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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 March 31, 2019

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 001-4802

Becton, Dickinson and Company

(Exact name of registrant as specified in its charter)

New Jersey	**22-0760120**
(State or other jurisdiction of incorporation or organization)	**(I.R.S. Employer Identification No.)**
1 Becton Drive, Franklin Lakes, New Jersey 07417-1880	**(201) 847-6800**
(Address of principal executive offices) (Zip Code)	**(Registrant's telephone number, including area code)**

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 and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted 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 and post such files). Yes ☒ No ☐

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, 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.

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 ☒

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

Title of Each Class	**Trading Symbol**	**Name of Each Exchange on Which Registered**
Common stock, par value $1.00	BDX	New York Stock Exchange
Depositary Shares, each representing a 1/20th interest in a share of 6.125% Cumulative Preferred Stock Series A	BDXA	New York Stock Exchange
0.368% Notes due June 6, 2019	BDX19D	New York Stock Exchange
1.000% Notes due December 15, 2022	BDX22A	New York Stock Exchange
1.900% Notes due December 15, 2026	BDX26	New York Stock Exchange
1.401% Notes due May 24, 2023	BDX23A	New York Stock Exchange
3.020% Notes due May 24, 2025	BDX25	New York Stock Exchange

There were 269,731,903 shares of Common Stock, $1.00 par value, outstanding at March 31, 2019.

BECTON, DICKINSON AND COMPANY
FORM 10-Q
For the quarterly period ended March 31, 2019

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ITEM 1. FINANCIAL STATEMENTS
BECTON, DICKINSON AND COMPANY
CONDENSED CONSOLIDATED BALANCE SHEETS
Millions of dollars

	March 31, 2019	September 30, 2018
Assets	(Unaudited)	
Current Assets:		
Cash and equivalents	$ 686	$ 1,140
Restricted cash	81	96
Short-term investments	10	17
Trade receivables, net	2,279	2,319
Inventories:		
Materials	555	510
Work in process	325	297
Finished products	1,748	1,644
	2,627	2,451
Assets held for sale	—	137
Prepaid expenses and other	1,161	1,251
Total Current Assets	6,844	7,411
Property, Plant and Equipment	10,875	10,485
Less allowances for depreciation and amortization	5,402	5,111
Property, Plant and Equipment, Net	5,473	5,375
Goodwill	23,513	23,600
Developed Technology, Net	11,625	12,184
Customer Relationships, Net	3,564	3,723
Other Intangibles, Net	518	534
Other Assets	1,061	1,078
Total Assets	$ 52,598	$ 53,904
Liabilities and Shareholders' Equity		
Current Liabilities:		
Short-term debt	$ 3,057	$ 2,601
Payables and accrued expenses	4,050	4,615
Total Current Liabilities	7,108	7,216
Long-Term Debt	17,556	18,894
Long-Term Employee Benefit Obligations	815	1,056
Deferred Income Taxes and Other	5,810	5,743
Commitments and Contingencies (See Note 5)		
Shareholders' Equity		
Preferred stock	2	2
Common stock	347	347
Capital in excess of par value	16,177	16,179
Retained earnings	12,792	12,596
Deferred compensation	23	22
Common stock in treasury - at cost	(6,192)	(6,243)
Accumulated other comprehensive loss	(1,839)	(1,909)
Total Shareholders' Equity	21,309	20,994
Total Liabilities and Shareholders' Equity	$ 52,598	$ 53,904

Amounts may not add due to rounding.
See notes to condensed consolidated financial statements

BECTON, DICKINSON AND COMPANY
CONDENSED CONSOLIDATED STATEMENTS OF INCOME (LOSS)
Millions of dollars, except per share data
(Unaudited)

	Three Months Ended March 31,		Six Months Ended March 31,	
	2019	2018	2019	2018
Revenues	$ 4,195	$ 4,222	$ 8,355	$ 7,302
Cost of products sold	2,221	2,616	4,408	4,143
Selling and administrative expense	1,089	1,056	2,161	1,829
Research and development expense	252	259	510	451
Acquisitions and other restructurings	101	104	191	458
Other operating expense, net	396	—	61	—
Total Operating Costs and Expenses	4,059	4,036	7,332	6,881
Operating Income	136	186	1,024	422
Interest expense	(171)	(185)	(342)	(343)
Interest income	18	4	6	48
Other income (expense), net	20	1	30	(15)
Income Before Income Taxes	3	6	718	111
Income tax (benefit) provision	(17)	18	98	260
Net Income (Loss)	20	(12)	619	(148)
Preferred stock dividends	(38)	(38)	(76)	(76)
Net (loss) income applicable to common shareholders	$ (18)	$ (50)	$ 544	$ (224)
Basic (Loss) Earnings per Share	$ (0.07)	$ (0.19)	$ 2.02	$ (0.90)
Diluted (Loss) Earnings per Share	$ (0.07)	$ (0.19)	$ 1.98	$ (0.90)
Dividends per Common Share	$ 0.77	$ 0.75	$ 1.54	$ 1.50

Amounts may not add due to rounding.
See notes to condensed consolidated financial statements

BECTON, DICKINSON AND COMPANY
CONDENSED CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME (LOSS)
Millions of dollars
(Unaudited)

	Three Months Ended March 31,		Six Months Ended March 31,	
	2019	2018	2019	2018
Net Income (Loss)	$ 20	$ (12)	$ 619	$ (148)
Other Comprehensive Income (Loss), Net of Tax				
Foreign currency translation adjustments	76	128	42	92
Defined benefit pension and postretirement plans	13	(90)	28	(72)
Cash flow hedges	(1)	(2)	—	(1)
Other Comprehensive Income, Net of Tax	88	36	70	18
Comprehensive Income (Loss)	$ 108	$ 24	$ 689	$ (130)

Amounts may not add due to rounding.
See notes to condensed consolidated financial statements

BECTON, DICKINSON AND COMPANY
CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS
Millions of dollars
(Unaudited)

	Six Months Ended March 31,	
	2019	2018
Operating Activities		
Net income (loss)	$ 619	$ (148)
Adjustments to net income (loss) to derive net cash provided by operating activities:		
Depreciation and amortization	1,126	844
Share-based compensation	152	207
Deferred income taxes	(109)	(400)
Change in operating assets and liabilities	(531)	702
Pension obligation	(202)	(72)
Excess tax benefits from payments under share-based compensation plans	38	56
Gain on sale of business	(335)	—
Product liability-related charge	331	—
Other, net	(63)	(172)
Net Cash Provided by Operating Activities	1,027	1,017
Investing Activities		
Capital expenditures	(362)	(391)
Proceeds from sale of investments, net	5	7
Acquisitions of businesses, net of cash acquired	—	(15,006)
Proceeds from divestitures, net	477	100
Other, net	(90)	(84)
Net Cash Provided by (Used for) Investing Activities	30	(15,373)
Financing Activities		
Change in credit facility borrowings	—	380
Proceeds from long-term debt and term loans	—	3,622
Payments of debt and term loans	(905)	(1,833)
Dividends paid	(491)	(449)
Other, net	(135)	(155)
Net Cash (Used for) Provided by Financing Activities	(1,532)	1,565
Effect of exchange rate changes on cash and equivalents and restricted cash	5	29
Net decrease in cash and equivalents and restricted cash	(469)	(12,762)
Opening Cash and Equivalents and Restricted Cash	1,236	14,179
Closing Cash and Equivalents and Restricted Cash	$ 767	$ 1,417
Non-Cash Investing Activities		
Fair value of shares issued as acquisition consideration	$ —	$ 8,004
Fair value of equity awards issued as acquisition consideration	$ —	$ 613

Amounts may not add due to rounding.
See notes to condensed consolidated financial statements

Note 1 – Basis of Presentation

The accompanying unaudited condensed consolidated financial statements have been prepared in accordance with the instructions to Form 10-Q and, in the opinion of the management of Becton, Dickinson and Company (the "Company"), include all adjustments which are of a normal recurring nature, necessary for a fair presentation of the financial position and the results of operations and cash flows for the periods presented. However, the financial statements do not include all information and accompanying notes required for a presentation in accordance with U.S. generally accepted accounting principles ("U.S. GAAP"). These condensed consolidated financial statements should be read in conjunction with the consolidated financial statements and the notes thereto included in the Company's 2018 Annual Report on Form 10-K. Within the financial statements and tables presented, certain columns and rows may not add due to the use of rounded numbers for disclosure purposes. Percentages and earnings per share amounts presented are calculated from the underlying amounts. The results of operations for the interim periods are not necessarily indicative of the results of operations to be expected for the full year.

Note 2 – Accounting Changes

New Accounting Principles Adopted

On October 1, 2018, the Company adopted Accounting Standards Codification Topic 606, "Revenue from Contracts with Customers" ("ASC 606") using the modified retrospective method. Under ASC 606, revenue is recognized upon the transfer of control of goods or services to customers and reflects the amount of consideration to which a reporting entity expects to be entitled in exchange for those goods or services. The Company assessed the impact of this new standard on its consolidated financial statements based upon a review of contracts that were not completed as of October 1, 2018. Amounts presented in the Company's financial statements for the prior-year periods have not been revised and are reflective of the revenue recognition requirements which were in effect for those periods. This accounting standard adoption, which is further discussed in Note 6, did not materially impact any line items of the Company's consolidated income statements and balance sheet.

On October 1, 2018, the Company retrospectively adopted an accounting standard update which requires all components of net periodic pension and postretirement benefit costs to be disaggregated from the service cost component and to be presented on the income statement outside a subtotal of income from operations, if one is presented. Upon the Company's adoption of the accounting standard update, which did not have a material impact on its consolidated financial statements, all components of the Company's net periodic pension and postretirement benefit costs, aside from service cost, are recorded to *Other income (expense), net* on its consolidated income statements for all periods presented. Revisions of prior-year period amounts were estimated based upon previously disclosed amounts.

On October 1, 2018, the Company adopted an accounting standard update which requires that the income tax effects of intercompany sales or transfers of assets, except those involving inventory, be recognized in the income statement as income tax expense (or benefit) in the period that the sale or transfer occurs. The Company adopted this accounting standard update, which did not have a material impact on its consolidated financial statements, using the modified retrospective method.

New Accounting Principle Not Yet Adopted

In February 2016, the FASB issued a new lease accounting standard which requires lessees to recognize lease assets and lease liabilities on the balance sheet. The new standard also requires expanded disclosures regarding leasing arrangements. The Company will adopt the standard on October 1, 2019 and continues to evaluate the impact on its consolidated financial statements.

Note 3 – Shareholders' Equity

Changes in certain components of shareholders' equity for the first two quarters of fiscal years 2019 and 2018 were as follows:

(Millions of dollars)	Common Stock Issued at Par Value	Capital in Excess of Par Value	Retained Earnings	Deferred Compensation	Treasury Stock	
					Shares (in thousands)	Amount
Balance at September 30, 2018	$ 347	$ 16,179	$ 12,596	$ 22	(78,463)	$ (6,243)
Net income	—	—	599	—	—	—
Common dividends ($0.77 per share)	—	—	(207)	—	—	—
Preferred dividends	—	—	(38)	—	—	—
Common stock issued for share-based compensation and other plans, net	—	(97)	—	2	851	9
Share-based compensation	—	92	—	—	—	—
Common stock held in trusts, net (a)	—	—	—	—	(12)	—
Effect of changes in accounting principles (see Note 2)	—	—	68	—	—	—
Balance at December 31, 2018	$ 347	$ 16,174	$ 13,018	$ 24	(77,624)	$ (6,235)
Net income	—	—	20	—	—	—
Common dividends ($0.77 per share)	—	—	(208)	—	—	—
Preferred dividends	—	—	(38)	—	—	—
Common stock issued for share-based compensation and other plans, net	—	(57)	(1)	(1)	618	42
Share-based compensation	—	60	—	—	—	—
Common stock held in trusts, net (a)	—	—	—	—	50	—
Balance at March 31, 2019	$ 347	$ 16,177	$ 12,792	$ 23	(76,955)	$ (6,192)

(Millions of dollars)	Common Stock Issued at Par Value	Capital in Excess of Par Value	Retained Earnings	Deferred Compensation	Treasury Stock	
					Shares (in thousands)	Amount
Balance at September 30, 2017	$ 347	$ 9,619	$ 13,111	$ 19	(118,745)	$ (8,427)
Net loss	—	—	(136)	—	—	—
Common dividends ($0.75 per share)	—	—	(172)	—	—	—
Preferred dividends	—	—	(38)	—	—	—
Common stock issued for acquisition	—	6,487	—	—	37,306	2,121
Common stock issued for share-based compensation and other plans, net	—	(51)	—	—	1,021	(37)
Share-based compensation	—	142	—	—	—	—
Common stock held in trusts, net (a)	—	—	—	—	(27)	—
Balance at December 31, 2017	$ 347	$ 16,197	$ 12,765	$ 19	(80,445)	$ (6,343)
Net loss	—	—	(12)	—	—	—
Common dividends ($0.75 per share)	—	—	(201)	—	—	—
Preferred dividends	—	—	(38)	—	—	—
Common stock issued for acquisition	—	(9)	—	—	—	—
Common stock issued for share-based compensation and other plans, net	—	(94)	(1)	2	943	44
Share-based compensation	—	76	—	—	—	—
Common stock held in trusts, net (a)	—	—	—	—	17	—
Effect of changes in accounting principles (see Note 2)	—	—	103	—	—	—
Balance at March 31, 2018	$ 347	$ 16,170	$ 12,616	$ 21	(79,485)	$ (6,300)

(a) Common stock held in trusts represents rabbi trusts in connection with deferred compensation under the Company's employee salary and bonus deferral plan and directors' deferral plan.

The components and changes of *Accumulated other comprehensive income (loss)* for the first two quarters of fiscal years 2019 and 2018 were as follows:

(Millions of dollars)	Total	Foreign Currency Translation	Benefit Plans	Cash Flow Hedges
Balance at September 30, 2018	$ (1,909)	$ (1,162)	$ (729)	$ (17)
Other comprehensive (loss) income before reclassifications, net of taxes	(32)	(35)	3	(1)
Amounts reclassified into income, net of taxes	14	—	13	1
Balance at December 31, 2018	$ (1,927)	$ (1,197)	$ (714)	$ (16)
Other comprehensive income (loss) before reclassifications, net of taxes	74	76	—	(2)
Amounts reclassified into income, net of taxes	14	—	13	1
Balance at March 31, 2019	$ (1,839)	$ (1,121)	$ (701)	$ (17)

(Millions of dollars)	Total	Foreign Currency Translation	Benefit Plans	Cash Flow Hedges
Balance at September 30, 2017	$ (1,723)	$ (1,001)	$ (703)	$ (18)
Other comprehensive loss before reclassifications, net of taxes	(36)	(36)	—	—
Amounts reclassified into income, net of taxes	18	—	17	1
Balance at December 31, 2017	$ (1,740)	$ (1,037)	$ (686)	$ (17)
Other comprehensive income before reclassifications, net of taxes	128	128	—	—
Amounts reclassified into income, net of taxes	11	—	9	2
Tax effects reclassified into retained earnings	(103)	—	(99)	(4)
Balance at March 31, 2018	$ (1,704)	$ (909)	$ (776)	$ (20)

The amount of foreign currency translation recognized in other comprehensive income during the three and six months ended March 31, 2019 and 2018 included net (losses) gains relating to net investment hedges, as further discussed in Note 13. During the second quarter of 2018, as permitted under U.S. GAAP guidance, the Company reclassified stranded income tax effects on items within *Accumulated other comprehensive income (loss)* resulting from the enactment of new U.S. tax legislation to *Retained earnings.* The reclassified tax effects related to prior service credits and net actuarial losses relating to benefit plans, as well as to terminated cash flow hedges. The tax effects relating to these items are generally recognized as such amounts are amortized into earnings.

Note 4 – Earnings per Share

The weighted average common shares used in the computations of basic and diluted earnings per share (shares in thousands) were as follows:

	Three Months Ended March 31,		Six Months Ended March 31,	
	2019	2018	2019	2018
Average common shares outstanding	269,882	267,341	269,454	248,484
Dilutive share equivalents from share-based plans	—	—	4,975	—
Average common and common equivalent shares outstanding – assuming dilution	269,882	267,341	274,429	248,484
Share equivalents excluded from the diluted shares outstanding calculation because the result would have been antidilutive:				
Mandatory convertible preferred stock	11,685	11,685	11,685	11,685
Share-based plans	4,405	6,352	—	5,439

Note 5 – Contingencies

Given the uncertain nature of litigation generally, the Company is not able, in all cases, to estimate the amount or range of loss that could result from an unfavorable outcome of the litigation to which the Company is a party. In accordance with U.S. GAAP, the Company establishes accruals to the extent probable future losses are estimable (in the case of environmental matters, without considering possible third-party recoveries). With respect to putative class action lawsuits in the United States and certain of the Canadian lawsuits described below relating to product liability matters, the Company is unable to estimate a range of reasonably possible losses for the following reasons: (i) all or certain of the proceedings are in early stages; (ii) the Company has not received and reviewed complete information regarding all or certain of the plaintiffs and their medical conditions; and/or (iii) there are significant factual issues to be resolved. In addition, there is uncertainty as to the likelihood of a class being certified or the ultimate size of the class. With respect to the investigative subpoena issued by the Department of Defense Inspector General and the Department of Health and Human Services and the civil investigative demand served by the Department of Justice, as discussed below, the Company is unable to estimate a range of reasonably possible losses for the following reasons: (i) all or certain of the proceedings are in early stages; and/or (ii) there are significant factual and legal issues to be resolved.

In view of the uncertainties discussed below, the Company could incur charges in excess of any currently established accruals and, to the extent available, liability insurance. In the opinion of management, any such future charges, individually or in the aggregate, could have a material adverse effect on the Company's consolidated results of operations and consolidated cash flows.

Product Liability Matters

The Company believes that certain settlements and judgments, as well as legal defense costs, relating to product liability matters are or may be covered in whole or in part under its product liability insurance policies with a limited number of insurance carriers, or, in some circumstances, indemnification obligations to the Company from other parties, which if disputed, the Company intends to vigorously contest. Amounts recovered under the Company's product liability insurance policies or indemnification arrangements may be less than the stated coverage limits or less than otherwise expected and may not be adequate to cover damages and/or costs relating to claims. In addition, there is no guarantee that insurers or other parties will pay claims or that coverage or indemnity will be otherwise available.

Hernia Product Claims

As of March 31, 2019, the Company is defending approximately 6,755 product liability claims involving the Company's line of hernia repair devices (collectively, the "Hernia Product Claims"). The majority of those claims are currently pending in a coordinated proceeding in Rhode Island State Court, but claims are also pending in other state and/or federal court jurisdictions. In addition, those claims include multiple putative class actions in Canada. Generally, the Hernia Product Claims seek damages for personal injury allegedly resulting from use of the products. From time to time, the Company engages in resolution discussions with plaintiffs' law firms regarding certain of the Hernia Product Claims, but the Company also intends to vigorously defend Hernia Product Claims that do not settle, including through litigation. Trials are scheduled throughout 2019 in various state and/or federal courts. The Company expects additional trials of Hernia Product Claims to take place over the next 12 months. In August 2018, a new hernia multi-district litigation ("MDL") was ordered to be established in the Southern District of Ohio. The Company cannot give any assurances that the resolution of the Hernia Product Claims that have not settled, including asserted and unasserted claims and the putative class action lawsuits, will not have a material adverse effect on the Company's business, results of operations, financial condition and/or liquidity.

Women's Health Product Claims

As of March 31, 2019, the Company is defending approximately 1,050 product liability claims involving the Company's line of pelvic mesh devices. The majority of those claims are currently pending in either the federal MDL in the United States District Court for the Southern District of West Virginia, or a coordinated proceeding in New Jersey State Court, but claims are also pending in other state and/or federal court jurisdictions. In addition, those claims include putative class actions filed in the United States. Not included in the figures above are approximately 1,015 filed and unfiled claims that have been asserted or threatened against the Company but lack sufficient information to determine whether a pelvic mesh device of the Company is actually at issue. The claims identified above also include products manufactured by both the Company and two subsidiaries of Medtronic plc (as successor in interest to Covidien plc) ("Medtronic"), each a supplier of the Company. Medtronic has an obligation to defend and indemnify the Company with respect to any product defect liability relating to products its subsidiaries had manufactured. As described below, in July 2015 the Company reached an agreement with Medtronic (which was amended in June 2017) regarding certain aspects of Medtronic's indemnification obligation. The foregoing lawsuits, unfiled claims, putative class actions, and other claims, together with claims that have settled or are the subject of agreements or agreements in principle to settle, are referred to collectively as the "Women's Health Product Claims." The Women's Health Product Claims generally seek damages for personal injury allegedly resulting from use of the products.

As of March 31, 2019, the Company has reached agreements or agreements in principle with various plaintiffs' law firms to settle their respective inventories of cases totaling approximately 15,160 of the Women's Health Product Claims. The Company believes that these Women's Health Product Claims are not the subject of Medtronic's indemnification obligation. These settlement agreements and agreements in principle include unfiled and previously unknown claims held by various plaintiffs' law firms, which are not included in the approximate number of lawsuits set forth in the first paragraph of this section. Each agreement is subject to certain conditions, including requirements for participation in the proposed settlements by a certain minimum number of plaintiffs. The Company continues to engage in discussions with other plaintiffs' law firms regarding potential resolution of unsettled Women's Health Product Claims, which may include additional inventory settlements.

Starting in 2014 in the MDL, the court entered certain pre-trial orders requiring trial work up and remand of a significant number of Women's Health Product Claims, including an order entered in the MDL on January 30, 2018, that requires the work up and remand of all remaining unsettled cases (the "WHP Pre-Trial Orders"). The WHP Pre-Trial Orders may result in material additional costs or trial verdicts in future periods in defending Women's Health Product Claims. Trials are anticipated throughout 2019 in state courts. A trial in the New Jersey coordinated proceeding began in March 2018, and in April 2018 a

jury entered a verdict against the Company in the total amount of $68 million ($33 million compensatory; $35 million punitive). The Company is in the process of appealing that verdict. A consolidated trial involving two plaintiffs is scheduled to begin in September 2019 in the New Jersey coordinated proceeding. The Company expects additional trials of Women's Health Product Claims to take place over the next 12 months, which may potentially include consolidated trials.

In July 2015, as part of the agreement with Medtronic noted above, Medtronic agreed to take responsibility for pursuing settlement of certain of the Women's Health Product Claims that relate to products distributed by the Company under supply agreements with Medtronic, and the Company has paid Medtronic $121 million towards these potential settlements. In June 2017, the Company amended the agreement with Medtronic to transfer responsibility for settlement of additional Women's Health Product Claims to Medtronic on terms similar to the July 2015 agreement, including with respect to the obligation to make payments to Medtronic towards these potential settlements. The Company also may, in its sole discretion, transfer responsibility for settlement of additional Women's Health Product Claims to Medtronic on similar terms. The agreements do not resolve the dispute between the Company and Medtronic with respect to Women's Health Product Claims that do not settle, if any.

During the course of engaging in settlement discussions with plaintiffs' law firms, the Company has learned, and may in future periods learn, additional information regarding these and other unfiled claims, or other lawsuits, which could materially impact the Company's estimate of the number of claims or lawsuits against the Company.

Filter Product Claims

As of March 31, 2019, the Company is defending approximately 6,960 product liability claims involving the Company's line of inferior vena cava filters (collectively, the "Filter Product Claims"). The majority of those claims are currently pending in an MDL in the United States District Court for the District of Arizona, but claims are also pending in other state and/or federal court jurisdictions, including a coordinated proceeding in Arizona State Court. In addition, those claims include putative class actions filed in the United States and Canada. The Filter Product Claims generally seek damages for personal injury allegedly resulting from use of the products. The Company has limited information regarding the nature and quantity of certain of the Filter Product Claims. The Company continues to receive claims and lawsuits and may in future periods learn additional information regarding other unfiled or unknown claims, or other lawsuits, which could materially impact the Company's estimate of the number of claims or lawsuits against the Company. Trials are scheduled throughout 2019 in the MDL and state courts. On March 30, 2018, a jury in the first MDL trial found the Company liable for negligent failure to warn and entered a verdict in favor of plaintiffs. The jury found the Company was not liable for (a) strict liability design defect; (b) strict liability failure to warn; and (c) negligent design. The Company has appealed that verdict. On June 1, 2018, a jury in the second MDL trial unanimously found in favor of the Company on all claims. On August 17, 2018, the Court entered summary judgment in favor of the Company on all claims in the third MDL trial. On October 5, 2018, a jury in the fourth MDL trial unanimously found in favor of the Company on all claims. The final MDL bellwether trial is scheduled to begin in May 2019. The MDL Court has indicated that as of May 31, 2019, it will no longer accept direct filings or transfers of cases into the Filter Product Claims MDL. The Company expects additional trials of Filter Product Claims may take place over the next 12 months.

In most product liability litigations (like those described above), plaintiffs allege a wide variety of claims, ranging from allegations of serious injury caused by the products to efforts to obtain compensation notwithstanding the absence of any injury. In many of these cases, the Company has not yet received and reviewed complete information regarding the plaintiffs and their medical conditions and, consequently, is unable to fully evaluate the claims. The Company expects that it will receive and review additional information regarding any remaining unsettled product liability matters.

In January 2017, the Company reached an agreement to resolve litigation filed in the Southern District of New York by its insurance carriers in connection with Women's Health Product Claims and Filter Product Claims. The agreement requires the insurance carriers to reimburse the Company for certain future costs incurred in connection with Filter Product Claims up to an agreed amount. For certain product liability claims or lawsuits, the Company does not maintain or has limited remaining insurance coverage.

Other Legal Matters

Since early 2013, the Company has received subpoenas or Civil Investigative Demands from a number of State Attorneys General seeking information related to the sales and marketing of certain of the Company's products that are the subject of the Hernia Product Claims and the Women's Health Product Claims. The Company is cooperating with these requests. Although the Company has had, and continues to have, discussions with the State Attorneys General with respect to overall potential resolution of this matter, there can be no assurance that a resolution will be reached or what the terms of any such resolution may be.

In July 2017, a civil investigative demand was served by the Department of Justice seeking documents and information relating to an investigation into possible violations of the False Claims Act in connection with the sales and marketing of FloChec® and QuantaFlo™ devices. The Company is cooperating with these requests. Since it is not feasible to predict the outcome of these matters, the Company cannot give any assurances that the resolution of these matters will not have a material adverse effect on the Company's business, results of operations, financial condition and/or liquidity.

The Company is a potentially responsible party to a number of federal administrative proceedings in the United States brought under the Comprehensive Environment Response, Compensation and Liability Act, also known as "Superfund," and similar state laws. The affected sites are in varying stages of development. In some instances, the remedy has been completed, while in others, environmental studies are underway or commencing. For several sites, there are other potentially responsible parties that may be jointly or severally liable to pay all or part of cleanup costs. While it is not feasible to predict the outcome of these proceedings, based upon the Company's experience, current information and applicable law, the Company does not expect these proceedings to have a material adverse effect on its financial condition and/or liquidity. However, one or more of the proceedings could be material to the Company's business and/or results of operations.

The Company is also involved both as a plaintiff and a defendant in other legal proceedings and claims that arise in the ordinary course of business. The Company believes that it has meritorious defenses to these suits pending against the Company and is engaged in a vigorous defense of each of these matters.

Litigation Reserves

The Company regularly monitors and evaluates the status of product liability and other legal matters, and may, from time-to-time, engage in settlement and mediation discussions taking into consideration developments in the matters and the risks and uncertainties surrounding litigation. These discussions could result in settlements of one or more of these claims at any time.

In the second quarter of 2019, the Company recorded a pre-tax charge to *Other operating expense, net*, of approximately $331 million related to certain of the product liability matters discussed above under the heading "Product Liability Matters," including the related legal defense costs. The Company recorded this charge based on additional information obtained during the quarter, including but not limited to: the allegations and documentation supporting or refuting such allegations; publicly available information regarding similar medical device mass tort settlements; historical information regarding other product liability settlements involving the Company; and the stage of litigation.

Accruals for the Company's product liability claims which are specifically discussed above, as well as the related legal defense costs, amounted to approximately $2.0 billion at both March 31, 2019 and September 30, 2018. As of March 31, 2019 and September 30, 2018, the Company had $80 million and $94 million, respectively, in qualified settlement funds ("QSFs"), subject to certain settlement conditions, for certain product liability matters. Payments to QSFs are recorded as a component of *Restricted cash*. The Company's expected recoveries related to product liability claims and related legal defense costs were approximately $152 million and $343 million at March 31, 2019 and September 30, 2018, respectively. A substantial amount of these expected recoveries at March 31, 2019 and September 30, 2018 related to the Company's agreements with Medtronic related to certain Women's Health Product Claims. During the six months ended March 31, 2019, Medtronic provided the Company with releases from liability for certain claims that were the subject of the agreement discussed further above. Accordingly, adjustments to reduce accruals for the Company's product liability claims, as well as the balance recorded for expected recoveries related to product liability claims, were recorded during the six months ended March 31, 2019.

The terms of the Company's agreements with Medtronic are substantially consistent with the assumptions underlying, and the manner in which, the Company has recorded expected recoveries related to the indemnification obligation. The expected recoveries at March 31, 2019 related to the indemnification obligation are not in dispute with respect to claims that Medtronic settles pursuant to the agreements. As described above, the agreements do not resolve the dispute between the Company and Medtronic with respect to Women's Health Product Claims that do not settle, if any, and the Company also may, in its sole discretion, transfer responsibility for settlement of additional Women's Health Product Claims to Medtronic on similar terms.

Note 6 – Revenues

As previously discussed in Note 2, the Company adopted ASC 606 using the modified retrospective method. The Company sells a broad range of medical supplies, devices, laboratory equipment and diagnostic products which are distributed through independent distribution channels and directly by BD through sales representatives. End-users of the Company's products include healthcare institutions, physicians, life science researchers, clinical laboratories, the pharmaceutical industry and the general public.

Timing of Revenue Recognition

The Company's revenues are primarily recognized when the customer obtains control of the product sold, which is generally upon shipment or delivery, depending on the delivery terms specified in the sales agreement. Revenues associated with certain instruments and equipment for which installation is complex, and therefore significantly affects the customer's ability to use and benefit from the product, are recognized when customer acceptance of these installed products has been confirmed. For certain service arrangements, including extended warranty and software maintenance contracts, revenue is recognized ratably over the contract term. The majority of revenues relating to extended warranty contracts associated with certain instruments and equipment is generally recognized within a few years whereas deferred revenue relating to software maintenance contracts is generally recognized over a longer period.

Measurement of Revenues

The Company acts as the principal in substantially all of its customer arrangements and as such, generally records revenues on a gross basis. Revenues exclude any taxes that the Company collects from customers and remits to tax authorities. The Company considers its shipping and handling costs to be costs of contract fulfillment and has made the accounting policy election to record these costs within *Selling and administrative expense*.

Payment terms extended to the Company's customers are based upon commercially reasonable terms for the markets in which the Company's products are sold. Because the Company generally expects to receive payment within one year or less from when control of a product is transferred to the customer, the Company does not generally adjust its revenues for the effects of a financing component. The Company's estimate of probable credit losses relating to trade receivables is determined based on historical experience and other specific account data. Amounts are written off against the allowances for doubtful accounts when the Company determines that a customer account is uncollectible. Such amounts are not material to the Company's consolidated financial results.

The Company's gross revenues are subject to a variety of deductions which are recorded in the same period that the underlying revenues are recognized. Such variable consideration include rebates, sales discounts and sales returns. Because these deductions represent estimates of the related obligations, judgment is required when determining the impact of these revenue deductions on gross revenues for a reporting period. Rebates provided by the Company are based upon prices determined under the Company's agreements with its end-user customers. Additional factors considered in the estimate of the Company's rebate liability include the quantification of inventory that is either in stock at or in transit to the Company's distributors, as well as the estimated lag time between the sale of product and the payment of corresponding rebates. The impact of other forms of variable consideration, including sales discounts and sales returns, is not material to the Company's revenues.

The Company's agreements with customers within certain organizational units including Medication Management Solutions, Diagnostic Systems and Biosciences, contain multiple performance obligations including both products and certain services noted above. The transaction price for these agreements is allocated to each performance obligation based upon its relative standalone selling price. Standalone selling price is the amount at which the Company would sell a promised good or service separately to a customer. The Company generally estimates standalone selling prices using its list prices and a consideration of typical discounts offered to customers.

Effects of Revenue Arrangements on Consolidated Balance Sheet

Due to the nature of the majority of the Company's products and services, the Company typically does not incur costs to fulfill a contract in advance of providing the customer with goods or services. Capitalized contract costs associated with the costs to fulfill contracts for certain products in the Medication Management Solutions organizational unit are immaterial to the Company's consolidated balance sheets. The Company's costs to obtain contracts are comprised of sales commissions which are paid to the Company's employees or third party agents. The majority of the sales commissions incurred by the Company relate to revenue that is recognized over a period that is less than one year and as such, the Company has elected a practical expedient provided under ASC 606 to record the majority of its expense associated with sales commissions as it is incurred. Commissions relating to revenues recognized over a period longer than one year are recorded as assets which are amortized over the period over which the revenues underlying the commissions are recognized. Capitalized contract costs related to such commissions are immaterial to the Company's consolidated balance sheets.

The Company records contract liabilities for unearned revenue that is allocable to performance obligations, such as extended warranty and software maintenance contracts, which are performed over time as discussed further above. These contract liabilities are immaterial to the Company's consolidated financial results. The Company's liability for product warranties provided under its agreements with customers is not material to its consolidated balance sheets.

Remaining Performance Obligations

The Company's obligations relative to service contracts, which are further discussed above, and pending installations of equipment, primarily in the Company's Medication Management Solutions unit, represent unsatisfied performance obligations of the Company. The revenues under existing and noncancelable contracts which are attributable to products and/or services that have not yet been installed or provided are estimated to be approximately $1.6 billion at March 31, 2019 and the Company expects to recognize the majority of this revenue over the next three years.

Within the Company's Medication Management Solutions, Medication Delivery Solutions, Diagnostic Systems and Biosciences units, some contracts also contain minimum purchase commitments of reagents or other consumables and the future sales of these consumables represent additional unsatisfied performance obligations of the Company. The revenue attributable to the unsatisfied minimum purchase commitment-related performance obligations will be recognized over the customer relationship period, which usually encompasses the current agreement term and subsequent renewal terms.

Disaggregation of Revenues

A disaggregation of the Company's revenues by segment, organizational unit and geographic region is provided in Note 7.

Note 7 – Segment Data

The Company's organizational structure is based upon three principal business segments: BD Medical (“Medical”), BD Life Sciences (“Life Sciences”) and BD Interventional ("Interventional"). The Company's segments are strategic businesses that are managed separately because each one develops, manufactures and markets distinct products and services. Segment disclosures are on a performance basis consistent with internal management reporting. The Company evaluates performance of its business segments and allocates resources to them primarily based upon segment operating income, which represents revenues reduced by product costs and operating expenses.

Revenues by segment, organizational unit and geographical areas for the three and six-month periods are detailed below. The Company has no material intersegment revenues. On December 29, 2017, the Company completed its acquisition of C.R. Bard, Inc. ("Bard"), which is further discussed in Note 9. Bard's operating results were included in the Company’s consolidated results of operations beginning on January 1, 2018 and as such, are not included in the financial results detailed below for the first quarter of the prior-year six-month period.

	Three Months Ended March 31,					
(Millions of dollars)	2019			2018		
	United States	International	Total	United States	International	Total
Medical						
Medication Delivery Solutions	$ 484	$ 446	$ 929	$ 504	$ 454	$ 958
Medication Management Solutions	497	118	615	461	120	581
Diabetes Care	137	133	270	131	136	267
Pharmaceutical Systems	93	273	366	82	284	366
Total segment revenues	$ 1,211	$ 969	$ 2,180	$ 1,178	$ 994	$ 2,172
Life Sciences						
Preanalytical Systems	$ 171	$ 195	$ 366	$ 181	$ 200	$ 381
Diagnostic Systems	180	209	389	201	209	410
Biosciences	120	177	297	116	191	307
Total segment revenues	$ 470	$ 582	$ 1,052	$ 498	$ 600	$ 1,098
Interventional						
Surgery	$ 271	$ 75	$ 345	$ 276	$ 75	$ 351
Peripheral Intervention	194	148	342	194	145	338
Urology and Critical Care	195	80	275	180	84	264
Total segment revenues	$ 659	$ 303	$ 963	$ 649	$ 303	$ 952
Total Company revenues	$ 2,341	$ 1,854	$ 4,195	$ 2,325	$ 1,898	$ 4,222

(Millions of dollars)	Six Months Ended March 31,					
	2019			2018		
	United States	International	Total	United States	International	Total
Medical						
Medication Delivery Solutions	$ 1,004	$ 883	$ 1,887	$ 874	$ 826	$ 1,700
Medication Management Solutions	1,003	236	1,239	932	237	1,168
Diabetes Care	282	261	544	277	267	544
Pharmaceutical Systems	161	485	646	136	475	612
Total segment revenues	$ 2,450	$ 1,865	$ 4,316	$ 2,218	$ 1,806	$ 4,024
Life Sciences						
Preanalytical Systems	$ 371	$ 387	$ 758	$ 366	$ 391	$ 756
Diagnostic Systems	355	416	771	367	423	791
Biosciences	228	350	579	224	372	596
Total segment revenues	$ 954	$ 1,153	$ 2,108	$ 957	$ 1,186	$ 2,143
Interventional						
Surgery	$ 545	$ 148	$ 693	$ 428	$ 99	$ 528
Peripheral Intervention	385	294	679	198	146	344
Urology and Critical Care	393	168	560	180	84	264
Total segment revenues	$ 1,323	$ 609	$ 1,932	$ 806	$ 329	$ 1,135
Total Company revenues	$ 4,728	$ 3,628	$ 8,355	$ 3,982	$ 3,321	$ 7,302

Segment income for the three and six-month periods was as follows:

(Millions of dollars)	Three Months Ended March 31,		Six Months Ended March 31,	
	2019	2018	2019	2018
Income Before Income Taxes				
Medical (a) (b)	$ 599	$ 588	$ 1,265	$ 1,211
Life Sciences	293	336	598	652
Interventional (b)	231	(154)	441	(72)
Total Segment Operating Income	1,123	770	2,303	1,791
Acquisitions and other restructurings	(101)	(104)	(191)	(458)
Net interest expense	(153)	(181)	(336)	(295)
Other unallocated items (c)	(866)	(479)	(1,058)	(926)
Income Before Income Taxes	$ 3	$ 6	$ 718	$ 111

(a) The amounts in 2019 include $65 million of estimated remediation costs recorded to *Other operating expense, net* relating to a recall of a product component, which generally pre-dated the Company's acquisition of CareFusion in fiscal year 2015, within the Medication Management Solutions unit's infusion systems platform.

(b) The amounts in 2018 included expense of $53 million and $369 million for the Medical and Interventional segments, respectively, related to the recognition of a fair value step-up adjustment of $422 million related to Bard's inventory on the acquisition date.

(c) Primarily comprised of foreign exchange, certain general and administrative expenses and share-based compensation expense. The amounts in 2019 include a pre-tax charge of $331 million related to certain product liability matters, which is further discussed in Note 5. In addition, the amount for the six months ended March 31, 2019 included the pre-tax gain recognized on the Company's sale of its Advanced Bioprocessing business of approximately $335 million, which is further discussed in Note 10.

Note 8 – Benefit Plans

The Company has defined benefit pension plans covering certain employees in the United States and certain international locations. The measurement date used for these plans is September 30.

Net pension cost included the following components for the three and six months ended March 31:

	Three Months Ended March 31,		Six Months Ended March 31,	
(Millions of dollars)	2019	2018	2019	2018
Service cost	$ 33	$ 34	$ 68	$ 64
Interest cost	26	22	54	41
Expected return on plan assets	(45)	(40)	(91)	(72)
Amortization of prior service credit	(3)	(3)	(7)	(7)
Amortization of loss	19	19	39	39
Settlements	—	2	—	2
Net pension cost	$ 31	$ 35	$ 63	$ 67

The amounts provided above for amortization of prior service credit and amortization of loss represent the reclassifications of prior service credits and net actuarial losses that were recognized in *Accumulated other comprehensive income (loss)* in prior periods.

As further discussed in Note 2, upon adopting an accounting standard update on October 1, 2018, all components of the Company's net periodic pension and postretirement benefit costs, aside from service cost, are recorded to *Other income (expense), net* on its consolidated statements of income, for all periods presented.

Note 9 – Acquisition

Bard

On December 29, 2017, the Company completed its acquisition of Bard. The operating activities of Bard from the acquisition date through December 31, 2017 were not material to the Company's consolidated results of operations. As such, Bard's operating results were included in the Company's consolidated results of operations beginning on January 1, 2018. During the first quarter of fiscal year 2019, the Company finalized its allocation of the fair value of consideration transferred to the individual assets acquired and liabilities assumed in this acquisition, which resulted in no material adjustments to the allocation.

Note 10 – Divestiture

The Company completed the sale of its Life Sciences segment's Advanced Bioprocessing business in October 2018 pursuant to a definitive agreement that was signed in September 2018. Assets held for sale on the consolidated balance sheet at September 30, 2018, subject to this agreement, were approximately $137 million. Liabilities held for sale under the agreement were immaterial. The Company recognized a pre-tax gain on the sale of approximately $335 million which was recorded as a component of *Other operating expense, net*. The historical financial results for the Advanced Bioprocessing business have not been classified as a discontinued operation.

Note 11 – Business Restructuring Charges

The Company incurred restructuring costs during the six months ended March 31, 2019, largely in connection with its acquisition of Bard, which were recorded as *Acquisitions and other restructurings*. Restructuring liability activity for the six months ended March 31, 2019 was as follows:

(Millions of dollars)	Employee Termination		Other		Total	
	Bard	Other Initiatives	Bard (a)	Other Initiatives	Bard	Other Initiatives
Balance at September 30, 2018	$ 33	$ 23	$ —	$ 4	$ 33	$ 27
Charged to expense	9	8	38	17	47	25
Cash payments	(22)	(11)	(2)	(14)	(24)	(25)
Non-cash settlements	—	—	(36)	(4)	(36)	(4)
Balance at March 31, 2019	$ 20	$ 20	—	$ 3	$ 20	$ 23

(a) Largely represents the cost associated with certain pre-acquisition equity awards of Bard which, to encourage post-acquisition employee retention, were converted to BD equity awards with substantially the same terms and conditions as were applicable under such Bard awards immediately prior to the acquisition date.

Note 12 – Intangible Assets

Intangible assets consisted of:

(Millions of dollars)	March 31, 2019		September 30, 2018	
	Gross Carrying Amount	Accumulated Amortization	Gross Carrying Amount	Accumulated Amortization
Amortized intangible assets				
Developed technology	$ 13,976	$ 2,352	$ 13,966	$ 1,782
Customer relationships	4,586	1,022	4,584	861
Product rights	118	60	121	58
Trademarks	407	93	407	84
Patents and other	407	295	397	288
Amortized intangible assets	$ 19,495	$ 3,822	$ 19,475	$ 3,073
Unamortized intangible assets				
Acquired in-process research and development	$ 31		$ 37	
Trademarks	2		2	
Unamortized intangible assets	$ 33		$ 39	

Intangible amortization expense for the three months ended March 31, 2019 and 2018 was $376 million and $370 million, respectively. Intangible amortization expense for the six months ended March 31, 2019 and 2018 was $754 million and $505 million, respectively. The increase in intangible amortization expense for the six months ended March 31, 2019 was attributable to assets acquired in the Bard transaction, which is further discussed in Note 9.

The following is a reconciliation of goodwill by business segment:

(Millions of dollars)	Medical	Life Sciences	Interventional	Total
Goodwill as of September 30, 2018	$ 10,054	$ 775	$ 12,771	$ 23,600
Divestiture-related adjustments	—	3	—	3
Purchase accounting adjustments (a)	(15)	—	(70)	(84)
Currency translation	(3)	(2)	—	(5)
Goodwill as of March 31, 2019	$ 10,036	$ 776	$ 12,701	$ 23,513

(a) The purchase accounting adjustments were primarily driven by adjustments to tax-related balances.

Note 13 – Derivative Instruments and Hedging Activities

The Company uses derivative instruments to mitigate certain exposures. The Company does not enter into derivative financial instruments for trading or speculative purposes. The effects these derivative instruments and hedged items have on financial position, financial performance, and cash flows are provided below.

Foreign Currency Risks and Related Strategies

The Company has foreign currency exposures throughout Europe, Greater Asia, Canada and Latin America. Transactional currency exposures that arise from entering into transactions, generally on an intercompany basis, in non-hyperinflationary countries that are denominated in currencies other than the functional currency are mitigated primarily through the use of forward contracts and currency options. Hedges of the transactional foreign exchange exposures resulting primarily from intercompany payables and receivables are undesignated hedges. As such, the gains or losses on these instruments are recognized immediately in income. These gains and losses are largely offset by gains and losses on the underlying hedged items, as well as the hedging costs associated with the derivative instruments. The net amounts recognized in *Other income (expense), net*, during the three and six months ended March 31, 2019 and 2018 were immaterial to the Company's consolidated financial results.

The total notional amounts of the Company's outstanding foreign exchange contracts as of March 31, 2019 and September 30, 2018 were $1.5 billion and $3.1 billion, respectively.

In order to mitigate foreign currency exposure relating to its investments in certain foreign subsidiaries, the Company has designated $2.6 billion of Euro-denominated debt and $327 million of British Pound-denominated debt as net investment hedges. Accordingly, net gains or losses relating to this debt, which are attributable to changes in the foreign currencies to U.S. dollar spot exchange rates, are recorded as accumulated foreign currency translation in *Other comprehensive income (loss)*. Net (losses) gains recorded to *Accumulated other comprehensive income (loss)* relating to the Company's net investment hedges for the three and six-month periods were as follows:

	Three Months Ended March 31,		Six Months Ended March 31,	
(Millions of dollars)	**2019**	**2018**	**2019**	**2018**
Net (losses) gains on net investment hedges	$ (18)	$ (103)	$ 41	$ (104)

Interest Rate Risks and Related Strategies

The Company's primary interest rate exposure results from changes in U.S. dollar interest rates. The Company's policy is to manage interest cost using a mix of fixed and variable rate debt. The Company periodically uses interest rate swaps to manage such exposures. Under these interest rate swaps, the Company exchanges, at specified intervals, the difference between fixed and floating interest amounts calculated by reference to an agreed-upon notional principal amount. These swaps are designated as either fair value or cash flow hedges.

For interest rate swaps designated as fair value hedges (i.e., hedges against the exposure to changes in the fair value of an asset or a liability or an identified portion thereof that is attributable to a particular risk), changes in the fair value of the interest rate swaps offset changes in the fair value of the fixed rate debt due to changes in market interest rates.

Changes in the fair value of the interest rate swaps designated as cash flow hedges (i.e., hedging the exposure to variability in expected future cash flows that is attributable to a particular risk) are offset by amounts recorded in *Other comprehensive income (loss)*. If interest rate derivatives designated as cash flow hedges are terminated, the balance in *Accumulated other comprehensive income (loss)* attributable to those derivatives is reclassified into earnings over the remaining life of the hedged debt. The net realized loss related to terminated interest rate swaps expected to be reclassified and recorded in *Interest expense* within the next 12 months is $6 million, net of tax.

The total notional amount of the Company's outstanding interest rate swaps designated as fair value hedges was $1.2 billion at March 31, 2019 and September 30, 2018. The outstanding swaps represent fixed-to-floating interest rate swap agreements the Company entered into to convert the interest payments on certain long-term notes from the fixed rate to a floating interest rate based on LIBOR. Changes in the fair value of the interest rate swaps offset changes in the fair value of the fixed rate debt. The amounts recorded during the three and six months ended March 31, 2019 and 2018 for changes in the fair value of these hedges were immaterial to the Company's consolidated financial results.

Other Risk Exposures

The Company purchases resins, which are oil-based components used in the manufacture of certain products. Significant increases in world oil prices that lead to increases in resin purchase costs could impact future operating results. From time to time, the Company has managed price risks associated with these commodity purchases through commodity derivative forward contracts. The Company's outstanding commodity derivative forward contracts at March 31, 2019 were immaterial to the Company's consolidated financial results. The Company had no outstanding commodity derivative forward contracts at September 30, 2018.

Financial Statement Effects

The fair values of derivative instruments outstanding at March 31, 2019 and September 30, 2018 were not material to the Company's consolidated balance sheets.

The amounts reclassified from accumulated other comprehensive income relating to cash flow hedges during the three and six months ended March 31, 2019 and 2018 were not material to the Company's consolidated financial results.

Note 14 – Financial Instruments and Fair Value Measurements

The following reconciles cash and equivalents and restricted cash reported within the Company's consolidated balance sheets at March 31, 2019 and September 30, 2018 to the total of these amounts shown on the Company's consolidated statements of cash flows:

(Millions of dollars)	March 31, 2019	September 30, 2018
Cash and equivalents	$ 686	$ 1,140
Restricted cash	81	96
Cash and equivalents and restricted cash	$ 767	$ 1,236

Cash equivalents consist of all highly liquid investments with a maturity of three months or less at time of purchase. Restricted cash consists of cash restricted from withdrawal and usage except for certain product liability matters.

The Company’s cash and equivalents includes institutional money market accounts which permit daily redemption and the fair values of these investments are based upon the quoted prices in active markets provided by the holding financial institutions, which are considered Level 1 inputs in the fair value hierarchy. The fair values of these accounts were $25 million and $228 million at March 31, 2019 and September 30, 2018, respectively. The Company’s remaining cash and equivalents, excluding restricted cash, were $661 million and $913 million at March 31, 2019 and September 30, 2018, respectively.

Short-term investments are held to their maturities and are carried at cost, which approximates fair value. The short-term investments consist of instruments with maturities greater than three months and less than one year.

Long-term debt is recorded at amortized cost. The fair value of long-term debt is measured based upon quoted prices in active markets for similar instruments, which are considered Level 2 inputs in the fair value hierarchy. The fair value of long-term debt was $18.2 billion and $18.8 billion at March 31, 2019 and September 30, 2018, respectively. The fair value of the current portion of long-term debt was $3.0 billion and $1.9 billion at March 31, 2019 and September 30, 2018, respectively.

All other instruments measured by the Company at fair value, including derivatives and contingent consideration liabilities, are immaterial to the Company's consolidated balance sheets.

Note 15 – Debt

In March 2019, the Company redeemed an aggregate principal amount of $250 million of its outstanding floating rate senior unsecured U.S. notes due December 29, 2020. Based upon the $249 million carrying value of the notes redeemed and the $250 million the Company paid to redeem the aggregate principal amount of the notes, the Company recorded a loss on this debt extinguishment transaction in the second quarter of fiscal year 2019 of $1 million as *Other income (expense), net*, on its consolidated statements of income.

Note 16 – Income Taxes

New U.S. tax legislation, which is commonly referred to as the Tax Cuts and Jobs Act (the "Act"), was enacted on December 22, 2017. Upon completing its accounting for the tax effects of the Act during fiscal year 2019, the Company recognized a net

charge of $10 million, which is reflected in the Company's consolidated statement of income within *Income tax (benefit) provision*, to adjust its one-time transition tax liability for all of its foreign subsidiaries. The Company also recorded charges to *Income tax (benefit) provision* during fiscal year 2019 of $7 million and $2 million, respectively, to adjust the Company's reevaluation of the permanent reinvestment assertion regarding foreign earnings and its re-measurement of deferred tax balances.

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

The following commentary should be read in conjunction with the condensed consolidated financial statements and accompanying notes presented in this report. Within the tables presented throughout this discussion, certain columns may not add due to the use of rounded numbers for disclosure purposes. Percentages and earnings per share amounts presented are calculated from the underlying amounts.

Company Overview

Becton, Dickinson and Company ("BD") is a global medical technology company engaged in the development, manufacture and sale of a broad range of medical supplies, devices, laboratory equipment and diagnostic products used by healthcare institutions, physicians, life science researchers, clinical laboratories, the pharmaceutical industry and the general public. The Company's organizational structure is based upon three principal business segments, BD Medical ("Medical"), BD Life Sciences ("Life Sciences") and BD Interventional ("Interventional").

BD's products are manufactured and sold worldwide. Our products are marketed in the United States and internationally through independent distribution channels and directly to end-users by BD and independent sales representatives. We organize our operations outside the United States as follows: Europe; EMA (which includes the Commonwealth of Independent States, the Middle East and Africa); Greater Asia (which includes Japan and Asia Pacific); Latin America (which includes Mexico, Central America, the Caribbean, and South America); and Canada. We continue to pursue growth opportunities in emerging markets, which include the following geographic regions: Eastern Europe, the Middle East, Africa, Latin America and certain countries within Asia Pacific. We are primarily focused on certain countries whose healthcare systems are expanding.

Overview of Financial Results and Financial Condition

For the three months ended March 31, 2019, worldwide revenues of $4.195 billion decreased 0.6% from the prior-year period which reflected volume growth of over 3%, an unfavorable impact from foreign currency translation of approximately 2.7% and pricing pressures of approximately 0.1%. Revenues for the three months ended March 31, 2019 also reflected an unfavorable impact of approximately 1% which was largely attributable to the Biosciences unit's divestiture of its Advanced Bioprocessing business at the end of October 2018, as is further discussed in Note 10 in the Notes to Condensed Consolidated Financial Statements. Volume growth in the second quarter of fiscal year 2019 was as follows:

- Medical segment volume growth in the second quarter reflected growth in all of the segment's units, particularly in the Medication Management Solutions unit.
- Life Sciences segment volume growth in the second quarter was mainly driven by the segment's Preanalytical Systems and Biosciences units.
- Interventional segment volume growth in the second quarter reflected sales growth in all units, particularly in the Peripheral Intervention unit as well as in the Urology and Critical Care unit.

We continue to invest in research and development, geographic expansion, and new product market programs to drive further revenue and profit growth. Our ability to sustain our long-term growth will depend on a number of factors, including our ability to expand our core business (including geographical expansion), develop innovative new products, and continue to improve operating efficiency and organizational effectiveness. While the economic environment for the healthcare industry and healthcare utilization in the United States is generally stable, destabilization in the future could adversely impact our businesses. Additionally, macroeconomic challenges in Europe continue to constrain healthcare utilization, although we currently view the environment as stable. In emerging markets, the Company's growth is dependent primarily on government funding for healthcare systems. In addition, pricing pressure exists globally which could adversely impact our businesses.

Cash flows from operating activities were $1.027 billion in the first six months of fiscal year 2019. At March 31, 2019, we had $777 million in cash and equivalents and short-term investments, including restricted cash. We continued to return value to our shareholders in the form of dividends. During the first six months of fiscal year 2019, we paid cash dividends of $491 million.

Each reporting period, we face currency exposure that arises from translating the results of our worldwide operations to the U.S. dollar at exchange rates that fluctuate from the beginning of such period. A stronger U.S. dollar, compared to the prior-year period, resulted in an unfavorable foreign currency translation impact to our revenue and earnings during the second quarter of fiscal year 2019. We evaluate our results of operations on both a reported and a foreign currency-neutral basis, which excludes the impact of fluctuations in foreign currency exchange rates. As exchange rates are an important factor in understanding period-to-period comparisons, we believe the presentation of results on a foreign currency-neutral basis in addition to reported results helps improve investors' ability to understand our operating results and evaluate our performance in comparison to prior periods. Foreign currency-neutral ("FXN") information compares results between periods as if exchange rates had remained constant period-over-period. We use results on a foreign currency-neutral basis as one measure to evaluate

our performance. We calculate foreign currency-neutral percentages by converting our current-period local currency financial results using the prior-period foreign currency exchange rates and comparing these adjusted amounts to our current-period results. These results should be considered in addition to, not as a substitute for, results reported in accordance with U.S. generally accepted accounting principles ("GAAP"). Results on a foreign currency-neutral basis, as we present them, may not be comparable to similarly titled measures used by other companies and are not measures of performance presented in accordance with U.S. GAAP.

Results of Operations

Medical Segment

The following summarizes second quarter Medical revenues by organizational unit:

	Three months ended March 31,				
(Millions of dollars)	2019	2018	Total Change	Estimated FX Impact	FXN Change
Medication Delivery Solutions	$ 929	$ 958	(3.0)%	(3.2)%	0.2%
Medication Management Solutions	615	581	5.9 %	(1.4)%	7.3%
Diabetes Care	270	267	1.1 %	(3.4)%	4.5%
Pharmaceutical Systems	366	366	(0.1)%	(4.0)%	3.9%
Total Medical Revenues	$ 2,180	$ 2,172	0.4 %	(2.9)%	3.3%

Second quarter Medical segment revenues reflected sales growth attributable to the Medication Management Solutions unit's installations of infusion systems and the Diabetes Care unit's global sales of pen needles. Revenues in the Medication Delivery Solutions unit were unfavorably impacted by U.S. distributor inventory adjustments in our hypodermic business during the quarter. This unfavorable impact to the Medication Delivery Solutions unit's revenues in the current quarter was partially offset by growth in sales of vascular management and vascular access devices in Europe.

Medical segment total revenues for the six-month period are below. Revenues in the current-year period were favorably impacted by the inclusion of revenues, resulting from our acquisition of C.R. Bard, Inc. ("Bard") in December 2017, associated with certain Bard products within the Medication Delivery Solutions unit in the first quarter of 2019 but not in the first quarter of the prior-year period as operating activities of the acquired business were not included in our consolidated results of operations until January 1, 2018.

	Six months ended March 31,				
(Millions of dollars)	2019	2018	Total Change	Estimated FX Impact	FXN Change
Total Medical Revenues	$ 4,316	$ 4,024	7.2%	(2.4)%	9.6%

Medical segment operating income for the three and six-month periods is provided below. Operating income in the current year's six-month period reflects the inclusion of results associated with certain Bard products in the first quarter of 2019, as further discussed above.

	Three months ended March 31,		Six months ended March 31,	
(Millions of dollars)	2019	2018	2019	2018
Medical segment operating income	$ 599	$ 588	$ 1,265	$ 1,211
Segment operating income as % of Medical revenues	*27.5%*	*27.1%*	*29.3%*	*30.1%*

The Medical segment's operating income in the second quarter was driven by its performance with respect to gross profit margin and operating expenses.

- Gross profit margin was higher in the second quarter of 2019 as compared with the second quarter of 2018 primarily due to the unfavorable prior-year impact of recognizing a fair value step-up adjustment relating to Bard's inventory on the acquisition date. Gross margin in the second quarter of 2019 was also favorably impacted by lower manufacturing costs resulting from continuous improvement projects which enhanced the efficiency of our operations. These favorable impacts to the Medical segment's gross margin were partially offset by unfavorable foreign currency translation, higher raw material costs and pricing pressures.

- Selling and administrative expense as a percentage of revenues was slightly higher in the second quarter of 2019 as compared with the prior-year period primarily due to higher general administrative expenses.
- Research and development expense as a percentage of revenues was lower in the second quarter of 2019 as compared with the second quarter of 2018.
- The Medical segment's operating income in the second quarter of 2019 additionally reflected the estimated cumulative costs of a product recall of $65 million recorded within *Other operating expense, net.* The recall relates to a product component, which generally pre-dated the Company's acquisition of CareFusion in fiscal year 2015, within the Medication Management Solutions unit's infusion systems platform.

Life Sciences Segment

The following summarizes second quarter Life Sciences revenues by organizational unit:

	Three months ended March 31,				
(Millions of dollars)	2019	2018	Total Change	Estimated FX Impact	FXN Change
Preanalytical Systems	$ 366	$ 381	(4.1)%	(3.9)%	(0.2)%
Diagnostic Systems	389	410	(5.1)%	(3.0)%	(2.1)%
Biosciences	297	307	(3.0)%	(3.0)%	— %
Total Life Sciences Revenues	$ 1,052	$ 1,098	(4.2)%	(3.3)%	(0.9)%

The Life Sciences segment's revenues in the second quarter reflected an unfavorable comparison of the Diagnostic System unit's current-period U.S. revenues to the prior-year period, which benefited from a more severe influenza season. This unfavorable comparison in the Diagnostic Systems unit was partially offset by growth in the unit's sales of core microbiology products as well as continued strength in sales of the unit's *BD MAX*™ molecular platform. The Preanalytical Systems unit's second quarter revenues reflected growth in sales of core products in emerging markets but were unfavorably impacted by higher than anticipated customer rebate and incentive fees which related to a prior fiscal year. Second quarter revenues in the Biosciences unit reflected growth in research reagent and instrument sales, as well as licensing revenues, but were unfavorably impacted by the divestiture of the Advanced Bioprocessing business, as previously discussed. The Biosciences unit's results for the prior-year period included revenues associated with the Advanced Bioprocessing business of $22 million.

Life Sciences segment total revenues for the six-month period were as follows:

	Six months ended March 31,				
(Millions of dollars)	2019	2018	Total Change	Estimated FX Impact	FXN Change
Total Life Sciences Revenues	$ 2,108	$ 2,143	(1.6)%	(2.6)%	1.0%

Life Sciences segment operating income for the three and six-month periods was as follows:

	Three months ended March 31,		Six months ended March 31,	
(Millions of dollars)	2019	2018	2019	2018
Life Sciences segment operating income	$ 293	$ 336	$ 598	$ 652
Segment operating income as % of Life Sciences revenues	*27.8%*	*30.6%*	*28.4%*	*30.4%*

The Life Sciences segment's operating income in the second quarter was driven by its performance with respect to gross profit margin and operating expenses.

- Gross profit margin in the second quarter of fiscal year 2019 was lower compared with the second quarter of 2018 primarily due to unfavorable foreign currency translation and an unfavorable impact from product mix as a result of the less severe flu season in the current-year period. Second quarter gross margin was also unfavorably impacted by customer rebate and incentive fees, as previously discussed above. These unfavorable impacts to the Life Sciences segment's gross margin were partially offset by licensing revenues, which are noted above, and lower manufacturing costs resulting from continuous improvement projects which enhanced the efficiency of our operations.
- Selling and administrative expense as a percentage of revenues in the second quarter of 2019 was relatively flat compared with the prior-year period as unfavorable foreign currency translation was offset by the timing of certain selling and general administrative expenses.

- Research and development expense as a percentage of revenues was slightly higher in the second quarter of 2019 as compared with the second quarter of 2018.

Interventional Segment

The following summarizes second quarter Interventional revenues by organizational unit:

	Three months ended March 31,				
(Millions of dollars)	2019	2018	Total Change	Estimated FX Impact	FXN Change
Surgery	$ 345	$ 351	(1.5)%	(1.2)%	(0.3)%
Peripheral Intervention	342	338	1.1 %	(2.7)%	3.8 %
Urology and Critical Care	275	264	4.5 %	(1.5)%	6.0 %
Total Interventional Revenues	$ 963	$ 952	1.1 %	(1.8)%	2.9 %

The Interventional segment's revenues in the second quarter reflected growth in the Peripheral Intervention unit's emerging market sales. This growth in the Peripheral Intervention unit was partially offset by an unfavorable impact related to a recent letter from the U.S. Food and Drug Administration ("FDA") to healthcare professionals regarding the use of paclitaxel-coated devices in the treatment of peripheral artery disease, which impacted sales of our drug-coated balloon products. The Urology and Critical Care unit's second quarter revenues were driven by growth in sales of acute urology products and sales by the unit's home care and targeted temperature management businesses. Second quarter revenues in the Surgery unit reflected an unfavorable comparison to the prior-year period, which included sales related to the unit's release of backordered supply to the market following Hurricane Maria. The impact of this unfavorable comparison was partially offset by growth in sales of the Surgery unit's biosurgery and infection prevention products.

Interventional segment total revenues for the six-month period are provided below. Revenues in the current-year period were favorably impacted by the inclusion of revenues associated with Bard's products in the segment's results for the first quarter of 2019, as further discussed above.

	Six months ended March 31,				
(Millions of dollars)	2019	2018	Total Change	Estimated FX Impact	FXN Change
Total Interventional Revenues	$ 1,932	$ 1,135	70.2%	(2.3)%	72.5%

Interventional segment operating income for the three and six-month periods is provided below. Operating income in the current year's six-month period reflects the inclusion of Bard results in the first quarter of 2019, as further discussed above.

	Three months ended March 31,		Six months ended March 31,	
(Millions of dollars)	2019	2018	2019	2018
Interventional segment operating income	$ 231	$ (154)	$ 441	$ (72)
Segment operating income as % of Interventional revenues	*24.0%*	*(16.2)%*	22.8%	(6.4)%

The Interventional segment's operating income in the second quarter was driven by its performance with respect to gross profit margin and operating expenses.

- Gross profit margin was higher in the second quarter of 2019 as compared with the second quarter of 2018 primarily due to the unfavorable prior-year impact of recognizing a fair value step-up adjustment relating to Bard's inventory on the acquisition date.
- Selling and administrative expense as a percentage of revenues in the second quarter of 2019 was relatively flat compared with the prior-year period.
- Research and development expense as a percentage of revenues was lower in the second quarter of 2019 as compared with the second quarter of 2018.

Geographic Revenues

BD's worldwide second quarter revenues by geography were as follows:

	Three months ended March 31,				
(Millions of dollars)	2019	2018	Total Change	Estimated FX Impact	FXN Change
United States	$ 2,341	$ 2,325	0.7 %	— %	0.7%
International	1,854	1,898	(2.3)%	(6.1)%	3.8%
Total Revenues	$ 4,195	$ 4,222	(0.6)%	(2.7)%	2.1%

Second quarter U.S. revenue growth was driven by revenues in the Medical segment's Medication Management Solutions unit, the Life Sciences segment's Biosciences unit and the Interventional segment's Urology and Critical Care unit. U.S. revenue growth in the second quarter of 2019 was unfavorably impacted by results in the Medical segment's Medication Delivery Solutions unit and the Life Sciences segment's Diagnostic Systems, as previously noted in the discussions above.

International revenues in the second quarter of 2019 reflected growth in all three segments. Second quarter international revenue growth in the Medical segment was particularly driven by growth in the Medication Delivery Solutions unit. Second quarter international revenue growth was also largely driven by the Life Sciences segment's Diagnostic Systems unit and the Interventional segment's Peripheral Intervention unit.

Emerging market revenues for the second quarter were $637 million, compared with $631 million in the prior year's quarter. Emerging market revenues in the current-year period also included an estimated $48 million unfavorable impact due to foreign currency translation. Second quarter revenue growth in emerging markets was particularly driven by sales in China and EMA.

Specified Items

Reflected in the financial results for the three and six-month periods of fiscal years 2019 and 2018 were the following specified items:

	Three months ended March 31,		Six months ended March 31,	
(Millions of dollars)	2019	2018	2019	2018
Integration costs (a)	$ 70	$ 79	$ 143	$ 153
Restructuring costs (a)	31	19	72	255
Transaction costs (a)	1	7	2	51
Financing impacts (b)	—	—	—	49
Purchase accounting adjustments (c)	379	790	757	925
Transaction gain/loss and product-related matters (d)	396	—	61	—
European regulatory initiative-related costs (e)	10	—	15	—
Hurricane recovery costs	—	5	—	12
Losses on debt extinguishment (f)	1	13	1	13
Total specified items	888	912	1,051	1,457
Less: tax impact of specified items and tax reform (g)	160	137	143	2
After-tax impact of specified items	$ 729	$ 775	$ 908	$ 1,455

(a) Represents integration, restructuring and transaction costs which are primarily recorded in *Acquisitions and other restructurings* and are further discussed below.

(b) Represents financing impacts associated with the Bard acquisition, which were recorded in *Interest income* and *Interest expense*.

(c) Primarily represents non-cash amortization expense associated with acquisition-related identifiable intangible assets. BD's amortization expense is primarily recorded in *Cost of products sold*. The amounts in 2018 also included a fair value step-up adjustment of $422 million relating to Bard's inventory on the acquisition date.

(d) Represents amounts recorded to *Other operating expense, net* relating to certain product liability matters and the estimated cost of a product recall, as further discussed below. The amount in the six-month period also included the pre-tax gain recognized in *Other operating expense, net* on BD's sale of its Advanced Bioprocessing business, which is further discussed below.

(e) Represents initial costs required to develop processes and systems to comply with emerging regulations such as the European Union Medical Device Regulation ("EUMDR") and General Data Protection Regulation ("GDPR"). These costs were recorded in *Cost of products sold* and *Research and development expense.*

(f) Represents losses recognized in *Other income (expense), net* upon our extinguishment of certain long-term senior notes.

(g) The amounts in the six-month periods of fiscal years 2019 and 2018 included additional tax expense, net, of $20 million and $275 million, respectively relating to new U.S. tax legislation, as further discussed below.

Gross Profit Margin

Gross profit margin for the three and six-month periods of fiscal year 2019 compared with the prior-year periods in 2018 reflected the following impacts:

	Three-month period	Six-month period
March 31, 2018 gross profit margin %	38.0 %	43.3 %
Impact of purchase accounting adjustments and other specified items	10.1 %	3.9 %
Operating performance	— %	1.0 %
Foreign currency translation	(1.0)%	(1.0)%
March 31, 2019 gross profit margin %	47.1 %	47.2 %

The impact of purchase accounting adjustments and other specified items on the current-year three and six-month periods was favorable due to a comparison to the prior-year periods, which included the recognition of fair value step-up adjustment relating to Bard's inventory on the acquisition date, as previously discussed above. Operating performance for the three-month period primarily reflected lower manufacturing costs resulting from continuous operations improvement projects, as discussed above, offset by the unfavorable impacts of higher raw material costs and pricing pressures. Operating performance in the current-year six-month period primarily reflected the favorable impact of Bard on product mix and lower manufacturing costs resulting from continuous operations improvement projects, partially offset by higher raw material costs and pricing pressures.

Operating Expenses

A summary of operating expenses for the three and six-month periods of fiscal years 2019 and 2018 is as follows:

	Three months ended March 31,		Increase (decrease) in basis points	Six months ended March 31,		Increase (decrease) in basis points
	2019	2018		2019	2018	
(Millions of dollars)						
Selling and administrative expense	$ 1,089	$ 1,056		$ 2,161	$ 1,829	
% of revenues	*25.9%*	*25.0%*	*90*	*25.9%*	*25.0%*	*90*
Research and development expense	$ 252	$ 259		$ 510	$ 451	
% of revenues	*6.0%*	*6.1%*	*(10)*	*6.1%*	*6.2%*	*(10)*
Acquisitions and other restructurings	$ 101	$ 104		$ 191	$ 458	
Other operating expense, net	$ 396	$ —		$ 61	$ —	

Selling and administrative expense

The increase in selling and administrative expense as a percentage of revenues in the current three-month period primarily reflected certain one-time selling and general administrative expenses. The increase in selling and administrative expense as a percentage of revenues in the current six-month period compared with the prior-year period primarily reflected higher selling and general administrative costs attributable to Bard, which had a higher selling and administrative spending profile, in the current-year's first quarter results.

Research and development expense

Research and development expense as a percentage of revenues in the current three and six-month periods was relatively flat compared with the prior-year periods. Spending in both the current and prior-year periods reflected our continued commitment to invest in new products and platforms.

Acquisitions and other restructurings

Costs relating to acquisitions and other restructurings in the current year's three and six-month periods largely represented integration and restructuring costs incurred due to our acquisition of Bard in the first quarter of 2018. Costs relating to acquisitions and other restructurings in the prior year's three and six-month periods included restructuring, integration and transaction costs incurred due to our acquisition of Bard as well as integration and restructuring costs related to our CareFusion acquisition and other portfolio rationalization initiatives. For further disclosures regarding restructuring costs, refer to Note 11 in the Notes to Condensed Consolidated Financial Statements.

Other operating expense, net

Other operating expense in the current three-month period included a charge of approximately $331 million relating to certain product liability matters as further discussed in Note 5 in the Notes to Condensed Consolidated Financial Statements. The amounts also included the estimated costs of $65 million relating to a product recall in the Medical segment, as previously discussed above. Net other operating expense in the current six-month period additionally included the pre-tax gain of $335 million recognized on BD's sale of its Advanced Bioprocessing business. Additional disclosures regarding this divestiture transaction are provided in Note 10 in the Notes to Condensed Consolidated Financial Statements.

Nonoperating Income

Net interest expense

The components for the three and six-month periods of fiscal years 2019 and 2018 were as follows:

	Three months ended March 31,		Six months ended March 31,	
(Millions of dollars)	**2019**	**2018**	**2019**	**2018**
Interest expense	$ (171)	$ (185)	$ (342)	$ (343)
Interest income	18	4	6	48
Net interest expense	$ (153)	$ (181)	$ (336)	$ (295)

Interest expense in the current year's three and six-month periods was relatively flat compared with the prior-year periods.

Interest income was not material to our consolidated financial results in the current and prior-year three-month periods. The decrease in interest income for the six-month period of fiscal year 2019 reflected higher levels of cash on hand in the first quarter of fiscal year 2018 in anticipation of closing the Bard acquisition at the end of the quarter.

Other income (expense), net

The components of *Other income (expense), net* for the three and six-month periods of fiscal years 2019 and 2018 were not material to our consolidated financial results.

Income Taxes

The income tax rates for the three and six-month periods of fiscal years 2019 and 2018 are provided below.

	Three months ended March 31,		Six months ended March 31,	
	2019	**2018**	**2019**	**2018**
Effective income tax rate	*(540.4)%*	*288.8%*	*13.7%*	*233.3%*
Impact, in basis points, from specified items	*(55,640)*	*27,190*	*10*	*21,660*

The effective income tax rate for the three-month period of fiscal year 2019 reflected a more favorable tax impact from specified items compared with the benefit associated with specified items recognized in the prior-year period. The effective income tax rate for the six-month period of fiscal year 2019 reflected a favorable impact relating to the timing of certain discrete items, as well as the recognition of $20 million of additional tax expense relating to U.S. tax legislation that was enacted in December 2017, compared with additional tax expense of $275 million that was recognized as a result of this

legislation in the prior-year period. For further disclosures regarding the finalization of our accounting for this U.S. tax legislation, refer to Note 16 in the Notes to Condensed Consolidated Financial Statements.

Net Income (Loss) and Diluted Earnings (Loss) per Share

Net Income (Loss) and Diluted Earnings (Loss) per Share for the three and six-month periods of fiscal years 2019 and 2018 were as follows:

	Three months ended March 31,		Six months ended March 31,	
	2019	2018	2019	2018
Net Income (Loss) (Millions of dollars)	$ 20	$ (12)	$ 619	$ (148)
Diluted (Loss) Earnings per Share	$ (0.07)	$ (0.19)	$ 1.98	$ (0.90)
Unfavorable impact-specified items	$ (2.70)	$ (2.90)	$ (3.31)	$ (5.86)
Dilutive impact of BD shares	$ 0.04	$ 0.06	$ —	$ (0.20)
Unfavorable impact-foreign currency translation	$ (0.25)		$ (0.39)	

The dilutive impacts for the three-month periods of fiscal years 2019 and 2018, as well as for the six-month period of fiscal year 2018, included the impact of share equivalents associated with share-based plans that were excluded from the reported diluted shares outstanding calculation because the result would have been antidilutive. The dilutive impact for the six-month period of fiscal year 2018 additionally included the unfavorable impact of BD shares issued through public offerings of equity securities in the third quarter of fiscal year 2017, in anticipation of the Bard acquisition, and BD shares issued as consideration transferred in the first quarter of fiscal year 2018 for the Bard acquisition.

Liquidity and Capital Resources

The following table summarizes our condensed consolidated statements of cash flows:

	Six months ended March 31,	
(Millions of dollars)	2019	2018
Net cash provided by (used for)		
Operating activities	$ 1,027	$ 1,017
Investing activities	$ 30	$ (15,373)
Financing activities	$ (1,532)	$ 1,565

Net Cash Flows from Operating Activities

Cash generated from operations, along with available cash and cash equivalents, is expected to be sufficient to fund our normal operating needs for the remainder of fiscal year 2019. Normal operating needs in fiscal year 2019 include working capital, capital expenditures, and cash dividends.

Cash flows from operating activities in the first six months of fiscal year 2019 reflected net income, adjusted by a change in operating assets and liabilities that was a net use of cash. This net use of cash primarily reflected lower levels of accounts payable and accrued expenses and higher levels of inventory, partially offset by lower levels of prepaid expenses and trade receivables. Accounts payable and accrued expenses were lower primarily due to the timing and amount of cash paid related to our product liability matters and income taxes payable. Cash flows from operating activities in the current-year period were adjusted by the charge of $331 million relating to certain product liability matters, which is noted above and further discussed in Note 5 in the Notes to Condensed Consolidated Financial Statements. Cash flows from operating activities in the current-year period additionally reflected a gain of $335 million on our sale of a business, which is further discussed in Note 10 in the Notes to Condensed Consolidated Financial Statements, as well as $200 million of discretionary cash contributions to fund our pension obligation.

Cash flows from operating activities in the prior-year period reflected a net loss as well as a non-cash change to deferred tax asset and liability balances which were remeasured during the prior-year period under new tax legislation, as further discussed above. Cash flows from operating activities in the prior-year period reflected a change in operating assets and liabilities that was a net source of cash, as well as discretionary cash contributions to fund our pension obligation of $112 million.

Net Cash Flows from Investing Activities

Our investments in capital expenditures are focused on projects that enhance our cost structure and manufacturing capabilities, and support our strategy of geographic expansion with select investments in growing markets. Capital expenditure-related cash outflows were $362 million in the first six months of fiscal year 2019, compared with $391 million in the prior-year period. Cash provided by investing activities in the first six months of fiscal year 2019 included $477 million of proceeds from our sale of a business during the period, as further discussed above, compared with $100 million of proceeds from divestitures in the prior-year period. Cash outflows for acquisitions in the prior-year period of $15.0 billion related to our acquisition of Bard.

Net Cash Flows from Financing Activities

Net cash from financing activities in the first six months of fiscal years 2019 and 2018 included the following significant cash flows:

	Six months ended March 31,	
(Millions of dollars)	**2019**	**2018**
Cash inflow (outflow)		
Change in credit facility borrowings	$ —	$ 380
Proceeds from long-term debt and term loans	$ —	$ 3,622
Payments of debt and term loans	$ (905)	$ (1,833)
Dividends paid	$ (491)	$ (449)

Certain measures relating to our total debt were as follows:

(Millions of dollars)	**March 31, 2019**	**September 30, 2018**
Total debt	$ 20,613	$ 21,496
Short-term debt as a percentage of total debt	14.8%	12.1%
Weighted average cost of total debt	3.3%	3.2%
Total debt as a percentage of total capital*	46.5%	47.8%

* Represents shareholders' equity, net non-current deferred income tax liabilities, and debt.

The increase in the ratio of short-term debt as a percentage of total debt at March 31, 2019 was primarily driven by the reclassification of certain notes from long-term to short-term.

Cash and Short-term Investments

At March 31, 2019, total worldwide cash and short-term investments, including restricted cash, were approximately $777 million, which were primarily held in jurisdictions outside of the United States.

Financing Facilities

In September 2018, we entered into a 364-day $750 million senior unsecured term loan facility. Borrowings outstanding under the term loan facility were $60 million at March 31, 2019. We also have a five-year senior unsecured revolving credit facility in place which provides borrowing of up to $2.25 billion. This facility will expire in December 2022. We are able to issue up to $100 million in letters of credit under this new revolving credit facility and it also includes a provision that enables BD, subject to additional commitments made by the lenders, to access up to an additional $500 million in financing through the facility for a maximum aggregate commitment of $2.75 billion. We use proceeds from this facility to fund general corporate needs. There were no borrowings outstanding under the revolving credit facility at March 31, 2019.

The agreements for our term loan and revolving credit facility contained the following financial covenants. We were in compliance with these covenants as of March 31, 2019.

- We are required to maintain an interest expense coverage ratio of not less than 4-to-1 as of the last day of each fiscal quarter.
- We are required to have a leverage coverage ratio, as applicable depending upon commencement and maturity of the facility, of no more than:
  - 6-to-1 from the closing date of the Bard acquisition until and including the first fiscal quarter-end thereafter;
  - 5.75-to-1 for the subsequent four fiscal quarters thereafter;
  - 5.25-to-1 for the subsequent four fiscal quarters thereafter;

- 4.5-to-1 for the subsequent four fiscal quarters thereafter;
- 4-to-1 for the subsequent four fiscal quarters thereafter;
- 3.75-to-1 thereafter.

We also have informal lines of credit outside the United States. The Company had no commercial paper borrowings outstanding as of March 31, 2019. We may, from time to time, sell certain trade receivable assets to third parties as we manage working capital over the normal course of our business activities.

Access to Capital and Credit Ratings

Our corporate credit ratings with the rating agencies Standard & Poor's Ratings Services, Moody's Investor Service and Fitch Ratings at March 31, 2019 were unchanged compared with our ratings at September 30, 2018.

Lower corporate debt ratings and downgrades of our corporate credit ratings or other credit ratings may increase our cost of borrowing. We believe that given our debt ratings, our financial management policies, our ability to generate cash flow and the non-cyclical, geographically diversified nature of our businesses, we would have access to additional short-term and long-term capital should the need arise. A rating reflects only the view of a rating agency and is not a recommendation to buy, sell or hold securities. Ratings can be revised upward or downward at any time by a rating agency if such rating agency decides that circumstances warrant such a change.

Concentrations of Credit Risk

We continually evaluate our accounts receivables for potential collection risks, particularly those resulting from sales to government-owned or government-supported healthcare facilities in certain countries, as payment may be dependent upon the financial stability and creditworthiness of those countries' national economies. We continually evaluate all governmental receivables for potential collection risks associated with the availability of government funding and reimbursement practices. We believe the current reserves related to all governmental receivables are adequate and that these receivables will not have a material adverse impact on our financial position or liquidity.

Regulatory Matters

In January 2018, BD received a Warning Letter from the U.S. Food and Drug Administration ("FDA"), citing certain alleged violations of quality system regulations and of law with respect to our Preanalytical Systems facility in Franklin Lakes, New Jersey. The Warning Letter states that, until BD resolves the outstanding issues covered by the Warning Letter, the FDA will not clear or approve any premarket submissions for Class III devices to which the non-conformances are reasonably related or grant requests for certificates to foreign governments. BD is working closely with the FDA and intends to fully implement corrective actions to address the concerns identified in the Warning Letter. However, BD cannot give any assurances that the FDA will be satisfied with its responses to the Warning Letter or as to the expected date of resolution of matters included in the Warning Letter. While BD does not believe that the issues identified in the Warning Letter will have a material impact on BD's operation, no assurances can be given that the resolution of this matter will not have a material adverse effect on BD's business, results of operations, financial conditions and/or liquidity.

In September 2018, BD received a Warning Letter from the FDA, citing certain alleged violations of quality system regulations and of law at BD's facility located in Franklin, Wisconsin. This Warning Letter was closed by the FDA in February 2019.

Cautionary Statement Regarding Forward-Looking Statements

BD and its representatives may from time to time make certain forward-looking statements in publicly released materials, both written and oral, including statements contained in filings with the Securities and Exchange Commission, press releases, and our reports to shareholders. Forward-looking statements may be identified by the use of words such as "plan," "expect," "believe," "intend," "will,", "may", "anticipate," "estimate" and other words of similar meaning in conjunction with, among other things, discussions of future operations and financial performance (including volume growth, sales and earnings per share growth, and cash flows) and statements regarding our strategy for growth, future product development, regulatory approvals, competitive position and expenditures. All statements that address our future operating performance or events or developments that we expect or anticipate will occur in the future are forward-looking statements.

Forward-looking statements are, and will be, based on management's then-current views and assumptions regarding future events, developments and operating performance, and speak only as of their dates. Investors should realize that if underlying assumptions prove inaccurate, or risks or uncertainties materialize, actual results could vary materially from our expectations and projections. Investors are therefore cautioned not to place undue reliance on any forward-looking statements. Furthermore, we undertake no obligation to update or revise any forward-looking statements after the date they are made, whether as a result of new information, future events and developments or otherwise, except as required by applicable law or regulations.

The following are some important factors that could cause our actual results to differ from our expectations in any forward-looking statements. For further discussion of certain of these factors, see Item 1A. Risk Factors in our 2018 Annual Report on Form 10-K.

- Weakness in the global economy and financial markets, which could increase the cost of operating our business, weaken demand for our products and services, negatively impact the prices we can charge for our products and services, or impair our ability to produce our products.
- Competitive factors that could adversely affect our operations, including new product introductions and technologies (for example, new forms of drug delivery) by our current or future competitors, consolidation or strategic alliances among healthcare companies, distributors and/or payers of healthcare to improve their competitive position or develop new models for the delivery of healthcare, increased pricing pressure due to the impact of low-cost manufacturers, patents attained by competitors (particularly as patents on our products expire), and new entrants into our markets.
- Risks relating to our acquisition of Bard, including our ability to successfully combine and integrate the Bard operations in order to obtain the anticipated benefits and costs savings from the transaction, and the significant additional indebtedness we incurred in connection with the financing of the acquisition and the impact this increased indebtedness may have on our ability to operate the combined company.
- The adverse financial impact resulting from unfavorable changes in foreign currency exchange rates.
- Regional, national and foreign economic factors, including inflation, deflation, and fluctuations in interest rates, and their potential effect on our operating performance.
- Our ability to achieve our projected level or mix of product sales, as our earnings forecasts are based on projected sales volumes and pricing of many product types, some of which are more profitable than others.
- Changes in reimbursement practices of third-party payers or adverse decisions relating to our products by such payers, which could reduce demand for our products or the price we can charge for such products.
- The impact of the medical device excise tax under the Patient Protection and Affordable Care Act in the United States. While this tax has been suspended through December 31, 2019, it is uncertain whether the suspension will be extended beyond that date.
- Healthcare reform in the U.S. or in other countries in which we do business that may involve changes in government pricing and reimbursement policies or other cost containment reforms.
- Changes in the domestic and foreign healthcare industry or in medical practices that result in a reduction in procedures using our products or increased pricing pressures, including the continued consolidation among healthcare providers and trends toward managed care and healthcare cost containment.
- The impact of changes in U.S. federal laws and policy that could affect fiscal and tax policies, healthcare, and international trade, including import and export regulation and international trade agreements. Recently, the U.S., China and other countries have imposed tariffs on certain products imported into their respective countries. Additional tariffs or other trade barriers imposed by the U.S., China or other countries could adversely impact our supply chain costs or otherwise adversely impact our results of operations.
- Fluctuations in the cost and availability of oil-based resins and other raw materials, as well as certain components, used in our products, the ability to maintain favorable supplier arrangements and relationships (particularly with respect to sole-source suppliers), and the potential adverse effects of any disruption in the availability of such items.
- Security breaches of our information technology systems or our products, which could impair our ability to conduct business, result in the loss of BD trade secrets or otherwise compromise sensitive information of BD or its customers, suppliers and other business partners, or of customers' patients, or result in product efficacy or safety concerns for certain of our products, and result in actions by regulatory bodies or civil litigation.
- Difficulties inherent in product development, including the potential inability to successfully continue technological innovation, successfully complete clinical trials, obtain regulatory approvals in the United States and abroad, obtain intellectual property protection for our products, obtain coverage and adequate reimbursement for new products, or gain and maintain market approval of products, as well as the possibility of infringement claims by competitors with respect to patents or other intellectual property rights, all of which can preclude or delay commercialization of a product. Delays in obtaining necessary approvals or clearances from FDA or other regulatory agencies or changes in the regulatory process may also delay product launches and increase development costs.
- The impact of business combinations or divestitures, including any volatility in earnings relating to acquisition-related costs, and our ability to successfully integrate any business we may acquire.

- Our ability to penetrate or expand our operations in emerging markets, which depends on local economic and political conditions, and how well we are able to make necessary infrastructure enhancements to production facilities and distribution networks. Our international operations also increase our compliance risks, including risks under the Foreign Corrupt Practices Act and other anti-corruption laws, as well as regulatory and privacy laws.
- Conditions in international markets, including social and political conditions, civil unrest, terrorist activity, governmental changes, trade barriers, restrictions on the ability to transfer capital across borders, difficulties in protecting and enforcing our intellectual property rights and governmental expropriation of assets. This includes the possible impact of the United Kingdom's exit from the European Union, which has created uncertainties affecting our business operations in the United Kingdom and the EU.
- Deficit reduction efforts or other actions that reduce the availability of government funding for healthcare and research, which could weaken demand for our products and result in additional pricing pressures, as well as create potential collection risks associated with such sales.
- Fluctuations in university or U.S. and international governmental funding and policies for life sciences research.
- Fluctuations in the demand for products we sell to pharmaceutical companies that are used to manufacture, or are sold with, the products of such companies, as a result of funding constraints, consolidation or otherwise.
- The effects of events that adversely impact our supply chain, including our ability to manufacture our products (particularly where production of a product line is concentrated in one or more plants) or source materials or components from suppliers (including sole-source suppliers) that are needed for such manufacturing, or our ability to provide products to our customers, including events that impact key distributors.
- Pending and potential future litigation or other proceedings asserting, and/or subpoenas seeking information with respect to, alleged violations of law (including in connection with federal and/or state healthcare programs (such as Medicare or Medicaid) and/or sales and marketing practices (such as investigative subpoenas and the civil investigative demands received by BD and Bard)), antitrust claims, product liability (which may involve lawsuits seeking class action status or seeking to establish multi-district litigation proceedings, including claims relating to our hernia repair implant products, surgical continence products for women and vena cava filter products), claims with respect to environmental matters, and patent infringement, and the availability or collectability of insurance relating to any such claims.
- New or changing laws and regulations affecting our domestic and foreign operations, or changes in enforcement practices, including laws relating to trade, monetary and fiscal policies, taxation (including tax reforms that could adversely impact multinational corporations), sales practices, environmental protection, price controls, and licensing and regulatory requirements for new products and products in the postmarketing phase. In particular, the U.S. and other countries may impose new requirements regarding registration, labeling or prohibited materials that may require us to re-register products already on the market or otherwise impact our ability to market our products. Environmental laws, particularly with respect to the emission of greenhouse gases, are also becoming more stringent throughout the world, which may increase our costs of operations or necessitate changes in our manufacturing plants or processes or those of our suppliers, or result in liability to BD.
- Product efficacy or safety concerns regarding our products resulting in product holds or recalls, regulatory action on the part of the FDA or foreign counterparts (including restrictions on future product clearances and civil penalties), declining sales and product liability claims, and damage to our reputation. As a result of the CareFusion acquisition, we are operating under a consent decree with the FDA relating to our U.S. infusion pump business. The consent decree authorizes the FDA, in the event of any violations in the future, to order us to cease manufacturing and distributing products, recall products or take other actions, and we may be required to pay significant monetary damages if we fail to comply with any provision of the consent decree. Also, in March 2019, the FDA issued a letter to healthcare professionals regarding the use of paclitaxel-coated devices in the treatment of peripheral artery disease, advising clinicians to consider using alternative options. We estimate that the FDA letter will lead to a fifty percent decrease in sales of BD’s drug-coated balloons for the balance of fiscal year 2019 compared to our original forecast, although the actual impact could be greater. The extent and duration of the impact from the FDA letter beyond fiscal year 2019 is difficult to predict, and no assurance can be given that it will not have a material impact on our results of operations in future periods.
- The effect of adverse media exposure or other publicity regarding BD’s business or operations, including the effect on BD’s reputation or demand for its products.
- The effect of market fluctuations on the value of assets in BD’s pension plans and on actuarial interest rate and asset return assumptions, which could require BD to make additional contributions to the plans or increase our pension plan expense.

- Our ability to obtain the anticipated benefits of restructuring programs, if any, that we may undertake.
- Issuance of new or revised accounting standards by the Financial Accounting Standards Board or the Securities and Exchange Commission.

The foregoing list sets forth many, but not all, of the factors that could impact our ability to achieve results described in any forward-looking statements. Investors should understand that it is not possible to predict or identify all such factors and should not consider this list to be a complete statement of all potential risks and uncertainties.

Item 3. Quantitative and Qualitative Disclosures About Market Risk

There have been no material changes in information reported since the end of the fiscal year ended September 30, 2018.

Item 4. Controls and Procedures

An evaluation was carried out by BD's management, with the participation of BD's Chief Executive Officer and Chief Financial Officer, of the effectiveness of the design and operation of BD's disclosure controls and procedures (as defined in Rule 13a-15(e) under the Securities Exchange Act of 1934) as of March 31, 2019. Based upon that evaluation, the Chief Executive Officer and Chief Financial Officer concluded that the design and operation of these disclosure controls and procedures were, as of the end of the period covered by this report, effective and designed to ensure that material information relating to BD and its consolidated subsidiaries would be made known to them by others within these entities.

There were no changes in our internal control over financial reporting during the fiscal quarter ended March 31, 2019 identified in connection with the above-referenced evaluation that have materially affected, or are reasonably likely to materially affect, BD's internal control over financial reporting. On December 29, 2017, BD completed the acquisition of Bard and in our 2018 Annual Report on Form 10-K, we excluded Bard from our evaluation of internal control over financial reporting. This exclusion was in accordance with the U.S. Securities and Exchange Commission's general guidance that a recently acquired business may be omitted from the assessment scope for up to one year from the date of acquisition. BD has extended its oversight and monitoring processes that support our internal control over financial reporting, as well as our disclosure controls and procedures, to the acquired operations of Bard and we will incorporate Bard into our annual assessment of internal control over financial reporting for our fiscal year ending September 30, 2019.

PART II - OTHER INFORMATION

Item 1. Legal Proceedings

We are involved, both as a plaintiff and a defendant, in various legal proceedings which arise in the ordinary course of business, including product liability and environmental matters as set forth in our 2018 Annual Report on Form 10-K and in Note 5 of the Notes to Condensed Consolidated Financial Statements in this report. Since December 31, 2018, there have been no material developments with respect to the legal proceedings in which we are involved.

Given the uncertain nature of litigation generally, BD is not able in all cases to estimate the amount or range of loss that could result from an unfavorable outcome of the litigation to which BD is a party. In accordance with U.S. generally accepted accounting principles, BD establishes accruals to the extent probable future losses are estimable (in the case of environmental matters, without considering possible third-party recoveries). In view of the uncertainties discussed above, BD could incur charges in excess of any currently established accruals and, to the extent available, excess liability insurance. In the opinion of management, any such future charges, individually or in the aggregate, could have a material adverse effect on BD's consolidated results of operations and consolidated cash flows.

Item 1A. Risk Factors

There were no material changes during the period covered by this report in the risk factors previously disclosed in Part I, Item 1A, of our 2018 Annual Report on Form 10-K.

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

The table below sets forth certain information regarding our purchases of common stock of BD during the quarter ended March 31, 2019.

Issuer Purchases of Equity Securities

For the three months ended March 31, 2019	Total Number of Shares Purchased (1)	Average Price Paid per Share	Total Number of Shares Purchased as Part of Publicly Announced Plans or Programs	Maximum Number of Shares that May Yet Be Purchased Under the Plans or Programs (2)
January 1 – 31, 2019	—	$ —	—	7,857,742
February 1 – 28, 2019	676	246.60	—	7,857,742
March 1 – 31, 2019	—	—	—	7,857,742
Total	676	$ 246.60	—	7,857,742

(1) Consists of 676 shares purchased during the quarter in open market transactions by the trust relating to BD's Deferred Compensation and Retirement Benefit Restoration Plan and 1996 Directors' Deferral Plan.

(2) Represents shares available under a repurchase program authorized by the Board of Directors on September 24, 2013 for 10 million shares, for which there is no expiration date.

Item 3. Defaults Upon Senior Securities

Not applicable.

Item 4. Mine Safety Disclosures

Not applicable.

Item 5. Other Information

Not applicable.

Item 6. Exhibits

Exhibit 10.1	Offer letter of Patrick Kaltenbach, dated March 29, 2018.
Exhibit 31	Certifications of Chief Executive Officer and Chief Financial Officer, pursuant to SEC Rule 13a - 14(a).
Exhibit 32	Certifications of Chief Executive Officer and Chief Financial Officer, pursuant to Rule 13a - 14(b) and Section 1350 of Chapter 63 of Title 18 of the U.S. Code.
Exhibit 101	The following materials from this report, formatted in XBRL (Extensible Business Reporting Language): (i) the Condensed Consolidated Balance Sheets, (ii) the Condensed Consolidated Statements of Income, (iii) the Condensed Consolidated Statements of Comprehensive Income, (iv) the Condensed Consolidated Statements of Cash Flows, and (v) Notes to Condensed Consolidated Financial Statements.

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 thereunto duly authorized.

Becton, Dickinson and Company

(Registrant)

Dated: May 9, 2019

/s/ Christopher Reidy

Christopher Reidy

Executive Vice President, Chief Financial Officer and Chief Administrative Officer

(Principal Financial Officer)

/s/ Charles Bodner

Charles Bodner

Senior Vice President, Corporate Finance, and Chief Accounting Officer

(Principal Accounting Officer)

INDEX TO EXHIBITS

Exhibit Number	Description of Exhibits
10.1	Offer letter of Patrick Kaltenbach, dated March 29, 2018.
31	Certifications of Chief Executive Officer and Chief Financial Officer, pursuant to SEC Rule 13a - 14(a).
32	Certifications of Chief Executive Officer and Chief Financial Officer, pursuant to Rule 13a - 14(b) and Section 1350 of Chapter 63 of Title 18 of the U.S. Code.
101	The following materials from this report, formatted in XBRL (Extensible Business Reporting Language): (i) the Condensed Consolidated Balance Sheets, (ii) the Condensed Consolidated Statements of Income, (iii) the Condensed Consolidated Statements of Comprehensive Income, (iv) the Condensed Consolidated Statements of Cash Flows, and (v) Notes to Condensed Consolidated Financial Statements.

Exhibit 10.1

EXPLANATORY NOTE

An incorrect version of this exhibit was filed with the registrant's Quarterly Report on Form 10-Q for the fiscal quarter ended December 31, 2018. The correct version of the exhibit is being filed with this report.

March 29, 2018

Patrick Kaltenbach
16510 Shady View Ln
Los Gatos, CA 95032

Dear Patrick:

Congratulations on your offer of employment! Becton, Dickinson and Company (BD) is a leading medical technology company that delivers clinically proven products and services to improve patient care. We are a global company that fosters close relationships with our customers to better understand their respective businesses and helps solve healthcare's most difficult challenges. We take great pride in hiring individuals who have the talent, drive and commitment to make health care better for our customers. We are extremely delighted to have you join our team.

I am pleased to confirm in writing our offer of employment to you. The details of your offer are as follows:

Position: Your position is EVP & President Life Sciences Segment, reporting directly to me. Your position is classified as a Job Group 9. Positions are assigned to Job Groups according to the scope and impact of the position.

We recommended at the recent Board of Directors meeting your designation as both a “Corporate Officer” and an “Executive Officer” of the company. You will become a member of both the Management Committee and BD Leadership Team.

Start Date: Your first day of employment will be May 29, 2018.

Pay: Your base annual rate of pay will be $650,000, subject to review and modification from time to time in accordance with standard Company practices. Associates are paid every other Friday. The two week pay period starts on Sunday and ends on the Saturday of the pay week.

Sign-On Bonus: You will receive a sign-on cash bonus of $2,000,000 (less applicable taxes), payable within 30 days following your start date. Your sign-on bonus is conditioned upon your continued employment with BD for twelve months following receipt of the payment. If you voluntarily terminate your employment within twelve months of the award, you will be required to reimburse the Company, within 60 days of termination date, a pro-rated portion of the respective sign-on bonus based on months of completed service.

Sign-on Equity Bonus: In addition to your annual long-term incentive (LTI) grant, you will receive a new hire LTI grant valued at $2,800,000 subject to approval of the BD Board of Directors at their first meeting after your start date. The grant will be made in Time Vested Units (TVUs), Performance Units (PSUs), and Stock Appreciation Rights (SARs). You will receive a second new hire LTI grant valued at $2,800,000 approximately one year following your date of hire made entirely in TVUs. TVUs vest one third (1/3) per year after the grant date, PSUs vest 100% after three years, and SARs vest one fourth (1/4) per year after the grant date.

Additionally, if Agilent’s November 2018 Performance Unit grant payout exceeds 100%, you will receive a cash payment in January 2019 up to $750,000 (less applicable taxes) to cover the difference. Similarly, if Agilent’s November 2019 Performance Unit grant payout exceeds 100%, you will receive a second cash payment in January 2020 up to $750,000 (less applicable taxes) to cover the difference. Timing of both payments is dependent on Agilent’s public disclosure of the level of applicable performance unit payout.

Subject to approval by our Board of Directors, in the event your employment is involuntarily terminated before the third anniversary of your employment start date, 100% of your first new hire LTI valued at $2,800,000 and 15% of your second

new hire grant valued at $2,800,000 will become immediately vested upon your termination date and such awards will be payable to you subject to the terms of the grants as applied to vested awards.

Rewards: You are eligible for a comprehensive, competitive compensation program that rewards talented associates for their performance.

We offer a comprehensive benefits package to eligible associates and their dependents, including Medical, Dental, Life insurance programs, a competitive 401(k) plan with company match and various other insurance programs. Each of these is either fully paid by BD or offered subject to an employee contribution as of the associate's first day of employment. According to IRS regulations, you will have 31 days from the date of hire to make benefit elections for the remainder of the calendar year. Details regarding these plans will follow shortly under separate mailing from our benefits administrator, Benefits Direct. If you have not received this information two weeks after your start date, please contact Benefits Direct at 1-800-234-9855 and speak with a Customer Service Representative.

Performance Incentive Plan (PIP): You will be eligible to participate in the Company's short-term incentive plan, which is known as the PIP. Your PIP target for the current Fiscal Year ending September 30 will be 80% of your current Fiscal Year ending Base Salary (prorated from your start date). PIP payouts may range from zero to double the incentive opportunity and are earned based on achievement of company financial goals and individual associate performance. Your PIP award is discretionary; there is no guarantee that an associate will receive a PIP payment in a particular year.

Long-Term Incentive Program (LTI): Under the 2004 Employee and Director Equity-Based Compensation Plan, you will be eligible to participate in BD's discretionary LTI program. The LTI program provides associates with a potential opportunity to build wealth and share in the success of the Company through the achievement of strategic objectives. The target grant award value for your position is $2,050,000. Annual LTI awards are determined based on individual associate performance and anticipated future contributions. Grants for each fiscal year are typically approved by the BD Board of Directors. There is no guarantee that an associate will receive an LTI award in a particular year.

Deferred Compensation Plan: You will be eligible to participate in the non-qualified BD Deferred Compensation Plan, which enables you to save over the IRS limits in the qualified 401(k) plan. You may elect to enroll in this plan within 30 days from the first day of your employment or annually in December. You may contribute up to 50% of your total eligible base pay and 100% of your eligible bonus compensation. Enrollment information will be sent to you by Fidelity Investments, our financial benefits service provider.

BD Share Retention and Ownership: Your position is subject to the BD Share Retention and Ownership Guidelines. Under the guidelines, you will be expected to hold in BD shares at least 75% of the net after-tax gain or net after-tax shares distributed to you from any equity-based compensation awards you have received until you have achieved and can maintain an ownership multiple of three (3.0) times your annual salary. More information will follow under separate cover.

Change in Control: You will receive from the Corporate Secretary's office and will be expected to sign a Change of Control Agreement that will increase your benefit should a change in control occur per the terms of the agreement.

Paid Time Off: You will be eligible for 30 days of vacation.

Tax Return Services: BD will pay the costs for its designated tax services partner to prepare and file your home and host country income tax returns for two years.

Mortgage Subsidy: BD will assume the remainder of your mortgage subsidy benefit to assist you with the cost of housing by subsidizing your mortgage payment and lowering your monthly interest rate and payment. If you leave the Company, the subsidy payment ceases and the interest rate reverts to the original note rate. Any remaining portion of the subsidy will revert to the Company. This benefit is directly paid by BD and is not exchangeable for other services or cash. A preferred lender must be used to receive this benefit.

Immigration Consideration: All offers of employment and continued employment are contingent upon an individual's ability to secure and maintain the legal right to work at BD, including work authorization. If efforts at securing this authorization should fail, the offer of employment is withdrawn with no liability to the Company for any expenses incurred, time spent or other inconvenience to the job applicant.

Ethics: As a company founded on a core set of values, we ask you to review the Company Code of Conduct and be prepared to sign an acknowledgement during your onboarding process.

At-Will Employment: While it is hoped that your association with BD is long lasting, the employment relationship between you and the Company is "at will." This means that your employment is not for any definite period of time and the Company or you may terminate your employment at any time, with or without notice, for any reason. Your at-will status is not subject to change without an express written agreement signed by an officer of the Company. There shall be no contract, expressed or implied, of employment.

Screening: Consistent with our policies for all BD personnel and the special consideration of our industry, this offer is contingent upon you taking a company paid drug screening test, the results of which must be negative, undergoing a motor vehicle record check (if applicable for the position), as well as completing a background check. These items must be completed prior to the above start date. If we do not receive the results prior to the above date, we will notify you to discuss an alternative start date.

Confidentiality Agreement and Agreement to Protect Company Assets: Your employment is contingent upon you signing the BD Confidentiality Agreement and Agreement to Protect Company Assets, if applicable. You will be asked to sign this document, once you receive the onboarding packet.

You understand that BD's offer of employment is based on your general skills and abilities and not because of your knowledge or possession, if any, of confidential or proprietary information of any former employer, customer, or other third party. You hereby certify that, by the time you become a BD associate, you will have returned all property, data and documents, whether electronic,

paper, or other form, of any former employer, customer, or other third party. You agree (a) not to disclose or use, directly or indirectly, in furtherance of your employment with BD, any confidential or proprietary information, whether in electronic, paper, or other form, that you obtained through your employment with any previous employer(s) and (b) to comply with and abide by the BD Confidentiality Agreement and Agreement to Protect Company Assets, if applicable.

If you have any questions, please feel free to call Dan Charlebois 201-847-6157 or email Daniel.charlebois@BD.com. I'm looking forward to working together to make health care better.

Sincerely,

Thomas Polen
President of BD

I accept the above offer of employment:

/s/ Patrick Kaltenbach April 6th, 2018
Patrick Kaltenbach Date

Exhibit 31

CERTIFICATIONS

I, Vincent A. Forlenza, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Becton, Dickinson and Company;

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(s) 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 (the registrant's fourth fiscal quarter in the case of an annual report) 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(s) 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: May 9, 2019

/s/ Vincent A. Forlenza

Vincent A. Forlenza

Chairman and Chief Executive Officer

I, Christopher Reidy, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Becton, Dickinson and Company;

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(s) 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 (the registrant's fourth fiscal quarter in the case of an annual report) 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(s) 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: May 9, 2019

/s/ Christopher Reidy

Christopher Reidy

Executive Vice President, Chief Financial Officer and Chief Administrative Officer

Exhibit 32

The certification set forth below is being submitted in connection with the Quarterly Report on Form 10-Q of Becton, Dickinson and Company for the quarter ended March 31, 2019 (the "Report") for the purpose of complying with Rule 13a – 14(b) of the Securities Exchange Act of 1934 (the "Exchange Act") and Section 1350 of Chapter 63 of Title 18 of the United States Code.

I, Vincent A. Forlenza, the Chief Executive Officer of Becton, Dickinson and Company, certify that:

1. such Report fully complies with the requirements of Section 13(a) of the Exchange Act; and

2. the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of Becton, Dickinson and Company.

May 9, 2019

/s/ Vincent A. Forlenza

Name: Vincent A. Forlenza

Chief Executive Officer

The certification set forth below is being submitted in connection with the Quarterly Report on Form 10-Q of Becton, Dickinson and Company for the quarter ended March 31, 2019 (the "Report") for the purpose of complying with Rule 13a – 14(b) of the Securities Exchange Act of 1934 (the "Exchange Act") and Section 1350 of Chapter 63 of Title 18 of the United States Code.

I, Christopher Reidy, the Chief Financial Officer of Becton, Dickinson and Company, certify that:

1. such Report fully complies with the requirements of Section 13(a) of the Exchange Act; and

2. the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of Becton, Dickinson and Company.

May 9, 2019

/s/ Christopher Reidy

Name: Christopher Reidy
Chief Financial Officer