better equipped to license technologies and intellectual property from third parties or to fund research and development, manufacturing and marketing efforts. Moreover, competitive and regulatory conditions in many markets in which we operate restrict our ability to fully recover, through price increases, higher costs of acquired goods and services resulting from inflation and other drivers of cost increases. Many public tenders have become more competitive due to governments lengthening the commitments of their public tenders to multiple years, which reduce the number of tenders in which we can participate annually. Because the value of these multiple-year tenders is so high, our competitors have been more aggressive with their pricing. Our failure to compete effectively and/or pricing pressures resulting from competition could adversely affect our business, results of operations and financial condition.

We may not be able to grow our business because of our failure to develop new or improved products.

Our future growth depends in part on our ability to continue to improve our product offerings and develop and introduce new product lines and extensions that integrate technological advances. In particular, we may not be able to keep up with changes in the clinical diagnostics industry, such as the trend toward molecular diagnostics or point-of-care tests. If we are unable to integrate technological advances into our product offerings or to design, develop, manufacture and market new product lines and extensions successfully and in a timely manner, our business, results of operations and financial condition will be adversely affected. The COVID-19 pandemic may delay our ability to develop and introduce new products. We have experienced product launch delays in the past, and may do so in the future. We cannot assure you that our product and process development efforts will be successful or that new products we introduce will achieve market acceptance. Failure to launch successful new products or improvements to existing products may cause our products to become obsolete, which could harm our business, results of operations and financial condition.

Breaches of our information systems could have a material adverse effect on our business and results of operations.

We have experienced and expect to continue to experience attempts by computer programmers and hackers to attack and penetrate our layered security controls, like the December 2019 Cyberattack that was previously discussed in Item 7 of our Annual Report for the period ended December 31, 2019. Through our sales and eCommerce channels, we collect and store confidential information that customers provide to, among other things, purchase products or services, enroll in promotional programs and register on our web site. We also acquire and retain information about suppliers and employees in the normal course of business. Such information on our systems includes personally identifiable information and, in limited instances, protected health information. We also create and maintain proprietary information that is critical to our business, such as our product designs and manufacturing processes. Despite recent initiatives to improve our technology systems, such as our enterprise resource planning implementation and the centralization of our global information technology organization, we could experience a significant data security breach. Increased use of remote work arrangements and rapidly evolving work scenarios in response to the COVID-19 pandemic expose us to additional risk of cyberattack and disruption. Because the techniques used to obtain unauthorized access, disable or degrade service, or sabotage systems change frequently and often are not recognized until launched against a target, we may not be able to anticipate all of these techniques or to implement adequate preventive measures. Computer hackers have attempted to penetrate and will likely continue to attempt to penetrate our and our vendors' information systems and, if successful, could misappropriate confidential customer, supplier, employee or other business information, such as our intellectual property. Third parties could also gain control of our systems and use them for criminal purposes while appearing to be us. As a result, we could lose existing customers, have difficulty attracting new customers, be exposed to claims from customers, financial institutions, payment card associations, employees and other persons, have regulatory sanctions or penalties imposed, incur additional expenses or lose revenues as a result of a data privacy breach, or suffer other

adverse consequences. Our operations and ability to process sales orders, particularly through our eCommerce channels, could also be disrupted, as they were in the December 2019 Cyberattack. Any significant breakdown, intrusion, interruption, corruption, or destruction of our systems, as well as any data breaches, could have a material adverse effect on our business and results of operations. See also our risk factors regarding our information technology systems and our enterprise resource planning system (ERP) implementation below.

If our information technology systems are disrupted, or if we fail to successfully implement, manage and integrate our information technology and reporting systems, our business, results of operations and financial condition could be harmed.

Our information technology (IT) systems are an integral part of our business, and a serious disruption of our IT systems could have a material adverse effect on our business, results of operations and financial condition. We depend on our IT systems to process orders, manage inventory and collect accounts receivable. Our IT systems also allow us to efficiently purchase products from our suppliers and ship products to our customers on a timely basis, maintain cost-effective operations and provide customer service. We may experience disruption of our IT systems due to redundancy issues with our network servers. We cannot assure you that our contingency plans will allow us to operate at our current level of efficiency.

Our ability to implement our business plan in a rapidly evolving market requires effective planning, reporting and analytical processes. We expect that we will need to continue to improve and further integrate our IT systems, reporting systems and operating procedures by training and educating our employees with respect to these improvements and integrations on an ongoing basis in order to effectively run our business. We may suffer interruptions in service, loss of data or reduced functionality when we upgrade or change systems. If we fail to successfully manage and integrate our IT systems, reporting systems and operating procedures, it could adversely affect our business, results of operations and financial condition. See also our risk factors regarding our data security above and ERP implementation and events beyond our control below.

We are subject to foreign currency exchange fluctuations, which could have a material adverse effect on our results of operations and financial condition.

As stated above, a significant portion of our operations and sales are outside of the United States. When we make purchases and sales in currencies other than the U.S. dollars, we are exposed to fluctuations in foreign currencies relative to the U.S. dollar that may adversely affect our results of operations and financial condition. Our international sales are largely denominated in local currencies. As a result, the strengthening of the U.S. dollar negatively impacts our consolidated net sales expressed in U.S. dollars. Conversely, when the U.S. dollar weakens, our expenses at our international sites increase. In addition, the volatility of other currencies may negatively impact our operations outside of the United States and increase our costs to hedge against currency fluctuations. We cannot assure you that future shifts in currency exchange rates will not have a material adverse effect on our results of operations and financial condition.

Our reported financial results may be materially affected by changes in the market value of our investment in Sartorius AG.

Changes in the market value of our investment in Sartorius AG may continue to materially impact our consolidated statements of income and other financial statements. A decline in the market value of our investment in Sartorius AG could result in significant losses due to write-downs in the value of the equity securities. An increase in the market value of our investment in Sartorius AG could result in a significant and favorable impact to net income independent of the actual operating performance of our business.

Our share price may change significantly based upon changes in the market valuation of Sartorius AG, and such change may be unrelated to the actual performance of our business. Non-operating income for a period may be significantly impacted by the timing of dividends paid by Sartorius AG, particularly in comparison to prior year periods.

We may incur losses in future periods due to write-downs in the value of financial instruments.

We have positions in a variety of financial instruments including asset backed securities and other similar instruments. Financial markets are volatile, particularly in light of the COVID-19 pandemic, and the markets for these securities can be illiquid. The value of these securities will continue to be impacted by external market factors including default rates, changes in the value of the underlying property, such as residential or commercial real estate, rating agency actions, the prices at which observable market transactions occur and the financial strength of various entities, such as financial guarantors who provide insurance for the securities. Should we need to convert these positions to cash, we may not be able to sell these instruments without significant losses due to current debtor financial conditions or other market considerations.

We also have positions in equity securities, including our investment in Sartorius AG. Financial markets are volatile and the markets for these equity securities can be illiquid as well. A decline in the market value of our investments in equity securities that we own could result in significant losses due to write-downs in the value of the equity securities. In addition, if we need to convert these positions to cash, we may not be able to sell these equity securities without significant losses.

We may experience difficulties implementing our new global enterprise resource planning system.

We are engaged in a multi-year implementation of a new global enterprise resource planning system (ERP). The ERP is designed to efficiently maintain our books and records and provide information important to the operation of our business to our management team. The ERP will continue to require significant investment of human and financial resources. In implementing the ERP, we may experience significant delays, increased costs and other difficulties. Any significant disruption or deficiency in the design and implementation of the ERP could adversely affect our ability to process orders, ship product, send invoices and track payments, fulfill contractual obligations or otherwise operate our business. For example, we experienced system implementation issues in our Clinical Diagnostics segment during our first deployment that impacted invoicing and caused an increase in accounts receivable. In our second deployment, we experienced delays in manufacturing and logistics, which adversely impacted our sales. In our third deployment in Western Europe in April 2017, we experienced system implementation issues impacting the timing of payment of vendor invoices and resulting in delays in product availability and shipments. We also experienced lower productivity levels related to the April 2017 go-live of the ERP in Western Europe, which adversely impacted our sales during the second and third quarters of 2017. We expect to implement the remaining smaller phases of the ERP platform over the next few years. In addition, our efforts to centralize various business processes and functions within our organization in connection with our ERP implementation may continue to disrupt our operations and negatively impact our business, results of operations and financial condition.

Recent and planned changes to our organizational structure and executive management team could negatively impact our business.

We made significant changes to our organizational structure over the past few years. In 2016, we began implementing the reorganization of the structure of our European organization, and we have continued to reorganize aspects of our European operations since 2016. The Board of Directors appointed a new Chief Financial Officer effective April 6, 2019, a new Chief Operating Officer effective April 22, 2019, and a new Chief Accounting Officer effective April 1, 2020. At the beginning of 2020, we appointed a new executive to head our Clinical Diagnostics segment, and we restructured this segment based on functional groups rather than product line divisions. These changes may have unintended consequences, such as distraction of our management and employees, business disruption, attrition of our workforce, inability to attract or retain key employees, and reduced employee morale or productivity.

Violations of the U.S. Foreign Corrupt Practices Act or similar anti-corruption laws could have a material adverse effect on our business, results of operations and financial condition.

As further discussed above in our risk factor concerning our international operations, we have significant international operations which expose us to additional costs and legal and regulatory risks, including the risk of violating anti-corruption laws such as the U.S. Foreign Corrupt Practices Act (FCPA) or similar anti-corruption laws. As previously disclosed, we entered into a non-prosecution agreement (NPA) with the U.S. Department of Justice (DOJ) and the Securities and Exchange Commission (SEC) and consented to the entry of an Order by the SEC (SEC Order), effective November 3, 2014, which actions resolved both the DOJ and the SEC investigations into our violations of the FCPA. Any future violations of the FCPA could result in more punitive actions by the SEC and DOJ and/or could harm our reputation with customers, either of which could materially adversely affect our business, results of operations and financial condition.

Our failure to establish and maintain effective internal control over financial reporting could result in material misstatements in our financial statements, our failure to meet our reporting obligations and cause investors to lose confidence in our reported financial information, which in turn could cause the trading price of our common stock to decline.

Maintaining effective disclosure controls and procedures and internal controls over financial reporting are necessary for us to produce reliable financial statements.

As previously discussed in Item 9A "Controls and Procedures" of our Annual Report for the period ended December 31, 2017, and Item 4 "Controls and Procedures" of our 2018 Form 10-Qs, management identified a material weakness in our internal control over financial reporting. During the fourth quarter of 2017 and throughout 2018, management conducted an extensive remediation plan to address its material weakness, and management concluded that the material weakness had been remediated as of December 31, 2018. However, we cannot assure you that additional deficiencies or material weaknesses in our internal control over financial reporting will not be identified in the future.

Material weaknesses have adversely affected us in the past and could affect us in the future, and the results of our periodic management evaluations and annual auditor attestation reports regarding the effectiveness of our internal control over financial reporting required by Section 404 of the Sarbanes-Oxley Act of 2002. Any failure to maintain or implement new or improved internal controls, or any difficulties that we may encounter in their maintenance or implementation, could result in additional significant deficiencies or material weaknesses, result in material misstatements in our consolidated financial statements and cause us to fail to meet our reporting obligations. This could cause us to lose public confidence, and could cause the trading price of our common stock to decline. For further information regarding our controls and procedures, see Part I, Item 4 of this Quarterly Report on Form 10-Q.

Risks relating to intellectual property rights may negatively impact our business.

We rely on a combination of copyright, trade secret, patent and trademark laws and third-party nondisclosure agreements to protect our intellectual property rights and products. However, we cannot assure you that our intellectual property rights will not be challenged, invalidated, circumvented or rendered unenforceable, or that meaningful protection or adequate remedies will be available to us. For instance, unauthorized third parties have attempted to copy our intellectual property, reverse engineer or obtain and use information that we regard as proprietary, or have developed equivalent technologies independently, and may do so in the future. Additionally, third parties have asserted patent, copyright and other intellectual property rights to technologies that are important to us, and may do so in the future. If we are unable to license or otherwise access protected technology used in our products, or if we lose our rights under any existing licenses, we could be prohibited from manufacturing and marketing such products. From time to time, we also must enforce our patents or other intellectual property rights or defend ourselves against claimed infringement of the rights of others through litigation. As a result, we could incur substantial costs, be forced to redesign our products, or be required to pay damages or royalties to an infringed party. Any of the foregoing matters could adversely impact our business, results of operations and financial condition.

Global economic and geopolitical conditions could adversely affect our operations.

In recent years, we have been faced with very challenging global economic conditions. The COVID-19 pandemic is currently causing disruptions to global economic conditions. It is unknown how long such disruptions will continue and whether such disruptions will become more severe. A deterioration in the global economic environment may, and is currently, resulting in decreased demand for our products, increased competition, downward pressure on the prices for our products and longer sales cycles. A weakening of macroeconomic conditions may, and currently is, also adversely affecting our suppliers, which could result in interruptions in supply in the future. We have also experienced delays in collecting receivables in certain countries in Western Europe, and we may experience similar delays in these and other countries or regions experiencing liquidity problems. In addition, a slowing of growth in the Chinese economy and in emerging markets could adversely affect our business, results of operations or financial condition. The worldwide decline in oil prices may impact the ability of countries dependent on oil revenue to fund the health care sector and research and development activities, which could result in a decreased demand for our products. There is also uncertainty surrounding the impact that Brexit will have on European and worldwide economic conditions and the stability of global financial markets, and a negative effect from any of these things could adversely affect our business, results of operations or financial condition. Additionally, the United States and other countries, such as China and India, recently have imposed tariffs on certain goods. While tariffs imposed by other countries on U.S. goods have not yet had a significant impact on our business, further escalation of tariffs or other trade barriers could adversely impact our profitability and/or our competitiveness. In addition, the geopolitical situation in locations such as the Middle East could adversely affect our business in such locations. See also our risk factors regarding the COVID-19 pandemic and our international operations above and regarding government regulations below.

Reductions in government funding and the capital spending programs of our customers could have a material adverse effect on our business, results of operations or financial condition.

Our customers include universities, clinical diagnostics laboratories, government agencies, hospitals and pharmaceutical, biotechnology and chemical companies. The capital spending programs of these institutions and companies have a significant effect on the demand for our products. Such programs are based on a wide variety of factors, including the resources available to make such purchases, the availability of funding from grants by governments or government agencies, the spending priorities for various types of equipment and the policies regarding capital expenditures during industry downturns or recessionary periods. If government funding to our customers were to decrease, or if our customers were to decrease or reallocate their budgets in a manner adverse to us, our business, results of operations or financial condition could be materially and adversely affected.

Changes in the healthcare industry could have an adverse effect on our business, results of operations and financial condition.

There have been, and will continue to be, significant changes in the healthcare industry in an effort to reduce costs. These changes include:

- The trend towards managed care, together with healthcare reform of the delivery system in the United States and efforts to reform in Europe, has resulted in increased pressure on healthcare providers and other participants in the healthcare industry to reduce selling prices. Consolidation among healthcare providers and consolidation among other participants in the healthcare industry has resulted in fewer, more powerful groups, whose purchasing power gives them cost containment leverage. In particular, there has been a consolidation of laboratories and a consolidation of blood transfusion centers. These industry trends and competitive forces place constraints on the levels of overall pricing, and thus could have a material adverse effect on our gross margins for products we sell in clinical diagnostic markets.
- Third party payors, such as Medicare and Medicaid in the United States, have reduced their reimbursements for certain medical products and services. Our Clinical Diagnostics business is impacted by the level of reimbursement available for clinical tests from third party payors. In the United States payment for many diagnostic tests furnished to Medicare fee-for-service beneficiaries is made based on the Medicare Clinical Laboratory Fee Schedule (CLFS), a fee schedule established and adjusted from time to time by the Centers for Medicare and Medicaid Services (CMS). Some commercial payors are guided by the CLFS in establishing their reimbursement rates. Laboratories and clinicians may decide not to order or perform certain clinical diagnostic tests if third party payments are inadequate, and we cannot predict whether third party payors will offer adequate reimbursement for tests utilizing our products to make them commercially attractive. Legislation, such as 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 reduced the payments for clinical laboratory services paid under the CLFS. In addition, the Protecting Access to Medicare Act of 2014 (PAMA) has made significant changes to the way Medicare will pay for clinical laboratory services, which has further reduced reimbursement rates.

To the extent that the healthcare industry seeks to address the need to contain costs stemming from reform measures such as those contained in the PPACA and the PAMA, or in future legislation, by limiting the number of clinical tests being performed or the amount of reimbursement available for such tests, our business, results of operations and financial condition could be adversely affected. If these changes in the healthcare markets in the United States and Europe continue, we could be forced to alter our approach in selling, marketing, distributing and servicing our products.

We are subject to substantial government regulation, and any changes in regulation or violations of regulations by us could adversely affect our business, prospects, results of operations or financial condition.

Some of our products (primarily our Clinical Diagnostic products), production processes and marketing are subject to U.S. federal, state and local, and foreign regulation, including by the FDA in the United States and its foreign counterparts. The FDA regulates our Clinical Diagnostic products as medical devices, and we are subject to significant regulatory clearances or approvals to market our Clinical Diagnostic products and other requirements including, for example, recordkeeping and reporting requirements, such as the FDA's medical device reporting regulations and reporting of corrections and removals. The FDA has broad regulatory and enforcement powers. If the FDA determines that we have failed to comply with applicable regulatory requirements, it can impose a variety of enforcement actions ranging from public warning letters, fines, injunctions, consent decrees and civil penalties to suspension or delayed issuance of approvals, seizure or recall of our products, total or partial shutdown of production, withdrawal of approvals or clearances already granted, and criminal prosecution.

The FDA can also require us to repair, replace or refund the cost of devices that we manufactured or distributed. In addition, the FDA may change its clearance and approval policies, adopt additional regulations or revise existing regulations, or take other actions, which may prevent or delay approval or clearance of our products or impact our ability to modify our currently approved or cleared products on a timely basis. Changes in the FDA's review of certain clinical diagnostic products referred to as laboratory developed tests, which are tests developed by a single laboratory for use only in that laboratory, could affect some of our customers who use our Life Science instruments for laboratory developed tests. In the past, the FDA has chosen to not enforce applicable regulations and has not reviewed such tests for approval. However, the FDA has issued draft guidance that it may begin enforcing its medical device requirements, including premarket submission requirements, to such tests. Any delay in, or failure to receive or maintain, clearance or approval for our products could prevent us from generating revenue from these products and adversely affect our business operations and financial results. Additionally, the FDA and other regulatory authorities have broad enforcement powers. Regulatory enforcement or inquiries, or other increased scrutiny on us, could affect the perceived safety and efficacy of our products and dissuade our customers from using our products.

Many foreign governments have similar rules and regulations regarding the importation, registration, labeling, sale and use of our products. Such agencies may also impose new requirements that may require us to modify or re-register products already on the market or otherwise impact our ability to market our products in those countries. For example, in April 2017 the European Parliament voted to enact final regulations that include broad changes regarding in vitro diagnostic devices and medical devices, which will require us to modify or re-register some products and will result in additional costs. In addition, Russia has enacted more stringent medical product registration and labeling regulations, China has enacted stricter labeling requirements, and we expect other countries, such as Brazil and India, to impose more regulations that impact our product registrations. Brexit also will likely result in additional regulatory requirements associated with goods sold in the United Kingdom and will likely result in additional complexities and possible delays with respect to goods, raw materials and personnel moving between the United Kingdom and the European Union. In addition, new government administrations may interpret existing regulations or practices differently. For example, the Mexican health regulatory agency COFEPRIS in 2019 cited Bio-Rad's Mexican subsidiary for operating practices that had been endorsed by a prior administration, which has impacted our ability to conduct our Clinical Diagnostics business in Mexico. Due to these evolving and diverse requirements, we face uncertain product approval timelines, additional time and effort to comply, as well as the potential for reduced sales and/or fines for noncompliance. Increasing protectionism in such countries also impedes our ability to compete with local companies. For example, we may not be able to participate in certain public tenders in Russia because of increasing measures to restrict access to such tenders for companies without local manufacturing capabilities. Such regulations could adversely affect our business, results of operations and financial condition. See also our risk factors regarding our international operations and regarding global economic and geopolitical conditions above.

We are also subject to government regulation of the use and handling of a number of materials and controlled substances. The U.S. Drug Enforcement Administration establishes registration, security, recordkeeping, reporting, storage, distribution and other requirements for controlled substances pursuant to the Controlled Substances Act of 1970. Failure to comply with present or future laws and regulations could result in substantial liability to us, suspension or cessation of our operations, restrictions on our ability to expand at our present locations or require us to make significant capital expenditures or incur other significant expenses.

We cannot assure you that we will be able to integrate acquired companies, products or technologies into our company successfully, or we may not be able to realize the anticipated benefits from the acquisitions.

As part of our overall business strategy, we pursue acquisitions of and investments in complementary companies, products and technologies. In order to be successful in these activities, we must, among other things:

- assimilate the operations and personnel of acquired companies;
- retain acquired business customers;
- minimize potential disruption to our ongoing business;
- retain key technical and management personnel;
- integrate acquired companies into our strategic and financial plans;
- accurately assess the value of target companies, products and technologies;
- comply with new regulatory requirements;
- harmonize standards, controls, procedures and policies;
- minimize the impact to our relationships with our employees and customers; and
- assess, document and remediate any deficiencies in disclosure controls and procedures and internal control over financial reporting.

The benefits of any acquisition may prove to be less than anticipated and may not outweigh the costs reported in our financial statements. Completing any potential future acquisitions could cause significant diversion of our management's time and resources. If we acquire new companies, products or technologies, we may be required to assume contingent liabilities or record impairment charges for goodwill and other intangible assets over time. Goodwill and non-amortizable intangible assets are subject to impairment testing, and potential periodic goodwill impairment charges, amortization expenses related to certain intangible assets, and other write-offs could harm our operating results. Impairment tests are highly sensitive to changes in assumptions and minor changes to assumptions could result in impairment losses. If the results forecast in our impairment tests are not achieved, or business trends vary from the assumptions used in forecasts, or external factors change detrimentally, future impairment losses may occur. For example, as we previously discussed in Item 7 of our Annual Report for the period ended December 31, 2017, one reporting unit, whose goodwill was primarily from the acquisitions of Biotest AG and DiaMed Holding AG, had excess fair value over book value of only 8% at December 31, 2017. The goodwill allocated to this reporting unit as of December 31, 2017 was \$263.6 million. We impaired all the goodwill related to this reporting unit for the year ended December 31, 2018 because assumptions utilized in our 2017 forecast did not materialize.

We cannot assure you that we will successfully overcome these risks or any other problems we encounter in connection with any acquisitions, and any such acquisitions could adversely affect our business, results of operations and financial condition.

Product quality and liability issues could harm our reputation and negatively impact our business, results of operations and financial condition.

We must adequately address quality issues associated with our products, including defects in our engineering, design and manufacturing processes, as well as defects in third-party components included in our products. Our instruments, reagents and consumables are complex, and identifying the root cause of quality issues, especially those affecting reagents or third-party components, is difficult. We may incur significant costs and expend substantial time in researching and remediating such issues. Quality issues could also delay our launching or manufacturing of new products. In addition, quality issues, unapproved uses of our products, or inadequate disclosure of risks related to our products, could result in product recalls or product liability or other claims being brought against us. These issues could harm our reputation, impair our relationship with existing customers and harm our ability to attract new customers, which could negatively impact our business, results of operations and financial condition.

Lack of key personnel could hurt our business.

Our products are very technical in nature. In general, only highly qualified and well-trained scientists have the necessary skills to develop, market and sell our products, and many of our manufacturing positions require very specialized knowledge and skills. In addition, the global nature of our business also requires that we have sophisticated and experienced staff to comply with increasingly complex international laws and regulations. We face intense competition for these professionals from our competitors, customers, marketing partners and other companies throughout our industry. In particular, the job market in Northern California, where many of our employees are located, is very competitive. If we do not offer competitive compensation and benefits, we may fail to retain or attract a sufficient number of qualified personnel, which could impair our ability to properly run our business.

In some cases we rely on temporary personnel or consultants, and we may do so in the future. Such temporary personnel or consultants may lack the knowledge and/or specific skills necessary for our business, require time to train without benefiting us through extended employment and increase our costs. In addition, as noted above, our strategic initiatives, such as our internal restructuring and ERP implementation, may be burdensome and disruptive and lead to employee dissatisfaction and attrition. Loss, including retirement, of long-term personnel may negatively impact our ability to conduct our business.

A reduction or interruption in the supply of components and raw materials could adversely affect our manufacturing operations and related product sales.

The manufacture of many of our products requires the timely delivery of sufficient amounts of quality components and materials. We manufacture our products in numerous manufacturing facilities around the world. We acquire our components and materials from many suppliers in various countries. We work closely with our suppliers to ensure the continuity of supply but we cannot guarantee these efforts will always be successful. Further, while we seek to diversify our sources of components and materials, in certain instances we acquire components and materials from a sole supplier. In addition, due to the regulatory environment in which we operate, we may be unable to quickly establish additional or replacement sources for some components or materials. If our supply is reduced or interrupted or of poor quality, and we are unable to develop alternative sources for such supply, our ability to manufacture our products in a timely or cost-effective manner could be adversely affected, which would adversely affect our ability to sell our products. See also our risk factor regarding the COVID-19 pandemic above.

Natural disasters, terrorist attacks, acts of war or other events beyond our control may cause damage or disruption to us and our employees, facilities, information systems, security systems, vendors and customers, which could significantly impact our business, results of operations and financial condition.

We have significant manufacturing and distribution facilities, including in the western United States, France, Switzerland, Germany and Singapore. In particular, the western United States has experienced a number of earthquakes, wildfires, floods, landslides and other natural disasters in recent years. These occurrences could damage or destroy our facilities which may result in interruptions to our business and losses that exceed our insurance coverage. In addition, electricity outages, strikes or other labor unrest at any of our sites or surrounding areas could cause disruption to our business.

Acts of terrorism, bioterrorism, violence or war, or public health issues such as the outbreak of a contagious disease like COVID-19 could also affect the markets in which we operate, our business operations and strategic plans. Political unrest may affect our sales in certain regions, such as in Southeast Asia, the Middle East and Eastern Europe. Any of these events could adversely affect our business, results of operations and financial condition. See also our risk factor regarding the COVID-19 pandemic above for a discussion of the current risks we are experiencing and continue to face relating to the COVID-19 pandemic.

We may have higher than anticipated tax liabilities.

We are subject to income taxes in the United States and many foreign jurisdictions. We report our results of operations based on our determination of the amount of taxes owed in various tax jurisdictions in which we operate. The determination of our worldwide provision for income taxes and other tax liabilities requires estimation, judgment and calculations where the ultimate tax determination may not be certain. Our determination of our tax liabilities is subject to review or examination by tax authorities in various tax jurisdictions. Tax authorities have disagreed with our judgment in the past and may disagree with positions we take in the future resulting in assessments of additional taxes. Any adverse outcome of such review or examination could have a negative impact on our operating results and financial condition.

Economic and political pressures to increase tax revenues in various jurisdictions may make resolving tax disputes more difficult. For example, in recent years, the tax authorities in Europe have disagreed with our tax positions related to hybrid debt, research and development credits, transfer pricing and indirect taxes, among others. We regularly assess the likelihood of the outcome resulting from these examinations to determine the adequacy of our provision for income taxes. Although we believe our tax estimates are reasonable, the final determination of tax audits and any related litigation could be materially different from our historical income tax provisions and accruals.

The results from various tax examinations, audits and litigation may differ from the liabilities recorded in our financial statements and could materially and adversely affect our financial results and cash flows in the periods in which those determinations are made.

Changes in tax laws or rates, changes in the interpretation of tax laws or changes in the jurisdictional mix of our earnings could adversely affect our financial position and results of operations.

On December 22, 2017, the U.S. enacted comprehensive tax legislation commonly referred to as the Tax Cuts and Jobs Act (the “Tax Act”) which made a number of substantial changes to how the United States imposes income tax on multinational corporations. The U.S. Treasury, Internal Revenue Service and other standard setting bodies continue to issue guidance and interpretation relating to the Tax Act. As future guidance is issued, we may make adjustments to amounts previously reported that could materially impact our financial statements.

The full impact of the COVID-19 pandemic is inherently uncertain at the time of this report. The COVID-19 pandemic has negatively impacted and, we expect, will continue to negatively impact our business operations, financial conditions and results of operations in a variety of ways and may impact our anticipated tax liabilities. Governments in the countries in which we operate are passing legislation intended to alleviate the economic burdens of the COVID-19 pandemic, including various tax incentives. We are continuing to evaluate the impact of these tax incentives to our financial statements.

Our global operations subject us to income and other taxes in the U.S. and in numerous foreign jurisdictions, each with different tax schemes and tax rates. In addition to the changes in tax laws and the interpretation of tax laws and tax rates in these jurisdictions, the jurisdictional mix of our earnings in countries with differing statutory tax rates can have a significant impact on our effective tax rate from period to period.

The tax effect of our investment in Sartorius AG and the jurisdictional mix of our earnings could continue to materially affect our financial results and cash flow.

In addition, the adoption of some or all of the recommendations set forth in the Organization for Economic Co-operation and Development's project on "Base Erosion and Profit Shifting" (BEPS) by tax authorities in the countries in which we operate, could negatively impact our effective tax rate. These recommendations focus on payments from affiliates in high tax jurisdictions to affiliates in lower tax jurisdictions and the activities that give rise to a taxable presence in a particular country.

Our reported financial results may be materially affected by changes in accounting principles generally accepted in the United States.

Generally accepted accounting principles in the United States, or U.S. GAAP, are subject to interpretation by the Financial Accounting Standards Board, or FASB, the U.S. Securities and Exchange Commission, or SEC, and various bodies formed to promulgate and interpret appropriate accounting principles. A change in these principles or interpretations could have a significant effect on our reported financial results, and could affect the reporting of transactions completed before the announcement of a change.

For example, in January 2016, the FASB issued Accounting Standards Update No. (ASU) 2016-01, "Recognition and Measurement of Financial Assets and Financial Liabilities." Amendments under ASU 2016-01, among other items, require that all equity investments in unconsolidated entities (other than those accounted for using the equity method of accounting), such as our investment in Sartorius AG, will be measured at fair value through earnings. The impact of adoption of ASU 2016-01 in the first quarter of 2018 materially impacted our condensed consolidated statements of income due to our investment in Sartorius AG, and this impact may continue in future periods.

Also for example, in February 2016, the FASB issued ASU 2016-02, "Leases," which requires, among other items, lease accounting to recognize most leases as assets and liabilities on the balance sheet. We adopted ASU 2016-02 on a modified retrospective basis effective January 1, 2019 with practical expedients. Where we act as a lessee, the adoption of the standard resulted in material additions to the balance sheet for right-of-use assets and the associated liabilities. Where we act as a lessor in reagent rental arrangements, there was an insignificant impact to our consolidated financial statements.

Environmental, health and safety regulations and enforcement proceedings may negatively impact our business, results of operations and financial condition.

Our operations are subject to federal, state, local and foreign environmental laws and regulations that govern such activities as transportation of goods, emissions to air and discharges to water, as well as handling and disposal practices for solid, hazardous and medical wastes. In addition to environmental laws that regulate our operations, we are also subject to environmental laws and regulations that create liability and clean-up responsibility for spills, disposals or other releases of hazardous substances into the environment as a result of our operations or otherwise impacting real property that we own or operate. The environmental laws and regulations also subject us to claims by third parties for damages resulting from any spills, disposals or releases resulting from our operations or at any of our properties. We must also comply with various health and safety regulations in the United States and abroad in connection with our operations.

We may in the future incur capital and operating costs to comply with currently existing laws and regulations, and possible new statutory enactments, and these expenditures may be significant. We have incurred, and may in the future incur, fines related to environmental matters and/or liability for costs or damages related to spills or other releases of hazardous substances into the environment at sites where we have operated, or at off-site locations where we have sent hazardous substances for disposal. We cannot assure you, however, that such matters or any future obligations to comply with environmental or health and safety laws and regulations will not adversely affect our business, results of operations or financial condition.

Our debt may restrict our future operations.

We have substantial debt and have the ability to incur additional debt. As of June 30, 2020, we had approximately \$438.7 million of outstanding indebtedness, primarily consisting of the 4.875% Notes due in December 2020 as further discussed in Note 6 of the condensed consolidated financial statements. In addition, we have a revolving credit facility that provides for up to \$200.0 million, \$0.2 million of which has been utilized for domestic standby letters of credit. Our incurrence of substantial amounts of debt may have important consequences. For instance, it could:

- make it more difficult for us to satisfy our financial obligations, including those relating to our outstanding debt;
- require us to dedicate a substantial portion of our cash flow from operations to the payment of interest and principal due under our debt, which will reduce funds available for other business purposes;
- increase our vulnerability to general adverse economic and industry conditions;
- limit our flexibility in planning for, or reacting to, changes in our business and the industries in which we operate;
- place us at a competitive disadvantage compared with some of our competitors that have less debt; and
- limit our ability to obtain additional financing required to fund working capital and capital expenditures and for other general corporate purposes.

Our existing credit facility and the terms of our other debt instruments, including agreements we may enter in the future, contain or will contain covenants imposing significant restrictions on our business. These restrictions may affect our ability to operate our business and may limit our ability to take advantage of potential business opportunities as they arise. These covenants place restrictions on our ability to, among other things: incur additional debt; acquire other businesses or assets through merger or purchase; create liens; make investments; enter into transactions with affiliates; sell assets; in the case of some of our subsidiaries, guarantee debt; and declare or pay dividends, redeem stock or make other distributions to stockholders. Our existing credit facility also requires that we comply with certain financial ratios, including a maximum consolidated leverage ratio test and a minimum consolidated interest coverage ratio test.

Our ability to comply with these covenants may be affected by events beyond our control, including prevailing economic, financial and industry conditions. The breach of any of these restrictions could result in a default. An event of default under our debt agreements would permit some of our lenders to declare all amounts borrowed from them to be due and payable, together with accrued and unpaid interest. In addition, acceleration of our other indebtedness may cause us to be unable to make interest payments on our outstanding notes and repay the principal amount of our outstanding notes or may cause the future subsidiary guarantors, if any, to be unable to make payments under the guarantees.

As further discussed in Part 1, Item 2, Management's Discussion and Analysis of Financial Condition and Results of Operations, we are currently assessing our options relating to the 4.875% Notes that are due in December 2020. If we decide to refinance the 4.875% Notes, the volatility of capital markets resulting from the COVID-19 pandemic may increase the difficulty of obtaining such financing.

We are subject to healthcare laws and regulations and could face substantial penalties if we are unable to fully comply with such laws.

We are subject to healthcare regulation and enforcement by both the U.S. federal government and the U.S. states and foreign governments in which we conduct our business. These healthcare laws and regulations include, for example:

- the U.S. federal Anti-Kickback Statute, which prohibits, among other things, persons or entities from soliciting, receiving, offering or providing remuneration, directly or indirectly, in return for or to induce either the referral of an individual for, or the purchase order or recommendation of, any item or services for which payment may be made under a federal healthcare program such as the Medicare and Medicaid programs;
- U.S. federal false claims laws, which prohibit, among other things, individuals or entities from knowingly presenting, or causing to be presented, claims for payment from Medicare, Medicaid, or other third-party payors that are false or fraudulent. In addition, the U.S. federal government may assert that a claim including items or services resulting from a violation of the federal Anti-Kickback Statute constitutes a false or fraudulent claim for purposes of the false claims statutes;
- the U.S. Physician Payment Sunshine Act, which requires certain manufacturers of drugs, biologics, devices and medical supplies to record any transfers of value to U.S. physicians and U.S. teaching hospitals;
- the Health Insurance Portability and Accountability Act ("HIPAA"), as amended by the Health Information Technology for Economic and Clinical Health Act, which governs the conduct of certain electronic healthcare transactions and protects the security and privacy of protected health information; and
- state or foreign law equivalents of each of the U.S. federal laws above, such as anti-kickback and false claims laws, which may apply to items or services reimbursed by any third-party payor, including commercial insurers.

These laws will continue to impose administrative, cost and compliance burdens on us. The shifting compliance environment and the need to build and maintain robust systems to comply with multiple jurisdictions with different compliance and/or reporting requirements increases the possibility that a healthcare company may violate one or more of these requirements. In addition, any action against us for violation of these laws, even if we successfully defend against it, could cause us to incur significant legal expenses and divert our management's attention from the operation of our business. If our operations are found to be in violation of any of the laws described above or any other governmental regulations that apply to us, we may be subject to penalties, including civil and criminal penalties, damages, fines, exclusion from the Medicare and Medicaid programs, and the curtailment or restructuring of our operations, any of which could adversely affect our ability to operate our business, results of operations and financial condition.

Regulations related to “conflict minerals” could adversely impact our business.

As part of the Dodd-Frank Wall Street Reform and Consumer Protection Act, the SEC adopted disclosure requirements regarding the use of certain minerals, known as conflict minerals, which are mined from the Democratic Republic of Congo (DRC) and adjoining countries, as well as procedures regarding a manufacturer's efforts to identify the sourcing of such minerals and metals produced from those minerals. In 2017, the European Parliament and the European Council formally approved a conflict minerals regulation, and the requirements will become effective starting in January 2021. We have incurred, and will continue to incur, additional costs in order to comply with the SEC's disclosure requirements. In addition, we might incur further costs due to possible changes to our products, processes, or sources of supply as a consequence of our due diligence activities. As our supply chain is complex, we may not be able to sufficiently verify the origins of the specified minerals used in our products through our due diligence procedures, which may harm our reputation. In addition, we may encounter challenges to satisfy those customers who require that all of the components of our products be certified as “DRC conflict free”, which could place us at a competitive disadvantage if we do not do so. We filed our report for the calendar year 2019 with the SEC on May 28, 2020.

Risks related to our common stock

A significant majority of our voting stock is held by the Schwartz family, which could lead to conflicts of interest.

We have two classes of voting stock: Class A Common Stock and Class B Common Stock. With a few exceptions, holders of Class A and Class B Common Stock vote as a single class. When voting as a single class, each share of Class A Common Stock is entitled to one-tenth of a vote, while each share of Class B Common Stock has one vote. In the election or removal of directors, the classes vote separately and the holders of Class A Common Stock are entitled to elect 25% of the Board of Directors, with holders of Class B Common Stock electing the remaining directors.

As a result of the Schwartz family's ownership of our Class A and Class B Common Stock, they are able to elect a majority of our directors, effect fundamental changes in our direction and control matters affecting us, including the determination of business opportunities that may be suitable for our company. The Schwartz family may exercise its control over us according to interests that are different from other investors' or debtors' interests. In particular, this concentration of ownership and voting power may have the effect of delaying or preventing a change in control of our company.

Item 2. Unregistered Sales of Equity Securities and Use of Proceeds

In November 2017, the Board of Directors authorized a new share repurchase program, granting Bio-Rad authority to repurchase, on a discretionary basis, up to \$250.0 million of outstanding shares of our common stock (“Share Repurchase Program”). As of June 30, 2020, \$73.1 million remained under the Share Repurchase Program. In July 2020, the Board of Directors authorized increasing the Share Repurchase Program to allow the Company to repurchase up to an additional \$200.0 million of stock.

Repurchases under the Share Repurchase Program may be made at management's discretion from time to time on the open market or through privately negotiated transactions. The authorization has no expiration.

The following table contains information on the shares of our common stock that we purchased or otherwise acquired during the three months ended June 30, 2020.

Period	Total Number of Shares Purchased	Average Price Paid per Share	Total Number of Shares Purchased as Part of Publicly Announced Plans or Programs	Maximum Number (or Approximate Dollar Value) of Shares that May yet be Purchased Under the Plans or Programs (in millions)
April 1 to April 30, 2020	—	\$ —	—	\$ 73.1
May 1 to May 31, 2020	—	\$ —	—	\$ 73.1
June 1 to June 30, 2020	—	\$ —	—	\$ 73.1

Item 3. Defaults Upon Senior Securities

None.

Item 4. Mine Safety Disclosures

Not applicable.

Item 5. Other Information

None.

Item 6. Exhibits

(a) Exhibits

The following documents are filed as part of this report:

Exhibit No.	
31.1	Chief Executive Officer Section 302 Certification
31.2	Chief Financial Officer Section 302 Certification
32.1	Chief Executive Officer Certification pursuant to 18 U.S.C Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002
32.2	Chief Financial Officer Certification pursuant to 18 U.S.C Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002
101.INS	The instance document does not appear in the interactive data file because its XBRL tags are embedded within the Inline XBRL document.
101.SCH	Inline XBRL Taxonomy Extension Schema Document
101.CAL	Inline XBRL Taxonomy Extension Calculation Linkbase Document
101.DEF	Inline XBRL Taxonomy Extension Definition Linkbase Document
101.LAB	Inline XBRL Taxonomy Extension Labels Linkbase Document
101.PRE	Inline XBRL Taxonomy Extension Presentation Linkbase Document
104.1	The cover page Interactive Data File is formatted in Inline XBRL and is contained in Exhibits 101

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned thereto duly authorized.

BIO-RAD LABORATORIES, INC.
(Registrant)

Date: July 31, 2020

/s/ Norman Schwartz

Norman Schwartz, Chairman of the Board,
President and Chief Executive Officer

Date: July 31, 2020

/s/ Ilan Daskal

Ilan Daskal, Executive Vice President,
Chief Financial Officer

Certification of Chief Executive Officer Required By
Exchange Act Rules 13a-14(a) and 15d-14(a)

I, Norman Schwartz, certify that:

1. I have reviewed this quarterly report on Form 10-Q of Bio-Rad Laboratories, Inc.
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report fairly present, in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: July 31, 2020

/s/ Norman Schwartz
Norman Schwartz, Chairman of the Board,
President and Chief Executive Officer

Certification of Chief Financial Officer Required By
Exchange Act Rules 13a-14(a) and 15d-14(a)

I, Ilan Daskal, certify that:

1. I have reviewed this quarterly report on Form 10-Q of Bio-Rad Laboratories, Inc.
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report fairly present, in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date:	<u>July 31, 2020</u>	<u>/s/ Ilan Daskal</u> Ilan Daskal Executive Vice President, Chief Financial Officer
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Certification of Periodic Report

I, Norman Schwartz, Chief Executive Officer of Bio-Rad Laboratories, Inc. (the “Company”), certify, pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, 18 U.S.C. Section 1350, that:

- (1) the Quarterly Report on Form 10-Q of the Company for the quarter ended June 30, 2020 (the “Report”) fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934 (15 U.S.C. 78m); and
- (2) the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: July 31, 2020

/s/ Norman Schwartz

Norman Schwartz, Chairman of the Board,
President and Chief Executive Officer

The foregoing certification is being furnished solely pursuant to 18 U.S.C. Section 1350 and is not being filed as part of the Report or as a separate disclosure document.

Certification of Periodic Report

I, Ilan Daskal, Chief Financial Officer of Bio-Rad Laboratories, Inc. (the “Company”), certify, pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, 18 U.S.C. Section 1350, that:

- (1) the Quarterly Report on Form 10-Q of the Company for the quarter ended June 30, 2020 (the “Report”) fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934 (15 U.S.C. 78m); and
- (2) the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: July 31, 2020

/s/ Ilan Daskal

Ilan Daskal
Executive Vice President,
Chief Financial Officer

The foregoing certification is being furnished solely pursuant to 18 U.S.C. Section 1350 and is not being filed as part of the Report or as a separate disclosure document.