
UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

FORM 10-Q

(Mark One)

- QUARTERLY REPORT PURSUANT TO SECTION 13 OR 15 (d) OF THE SECURITIES EXCHANGE ACT OF 1934**
For the quarterly period ended **June 30, 2018**
or
- TRANSITION REPORT PURSUANT TO SECTION 13 OR 15 (d) OF THE SECURITIES EXCHANGE ACT OF 1934**
For the transition period from _____ to _____
Commission File Number **1-8036**

WEST PHARMACEUTICAL SERVICES, INC.
(Exact name of registrant as specified in its charter)

Pennsylvania
(State or other jurisdiction of
incorporation or organization)

23-1210010
(I.R.S. Employer Identification Number)

530 Herman O. West Drive, Exton, PA
(Address of principal executive offices)

19341-0645
(Zip Code)

Registrant's telephone number, including area code: **610-594-2900**

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 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, a smaller reporting company, or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company," and "emerging growth company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer	<input checked="" type="checkbox"/>	Accelerated filer	<input type="checkbox"/>
Non-accelerated filer	<input type="checkbox"/> (Do not check if a smaller reporting company)	Smaller reporting company	<input type="checkbox"/>
		Emerging growth company	<input type="checkbox"/>

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

As of June 30, 2018, there were 73,538,278 shares of the Registrant's common stock outstanding.

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PART I. FINANCIAL INFORMATION**ITEM 1. FINANCIAL STATEMENTS****CONDENSED CONSOLIDATED STATEMENTS OF INCOME (UNAUDITED)**West Pharmaceutical Services, Inc. and Subsidiaries
(in millions, except per share data)

	Three Months Ended June 30,		Six Months Ended June 30,	
	2018	2017	2018	2017
Net sales	\$ 447.5	\$ 397.6	\$ 863.2	\$ 785.3
Cost of goods and services sold	305.3	272.6	586.6	526.1
Gross profit	142.2	125.0	276.6	259.2
Research and development	10.8	10.0	20.4	20.3
Selling, general and administrative expenses	70.0	61.3	138.3	123.8
Other expense (Note 13)	1.1	11.7	4.2	12.6
Operating profit	60.3	42.0	113.7	102.5
Interest expense	2.2	2.2	4.1	4.3
Interest income	(0.3)	(0.3)	(0.9)	(0.6)
Other nonoperating income	(1.7)	(0.6)	(3.3)	(1.4)
Income before income taxes	60.1	40.7	113.8	100.2
Income tax expense	6.0	2.9	18.5	5.1
Equity in net income of affiliated companies	(2.0)	(1.0)	(4.4)	(4.6)
Net income	\$ 56.1	\$ 38.8	\$ 99.7	\$ 99.7
Net income per share:				
Basic	\$ 0.76	\$ 0.53	\$ 1.35	\$ 1.35
Diluted	\$ 0.75	\$ 0.51	\$ 1.33	\$ 1.32
Weighted average shares outstanding:				
Basic	73.6	73.9	73.8	73.6
Diluted	75.0	75.8	75.2	75.7
Dividends declared per share	\$ 0.14	\$ 0.13	\$ 0.28	\$ 0.26

See accompanying notes to condensed consolidated financial statements.

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CONDENSED CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME (UNAUDITED)

West Pharmaceutical Services, Inc. and Subsidiaries

(in millions)

	Three Months Ended June 30,		Six Months Ended June 30,	
	2018	2017	2018	2017
Net income	\$ 56.1	\$ 38.8	\$ 99.7	\$ 99.7
Other comprehensive (loss) income, net of tax:				
Foreign currency translation adjustments	(49.6)	36.3	(29.6)	42.2
Defined benefit pension and other postretirement plan adjustments, net of tax of \$0.4, \$(0.3), \$0.1 and \$(0.4), respectively	1.0	(0.8)	0.3	(0.9)
Net loss on investment securities, net of tax of \$(3.0) and \$(2.9), respectively	—	(5.4)	—	(5.1)
Net gain (loss) on derivatives, net of tax of \$0.3, \$(1.1), \$1.1 and \$(0.3), respectively	0.7	(2.9)	2.9	(1.2)
Other comprehensive (loss) income, net of tax	(47.9)	27.2	(26.4)	35.0
Comprehensive income	\$ 8.2	\$ 66.0	\$ 73.3	\$ 134.7

See accompanying notes to condensed consolidated financial statements.

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CONDENSED CONSOLIDATED BALANCE SHEETS (UNAUDITED)

West Pharmaceutical Services, Inc. and Subsidiaries
(in millions, except per share data)

	June 30, 2018	December 31, 2017
ASSETS		
Current assets:		
Cash and cash equivalents	\$ 225.5	\$ 235.9
Accounts receivable, net	296.7	253.2
Inventories	208.2	215.2
Other current assets	36.5	39.2
Total current assets	766.9	743.5
Property, plant and equipment	1,737.0	1,745.8
Less: accumulated depreciation and amortization	910.3	890.8
Property, plant and equipment, net	826.7	855.0
Investments in affiliated companies	91.8	85.8
Goodwill	106.6	107.7
Deferred income taxes	38.5	25.7
Intangible assets, net	21.7	21.7
Other noncurrent assets	21.5	23.4
Total Assets	\$ 1,873.7	\$ 1,862.8
LIABILITIES AND EQUITY		
Current liabilities:		
Accounts payable	\$ 126.2	\$ 138.1
Pension and other postretirement benefits	2.2	2.2
Accrued salaries, wages and benefits	55.1	56.2
Income taxes payable	17.9	6.0
Other current liabilities	86.2	77.0
Total current liabilities	287.6	279.5
Long-term debt	196.4	197.0
Deferred income taxes	11.8	10.4
Pension and other postretirement benefits	53.6	53.4
Other long-term liabilities	42.4	42.6
Total Liabilities	591.8	582.9
Commitments and contingencies (Note 15)		
Equity:		
Preferred stock, 3.0 million shares authorized; 0 shares issued and outstanding	—	—
Common stock, par value \$0.25 per share; 100.0 million shares authorized; shares issued: 75.3 million and 75.2 million; shares outstanding: 73.5 million and 73.9 million	18.8	18.8
Capital in excess of par value	304.7	309.3
Retained earnings	1,258.0	1,178.2
Accumulated other comprehensive loss	(143.7)	(117.3)
Treasury stock, at cost (1.8 million and 1.3 million shares)	(155.9)	(109.1)
Total Equity	1,281.9	1,279.9
Total Liabilities and Equity	\$ 1,873.7	\$ 1,862.8

See accompanying notes to condensed consolidated financial statements.

CONDENSED CONSOLIDATED STATEMENT OF EQUITY (UNAUDITED)

West Pharmaceutical Services, Inc. and Subsidiaries

(in millions)

	Common Shares Issued	Common Stock	Capital in Excess of Par Value	Number of Treasury Shares	Treasury Stock	Retained earnings	Accumulated other comprehensive (loss) income	Total
Balance, December 31, 2017	75.2	\$ 18.8	\$ 309.3	1.3	\$ (109.1)	\$ 1,178.2	\$ (117.3)	\$ 1,279.9
Effect of modified retrospective application of a new accounting standard (see Note 3)	—	—	—	—	—	11.4	—	11.4
Net income	—	—	—	—	—	99.7	—	99.7
Stock-based compensation	—	—	2.2	—	9.3	—	—	11.5
Shares issued under stock plans	0.1	—	(7.0)	(0.3)	19.3	—	—	12.3
Shares purchased under share repurchase program	—	—	—	0.8	(70.8)	—	—	(70.8)
Shares repurchased for employee tax withholdings	—	—	0.2	—	(4.6)	—	—	(4.4)
Dividends declared	—	—	—	—	—	(31.3)	—	(31.3)
Other comprehensive income, net of tax	—	—	—	—	—	—	(26.4)	(26.4)
Balance, June 30, 2018	<u>75.3</u>	<u>\$ 18.8</u>	<u>\$ 304.7</u>	<u>1.8</u>	<u>\$ (155.9)</u>	<u>\$ 1,258.0</u>	<u>\$ (143.7)</u>	<u>\$ 1,281.9</u>

See accompanying notes to condensed consolidated financial statements.

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CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS (UNAUDITED)

West Pharmaceutical Services, Inc. and Subsidiaries

(in millions)

	Six Months Ended June 30,	
	2018	2017
Cash flows from operating activities:		
Net income	\$ 99.7	\$ 99.7
Adjustments to reconcile net income to net cash provided by operating activities:		
Depreciation	50.6	45.4
Amortization	1.3	1.4
Stock-based compensation	9.4	9.0
Non-cash restructuring charges	0.4	—
Venezuela deconsolidation	—	11.1
Contingent consideration payments in excess of acquisition-date liability	(0.5)	—
Other non-cash items, net	(3.4)	(3.6)
Changes in assets and liabilities	(30.5)	(57.0)
Net cash provided by operating activities	127.0	106.0
Cash flows from investing activities:		
Capital expenditures	(48.2)	(67.0)
Cash related to deconsolidated Venezuelan subsidiary	—	(6.0)
Other, net	2.5	2.8
Net cash used in investing activities	(45.7)	(70.2)
Cash flows from financing activities:		
Repayments of long-term debt	—	(1.2)
Dividend payments	(20.7)	(19.1)
Contingent consideration payments up to amount of acquisition-date liability	—	(0.2)
Proceeds from exercise of stock options and stock appreciation rights	10.9	29.5
Employee stock purchase plan contributions	2.4	2.2
Shares purchased under share repurchase programs	(70.8)	(26.9)
Shares repurchased for employee tax withholdings	(4.4)	(3.8)
Net cash used in financing activities	(82.6)	(19.5)
Effect of exchange rates on cash	(9.1)	7.3
Net (decrease) increase in cash and cash equivalents	(10.4)	23.6
Cash, including cash equivalents at beginning of period	235.9	203.0
Cash, including cash equivalents at end of period	\$ 225.5	\$ 226.6

See accompanying notes to condensed consolidated financial statements.

NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS (UNAUDITED)

Note 1: Summary of Significant Accounting Policies

Basis of Presentation: The condensed consolidated financial statements included in this report are unaudited and have been prepared in accordance with United States (“U.S.”) generally accepted accounting principles (“U.S. GAAP”) for interim financial reporting and U.S. Securities and Exchange Commission (“SEC”) regulations. The year-end condensed consolidated balance sheet data was derived from audited financial statements, but does not include all disclosures required by U.S. GAAP. Certain information and footnote disclosures normally included in annual financial statements prepared in accordance with U.S. GAAP have been condensed or omitted. In the opinion of management, these financial statements include all adjustments, which are of a normal recurring nature, necessary for a fair statement of the financial position, results of operations, cash flows and the change in equity for the periods presented. The condensed consolidated financial statements for the three and six months ended June 30, 2018 should be read in conjunction with the consolidated financial statements and notes thereto of West Pharmaceutical Services, Inc. and its majority-owned subsidiaries (which may be referred to as “West”, the “Company”, “we”, “us” or “our”) appearing in our Annual Report on Form 10-K for the year ended December 31, 2017 (the “2017 Annual Report”). The results of operations for any interim period are not necessarily indicative of results for the full year.

As of April 1, 2017, our consolidated financial statements exclude the results of our Venezuelan subsidiary. Please refer to Note 13, *Other Expense*, for further discussion.

Note 2: New Accounting Standards

Recently Adopted Standards

In March 2018, the Financial Accounting Standards Board (“FASB”) issued guidance which updates the income tax accounting in U.S. GAAP to reflect the SEC’s interpretive guidance released on December 22, 2017, when the Tax Cuts and Jobs Act (the “2017 Tax Act”) was signed into law. This guidance was effective immediately upon issuance. Please refer to Note 15, *Income Taxes*, to the consolidated financial statements in our 2017 Annual Report for additional information.

In May 2017, the FASB issued guidance which amends the scope of modification accounting for share-based payment arrangements. The guidance focuses on changes to the terms or conditions of share-based payment awards that would require the application of modification accounting and specifies that an entity would not apply modification accounting if its fair value, vesting conditions and classification of the awards are the same immediately before and after the modification. This guidance is effective for fiscal years, and interim periods within those years, beginning after December 15, 2017. Early adoption is permitted. We adopted this guidance as of January 1, 2018, on a prospective basis. The adoption did not have a material impact on our financial statements.

In March 2017, the FASB issued guidance on the presentation of net periodic pension and postretirement benefit cost (net benefit cost). The guidance requires the bifurcation of net benefit cost. The service cost component will be presented with other employee compensation costs in operating income (or capitalized in assets) and the other components will be reported separately outside of operations, and will not be eligible for capitalization. This guidance is effective for fiscal years, and interim periods within those years, beginning after December 15, 2017. Early adoption is permitted. We adopted this guidance as of January 1, 2018, on a retrospective basis. As a result of this adoption, we reclassified net benefit cost components other than service cost from operating income to outside of operations. Net periodic benefit cost for the three months ended June 30, 2018 and 2017 was \$1.0 million and \$2.0 million, respectively, of which \$2.7 million and \$2.6 million, respectively, related to service cost and \$1.7 million and \$0.6 million, respectively, related to net benefit cost components other than service cost. Net periodic benefit cost for the six months ended June 30, 2018 and 2017 was \$2.2 million and \$3.9 million, respectively, of which \$5.5 million and \$5.3 million, respectively, related to service cost and \$3.3 million and \$1.4 million, respectively, related to net benefit cost components other than service cost. The adoption of this guidance had no impact on net income.

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In November 2016, the FASB issued guidance on the classification and presentation of restricted cash in the statement of cash flows. This guidance is effective for fiscal years, and interim periods within those years, beginning after December 15, 2017. Early adoption is permitted. We adopted this guidance as of January 1, 2018, on a retrospective basis. As of June 30, 2018 and December 31, 2017, we had no restricted cash.

In August 2016, the FASB issued guidance to reduce the diversity in how certain cash receipts and cash payments are presented and classified in the statement of cash flows. This guidance is effective for fiscal years, and interim periods within those years, beginning after December 15, 2017. Early adoption is permitted. We adopted this guidance as of January 1, 2018, on a retrospective basis. The adoption did not have a material impact on our financial statements.

In January 2016, the FASB issued guidance that addresses certain aspects of recognition, measurement, presentation, and disclosure of financial instruments. This guidance is effective for fiscal years, and interim periods within those years, beginning after December 15, 2017. We adopted this guidance as of January 1, 2018, on a prospective basis. The adoption did not have a material impact on our financial statements.

In May 2014, the FASB issued guidance on the accounting for revenue from contracts with customers, Accounting Standards Codification (“ASC”) Topic 606 (“ASC 606”), that supersedes most existing revenue recognition guidance, including industry-specific guidance. The core principle requires an entity to recognize revenue to depict the transfer of goods or services to customers in an amount that reflects the consideration to which the entity expects to be entitled in exchange for those goods or services. In addition, ASC 606 requires enhanced disclosures regarding the nature, timing and uncertainty of revenue and cash flows arising from an entity’s contracts with customers. The FASB subsequently issued additional clarifying standards to address issues arising from implementation of ASC 606. We adopted ASC 606 as of January 1, 2018, on a modified retrospective basis. Please refer to Note 3, *Revenue*, for additional information.

Standards Issued Not Yet Adopted

In June 2018, the FASB issued guidance which expands the scope of accounting for share-based payment arrangements to include share-based payment transactions for acquiring goods and services from nonemployees. This guidance is effective for fiscal years, and interim periods within those years, beginning after December 15, 2018. Early adoption is permitted. We are currently evaluating our adoption timing and the impact that this guidance may have on our financial statements.

In February 2018, the FASB issued guidance to address a specific consequence of the 2017 Tax Act by allowing a reclassification from accumulated other comprehensive income (loss) to retained earnings for stranded tax effects resulting from the 2017 Tax Act’s reduction of the U.S. federal corporate income tax rate. This guidance is effective for fiscal years, and interim periods within those years, beginning after December 15, 2018. Early adoption is permitted. We are currently evaluating our adoption timing and the impact that this guidance may have on our financial statements.

In August 2017, the FASB issued guidance which expands and refines hedge accounting for both nonfinancial and financial risk components and aligns the recognition and presentation of the effects of the hedging instrument and the hedged item in the financial statements. This guidance is effective for fiscal years, and interim periods within those years, beginning after December 15, 2018. Early adoption is permitted. We are currently evaluating our adoption timing and the impact that this guidance will have on our financial statements.

In February 2016, the FASB issued guidance on the accounting for leases. This guidance requires lessees to recognize lease assets and lease liabilities on the balance sheet and to expand disclosures about leasing arrangements, both qualitative and quantitative. In terms of transition, the guidance requires adoption based upon a modified retrospective approach. This guidance is effective for fiscal years, and interim periods within those years, beginning after December 15, 2018. We are currently evaluating the impact that this guidance will have on our financial statements. As of June 30, 2018 and December 31, 2017, future minimum rental payments under non-cancelable operating leases were \$71.3 million and \$79.1 million, respectively.

Note 3: Revenue

Adoption of ASC 606

On January 1, 2018, we adopted ASC 606, on a modified retrospective basis, applied to those contracts which were not completed as of January 1, 2018. As a result of our adoption, we recorded a cumulative-effect adjustment of \$11.4 million within retained earnings in our condensed consolidated balance sheet as of January 1, 2018, to reflect a change in the timing of revenue recognition under ASC 606, from point in time to over time, on our Contract-Manufactured Products product sales, certain Proprietary Products product sales, development and tooling agreements, as well as an acceleration on a portion of the remaining unearned income from a nonrefundable customer payment.

Results for reporting periods beginning after January 1, 2018 are presented under ASC 606, while prior period amounts are not adjusted and continue to be reported under the accounting standards in effect for those periods.

The cumulative effect of the changes made to our condensed consolidated January 1, 2018 balance sheet for the adoption of ASC 606 was as follows:

(\$ in millions)	Balance at December 31, 2017	Adjustments Due to ASC 606	Balance at January 1, 2018
Assets:			
Accounts receivable, net	\$ 253.2	\$ 25.0	\$ 278.2
Inventories	215.2	(20.8)	194.4
Other current assets	39.2	(8.4)	30.8
Liabilities and Equity:			
Other current liabilities	\$ 77.0	\$ (13.7)	\$ 63.3
Deferred income taxes	10.4	3.0	13.4
Other long-term liabilities	42.6	(4.9)	37.7
Retained earnings	1,178.2	11.4	1,189.6

The impact of the adoption of ASC 606 on our condensed consolidated income statement for the three months ended June 30, 2018 was as follows:

(\$ in millions)	As Reported	Balances without Adoption of ASC 606	Effects of Change (Lower)/Higher
Net sales	\$ 447.5	\$ 452.6	\$ (5.1)
Cost of goods and services sold	305.3	305.9	(0.6)
Research and development	10.8	10.9	(0.1)
Other expense	1.1	0.9	0.2
Income tax expense	6.0	6.8	(0.8)
Net income	\$ 56.1	\$ 59.9	\$ (3.8)

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The impact of the adoption of ASC 606 on our condensed consolidated income statement for the six months ended June 30, 2018 was as follows:

(\$ in millions)	As Reported	Balances without Adoption of ASC 606	Effects of Change (Lower)/Higher
Net sales	\$ 863.2	\$ 870.9	\$ (7.7)
Cost of goods and services sold	586.6	588.6	(2.0)
Research and development	20.4	20.5	(0.1)
Other expense	4.2	3.9	0.3
Income tax expense	18.5	19.7	(1.2)
Net income	\$ 99.7	\$ 104.4	\$ (4.7)

The impact of the adoption of ASC 606 on our condensed consolidated balance sheet as of June 30, 2018 was as follows:

(\$ in millions)	As Reported	Balances without Adoption of ASC 606	Effects of Change Higher/(Lower)
Assets:			
Accounts receivable, net	\$ 296.7	\$ 276.8	\$ 19.9
Inventories	208.2	225.0	(16.8)
Other current assets	36.5	46.1	(9.6)
Liabilities and Equity:			
Other current liabilities	\$ 86.2	\$ 96.5	\$ (10.3)
Deferred income taxes	11.8	10.0	1.8
Other long-term liabilities	42.4	47.1	(4.7)
Retained earnings	1,258.0	1,251.3	6.7

Revenue Recognition

Our revenue results from the sale of goods or services and reflects the consideration to which we expect to be entitled to in exchange for those goods or services. We record revenue based on a five-step model, in accordance with ASC 606. Following the identification of a contract with a customer, we identify the performance obligations (goods or services) in the contract, determine the transaction price, allocate the transaction price to the performance obligations in the contract, and recognize the revenue when (or as) we satisfy the performance obligations by transferring the promised goods or services to our customers. A good or service is transferred when (or as) the customer obtains control of that good or service.

We recognize the majority of our revenue, primarily relating to Proprietary Products product sales, at a point in time, following the transfer of control of our products to our customers, which typically occurs upon shipment or delivery, depending on the terms of the related agreements.

We recognize revenue relating to our Contract-Manufactured Products product sales and certain Proprietary Products product sales over time, as our performance does not create an asset with an alternative use to us and we have an enforceable right to payment for performance completed to date.

We recognize revenue relating to our development and tooling agreements over time, as our performance creates or enhances an asset that the customer controls as the asset is created or enhanced.

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For revenue recognized over time, revenue is recognized by applying a method of measuring progress toward complete satisfaction of the related performance obligation. When selecting the method for measuring progress, we select the method that best depicts the transfer of control of goods or services promised to our customers.

Revenue for our Contract-Manufactured Products product sales, certain Proprietary Products product sales, and our development and tooling agreements is recorded under an input method, which recognizes revenue on the basis of our efforts or inputs to the satisfaction of a performance obligation (for example, resources consumed, labor hours expended, costs incurred, time elapsed, or machine hours used) relative to the total expected inputs to the satisfaction of that performance obligation. The input method that we use is based on costs incurred.

The majority of the performance obligations within our contracts are satisfied within one year or less. Performance obligations satisfied beyond one year include those relating to a nonrefundable customer payment of \$20.0 million received in June 2013 in return for the exclusive use of the SmartDose® technology platform within a specific therapeutic area. As of June 30, 2018, there was \$6.9 million of unearned income related to this payment, of which \$0.9 million was included in other current liabilities and \$6.0 million was included in other long-term liabilities. The unearned income is being recognized as income on a straight-line basis over the remaining term of the agreement. The agreement does not include a future minimum purchase commitment from the customer.

Our revenue can be generated from contracts with multiple performance obligations. When a sales agreement involves multiple performance obligations, each obligation is separately identified and the transaction price is allocated based on the amount of consideration we expect to be entitled to in exchange for transferring the promised good or service to the customer.

Some customers receive pricing rebates upon attaining established sales volumes. We record rebate costs when sales occur based on our assessment of the likelihood that the required volumes will be attained. We also maintain an allowance for product returns, as we believe that we are able to reasonably estimate the amount of returns based on our substantial historical experience.

The following table presents the approximate percentage of our net sales by market group:

	Three Months Ended June 30,		Six Months Ended June 30,	
	2018	2017 ⁽¹⁾	2018	2017 ⁽¹⁾
Biologics	21%	23%	22%	23%
Generics	21%	20%	21%	20%
Pharma	35%	36%	35%	37%
Contract-Manufactured Products	23%	21%	22%	20%
	100%	100%	100%	100%

(1) As noted above, prior period amounts have not been adjusted under the modified retrospective method.

The following table presents the approximate percentage of our net sales by product category:

	Three Months Ended June 30,		Six Months Ended June 30,	
	2018	2017 ⁽¹⁾	2018	2017 ⁽¹⁾
High-Value Components	43%	41%	42%	42%
Standard Packaging	31%	34%	32%	34%
Delivery Devices	3%	4%	4%	4%
Contract-Manufactured Products	23%	21%	22%	20%
	100%	100%	100%	100%

(1) As noted above, prior period amounts have not been adjusted under the modified retrospective method.

The following table presents the approximate percentage of our net sales by geographic location:

	Three Months Ended June 30,		Six Months Ended June 30,	
	2018	2017 ⁽¹⁾	2018	2017 ⁽¹⁾
Americas	48%	52%	47%	52%
Europe, Middle East, Africa	44%	41%	45%	41%
Asia Pacific	8%	7%	8%	7%
	100%	100%	100%	100%

(1) As noted above, prior period amounts have not been adjusted under the modified retrospective method.

Contract Assets and Liabilities

Contract assets or liabilities result from transactions with revenue recorded over time. If the measure of remaining rights exceeds the measure of the remaining performance obligations, we record a contract asset. Contract assets are recorded on the condensed consolidated balance sheet in accounts receivable, net, and other assets (current and noncurrent portions, respectively). Contract assets included in accounts receivable, net, relate to the unbilled amounts of our product sales for which we have recognized revenue over time. Contract assets included in other assets represent the remaining performance obligations of our development and tooling agreements. Conversely, if the measure of the remaining performance obligations exceeds the measure of the remaining rights, we record a contract liability. Contract liabilities are recorded on the condensed consolidated balance sheet in other liabilities (current and noncurrent portions, respectively) and represent cash payments received in advance of our performance.

The following table summarizes our contract assets and liabilities, excluding contract assets included in accounts receivable, net:

	(\$ in millions)
Contract assets, December 31, 2017	\$ 7.5
Contract assets, June 30, 2018	6.0
Change in contract assets - (decrease) increase	\$ (1.5)
Deferred income, December 31, 2017	\$ (33.6)
Deferred income, June 30, 2018	(24.2)
Change in deferred income - decrease (increase)	\$ 9.4

The decrease in deferred income during the six months ended June 30, 2018 was primarily due to the recognition of revenue of \$48.4 million, including \$25.4 million of revenue that was included in deferred income at the beginning of the year, partially offset by additional cash payments of \$35.3 million received in advance of satisfying future performance obligations along with \$3.7 million in other adjustments.

Practical Expedients and Exemptions

We have elected to disregard the effects of a significant financing component, as we expect, at the inception of our contracts, that the period between when we transfer a promised good or service to the customer and when the customer pays for that good or service will be one year or less.

In addition, we have elected to omit the disclosure of the majority of our remaining performance obligations, which are satisfied within one year or less.

Note 4: Net Income Per Share

The following table reconciles the shares used in the calculation of basic net income per share to those used for diluted net income per share:

(in millions)	Three Months Ended June 30,		Six Months Ended June 30,	
	2018	2017	2018	2017
Net income	\$ 56.1	\$ 38.8	\$ 99.7	\$ 99.7
Weighted average common shares outstanding	73.6	73.9	73.8	73.6
Dilutive effect of equity awards, based on the treasury stock method	1.4	1.9	1.4	2.1
Weighted average shares assuming dilution	75.0	75.8	75.2	75.7

During the three months ended June 30, 2018 and 2017, there were 0.9 million and 0.5 million shares, respectively, from stock-based compensation plans not included in the computation of diluted net income per share because their impact was antidilutive. There were 0.8 million and 0.3 million antidilutive shares outstanding during the six months ended June 30, 2018 and 2017, respectively.

In February 2018, we announced a share repurchase program for calendar-year 2018 authorizing the repurchase of up to 800,000 shares of our common stock from time to time on the open market or in privately-negotiated transactions as permitted under the Securities Exchange Act of 1934 Rule 10b-18. The number of shares to be repurchased and the timing of such transactions will depend on a variety of factors, including market conditions. During the three months ended June 30, 2018, we purchased 260,000 shares of our common stock under the program at a cost of \$22.9 million, or an average price of \$88.03 per share. During the six months ended June 30, 2018, we purchased 800,000 shares of our common stock under the program at a cost of \$70.8 million, or an average price of \$88.51 per share.

Note 5: Inventories

Inventories are valued at the lower of cost (on a first-in, first-out basis) and net realizable value. Inventory balances were as follows:

(\$ in millions)	June 30, 2018	December 31, 2017
Raw materials	\$ 90.2	\$ 88.6
Work in process	39.0	31.8
Finished goods	79.0	94.8
	\$ 208.2	\$ 215.2

Note 6: Affiliated Companies

At June 30, 2018 and December 31, 2017, the aggregate carrying amount of investments in equity-method affiliates was \$78.4 million and \$72.4 million, respectively, and the aggregate carrying amount of cost-method investments, for which fair value was not readily determinable, was \$13.4 million at both period-ends. We test our cost-method investments for impairment whenever circumstances indicate that the carrying value of the investments may not be recoverable. Please refer to Note 5, *Affiliated Companies*, to the consolidated financial statements in our 2017 Annual Report for additional details.

Note 7: Debt

The following table summarizes our long-term debt obligations, net of unamortized debt issuance costs and current maturities. The interest rates shown in parentheses are as of June 30, 2018.

(\$ in millions)	June 30, 2018	December 31, 2017
Note payable, due December 31, 2019	\$ 0.1	\$ 0.1
Credit Facility, due October 15, 2020 (1.00%)	28.9	29.6
Series A notes, due July 5, 2022 (3.67%)	42.0	42.0
Series B notes, due July 5, 2024 (3.82%)	53.0	53.0
Series C notes, due July 5, 2027 (4.02%)	73.0	73.0
	197.0	197.7
Less: unamortized debt issuance costs	0.6	0.7
Total debt	196.4	197.0
Less: current portion of long-term debt	—	—
Long-term debt, net	\$ 196.4	\$ 197.0

Please refer to Note 8, *Debt*, to the consolidated financial statements in our 2017 Annual Report for additional details regarding our debt agreements.

At June 30, 2018, we had \$28.9 million in outstanding long-term borrowings under our \$300.0 million multi-currency revolving credit facility (the “Credit Facility”), of which \$4.5 million was denominated in Japanese Yen (“Yen”) and \$24.4 million was denominated in Euro. These borrowings, together with outstanding letters of credit of \$2.8 million, resulted in a borrowing capacity available under the Credit Facility of \$268.3 million at June 30, 2018. Please refer to Note 8, *Derivative Financial Instruments*, for a discussion of the foreign currency hedges associated with the Credit Facility.

Note 8: Derivative Financial Instruments

Our ongoing business operations expose us to various risks such as fluctuating interest rates, foreign exchange rates and increasing commodity prices. To manage these market risks, we periodically enter into derivative financial instruments such as interest rate swaps, options and foreign exchange contracts for periods consistent with, and for notional amounts equal to or less than, the related underlying exposures. We do not purchase or hold any derivative financial instruments for investment or trading purposes. All derivatives are recorded in our condensed consolidated balance sheet at fair value.

Foreign Exchange Rate Risk

We have entered into forward exchange contracts, designated as fair value hedges, to manage our exposure to fluctuating foreign exchange rates on cross-currency intercompany loans. As of June 30, 2018, the total amount of these forward exchange contracts was €10.0 million, Singapore Dollar (“SGD”) 601.5 million and \$13.4 million. As of December 31, 2017, the total amount of these forward exchange contracts was €12.0 million, SGD 171.0 million and \$13.4 million.

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In addition, we have entered into several foreign currency contracts, designated as cash flow hedges, for periods of up to eighteen months, intended to hedge the currency risk associated with a portion of our forecasted transactions denominated in foreign currencies. As of June 30, 2018, we had outstanding foreign currency contracts to purchase and sell certain pairs of currencies, as follows:

(in millions) Currency	Purchase	Sell	
		U. S. Dollar (“USD”)	Euro
USD	29.6	—	24.4
Yen	5,375.7	28.2	17.9
SGD	33.5	16.3	7.3

At June 30, 2018, a portion of our debt consisted of borrowings denominated in currencies other than USD. We have designated our €21.0 million (\$24.4 million) Euro-denominated borrowings under our Credit Facility as a hedge of our net investment in certain European subsidiaries. A cumulative foreign currency translation loss of \$0.6 million pre-tax (\$0.5 million after tax) on this debt was recorded within accumulated other comprehensive loss as of June 30, 2018. We have also designated our ¥500.0 million (\$4.5 million) Yen-denominated borrowings under our Credit Facility as a hedge of our net investment in Daikyo Seiko, Ltd. (“Daikyo”). At June 30, 2018, there was a cumulative foreign currency translation loss of \$0.4 million pre-tax (\$0.3 million after tax) on this Yen-denominated debt, which was also included within accumulated other comprehensive loss.

Commodity Price Risk

Many of our proprietary products are made from synthetic elastomers, which are derived from the petroleum refining process. We purchase the majority of our elastomers via long-term supply contracts, some of which contain clauses that provide for surcharges related to fluctuations in crude oil prices. The following economic hedges did not qualify for hedge accounting treatment since they did not meet the highly effective requirement at inception.

In November 2017, we purchased a series of call options for a total of 125,166 barrels of crude oil to mitigate our exposure to such oil-based surcharges and protect operating cash flows with regards to a portion of our forecasted elastomer purchases through May 2019. In April 2018, we purchased a series of call options for a total of 30,612 barrels of crude oil from December 2018 through August 2019.

During the three and six months ended June 30, 2018, the gain recorded in cost of goods and services sold related to these call options was \$0.5 million.

As of June 30, 2018, we had outstanding contracts to purchase 98,658 barrels of crude oil from July 2018 to August 2019 at a weighted-average strike price of \$73.10 per barrel.

Effects of Derivative Instruments on Financial Position and Results of Operations

Please refer to Note 9, *Fair Value Measurements*, for the balance sheet location and fair values of our derivative instruments as of June 30, 2018 and December 31, 2017.

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The following table summarizes the effects of derivative instruments designated as hedges on other comprehensive income (“OCI”) and earnings, net of tax:

(\$ in millions)	Amount of Gain (Loss) Recognized in OCI for the Three Months Ended June 30,		Amount of Loss (Gain) Reclassified from Accumulated OCI into Income for the Three Months Ended June 30,		Location of Loss (Gain) Reclassified from Accumulated OCI into Income
	2018	2017	2018	2017	
Cash Flow Hedges:					
Foreign currency hedge contracts	\$ 0.5	\$ (1.2)	\$ 0.3	\$ 0.2	Net sales
Foreign currency hedge contracts	(0.2)	(2.2)	0.1	0.1	Cost of goods and services sold
Interest rate swap contracts	—	—	—	0.2	Interest expense
Total	\$ 0.3	\$ (3.4)	\$ 0.4	\$ 0.5	
Net Investment Hedges:					
Foreign currency-denominated debt	\$ 1.2	\$ (0.9)	\$ —	\$ —	Other expense
Total	\$ 1.2	\$ (0.9)	\$ —	\$ —	

(\$ in millions)	Amount of Gain (Loss) Recognized in OCI for the Six Months Ended June 30,		Amount of Loss (Gain) Reclassified from Accumulated OCI into Income for the Six Months Ended June 30,		Location of Loss (Gain) Reclassified from Accumulated OCI into Income
	2018	2017	2018	2017	
Cash Flow Hedges:					
Foreign currency hedge contracts	\$ 0.1	\$ (0.9)	\$ 0.8	\$ 0.3	Net sales
Foreign currency hedge contracts	1.4	(1.1)	0.5	0.1	Cost of goods and services sold
Interest rate swap contracts	—	—	—	0.3	Interest expense
Forward treasury locks	—	—	0.1	0.1	Interest expense
Total	\$ 1.5	\$ (2.0)	\$ 1.4	\$ 0.8	
Net Investment Hedges:					
Foreign currency-denominated debt	\$ 0.5	\$ (1.2)	\$ —	\$ —	Other expense
Total	\$ 0.5	\$ (1.2)	\$ —	\$ —	

For the three and six months ended June 30, 2018 and 2017, there was no material ineffectiveness related to our hedges.

Note 9: Fair Value Measurements

Fair value is defined as the price that would be received to sell an asset or paid to transfer a liability (an exit price) in the principal or most advantageous market for the asset or liability in an orderly transaction between market participants on the measurement date. The following fair value hierarchy classifies the inputs to valuation techniques used to measure fair value into one of three levels:

- Level 1: Unadjusted quoted prices in active markets for identical assets or liabilities.
- Level 2: Inputs other than quoted prices that are observable for the asset or liability, either directly or indirectly. These include quoted prices for similar assets or liabilities in active markets and quoted prices for identical or similar assets or liabilities in markets that are not active.
- Level 3: Unobservable inputs that reflect the reporting entity's own assumptions.

The following tables present the assets and liabilities recorded at fair value on a recurring basis:

(\$ in millions)	Balance at June 30, 2018	Basis of Fair Value Measurements		
		Level 1	Level 2	Level 3
Assets:				
Deferred compensation assets	\$ 8.8	\$ 8.8	\$ —	\$ —
Foreign currency contracts	3.4	—	3.4	—
	<u>\$ 12.2</u>	<u>\$ 8.8</u>	<u>\$ 3.4</u>	<u>\$ —</u>
Liabilities:				
Contingent consideration	\$ 5.0	\$ —	\$ —	\$ 5.0
Deferred compensation liabilities	9.9	9.9	—	—
Foreign currency contracts	8.0	—	8.0	—
	<u>\$ 22.9</u>	<u>\$ 9.9</u>	<u>\$ 8.0</u>	<u>\$ 5.0</u>

(\$ in millions)	Balance at December 31, 2017	Basis of Fair Value Measurements		
		Level 1	Level 2	Level 3
Assets:				
Deferred compensation assets	\$ 8.9	\$ 8.9	\$ —	\$ —
Foreign currency contracts	0.5	—	0.5	—
	<u>\$ 9.4</u>	<u>\$ 8.9</u>	<u>\$ 0.5</u>	<u>\$ —</u>
Liabilities:				
Contingent consideration	\$ 4.9	\$ —	\$ —	\$ 4.9
Deferred compensation liabilities	9.9	9.9	—	—
Foreign currency contracts	5.1	—	5.1	—
	<u>\$ 19.9</u>	<u>\$ 9.9</u>	<u>\$ 5.1</u>	<u>\$ 4.9</u>

Deferred compensation assets are included within other noncurrent assets and are valued using a market approach based on quoted market prices in an active market. The fair value of our foreign currency contracts, included within other current assets and other current liabilities, is valued using an income approach based on quoted forward foreign exchange rates and spot rates at the reporting date. The fair value of our contingent consideration, included within other current and other long-term liabilities, is discussed further in the section related to Level 3 fair value

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measurements. The fair value of deferred compensation liabilities is based on quoted prices of the underlying employees' investment selections and is included within other long-term liabilities.

Level 3 Fair Value Measurements

The fair value of the contingent consideration liability related to the SmartDose technology platform (the "SmartDose contingent consideration") was initially determined using a probability-weighted income approach, and is revalued at each reporting date or more frequently if circumstances dictate. Changes in the fair value of this obligation are recorded as income or expense within other expense in our condensed consolidated statements of income. The significant unobservable inputs used in the fair value measurement of the SmartDose contingent consideration are the sales projections, the probability of success factors, and the discount rate. Significant increases or decreases in any of those inputs in isolation would result in a significantly lower or higher fair value measurement. As development and commercialization of the SmartDose technology platform progresses, we may need to update the sales projections, the probability of success factors, and the discount rate used. This could result in a material increase or decrease to the SmartDose contingent consideration.

The following table provides a summary of changes in our Level 3 fair value measurements:

	(\$ in millions)
Balance, December 31, 2016	\$ 8.0
Decrease in fair value recorded in earnings	(2.4)
Payments	(0.7)
Balance, December 31, 2017	4.9
Increase in fair value recorded in earnings	0.6
Payments	(0.5)
Balance, June 30, 2018	\$ 5.0

Other Financial Instruments

We believe that the carrying amounts of our cash and cash equivalents and accounts receivable approximate their fair values due to their near-term maturities.

The estimated fair value of long-term debt is based on quoted market prices for debt issuances with similar terms and maturities and is classified as Level 2 within the fair value hierarchy. At June 30, 2018, the estimated fair value of long-term debt was \$194.6 million compared to a carrying amount of \$196.4 million. At December 31, 2017, the estimated fair value of long-term debt was \$201.5 million and the carrying amount was \$197.0 million.

Note 10: Stock-Based Compensation

The West Pharmaceutical Services, Inc. 2016 Omnibus Incentive Compensation Plan (the "2016 Plan") provides for the granting of stock options, stock appreciation rights, restricted stock awards and performance awards to employees and non-employee directors. A committee of the Board of Directors determines the terms and conditions of awards to be granted. Vesting requirements vary by award. At June 30, 2018, there were 3,748,019 shares remaining in the 2016 Plan for future grants.

During the six months ended June 30, 2018, we granted 477,501 stock options at a weighted average exercise price of \$90.10 per share based on the grant-date fair value of our stock to employees under the 2016 Plan. The weighted average grant date fair value of options granted was \$20.06 per share as determined by the Black-Scholes option valuation model using the following weighted average assumptions: a risk-free interest rate of 2.7%; expected life of 5.6 years based on prior experience; stock volatility of 19.8% based on historical data; and a dividend yield of 0.7%. Stock option expense is recognized over the vesting period, net of forfeitures.

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During the six months ended June 30, 2018, we granted 98,065 stock-settled performance share unit (“PSU”) awards at a weighted average grant-date fair value of \$89.90 per share to eligible employees. These awards are earned based on the Company’s performance against pre-established targets, including annual growth rate of revenue and return on invested capital, over a specified performance period. Depending on the achievement of the targets, recipients of stock-settled PSU awards are entitled to receive a certain number of shares of common stock. Shares earned under PSU awards may vary from 0% to 200% of an employee’s targeted award. The fair value of stock-settled PSU awards is based on the market price of our stock at the grant date and is recognized as expense over the performance period, adjusted for estimated target outcomes and net of forfeitures.

During the six months ended June 30, 2018, we granted 14,745 stock-settled restricted share unit (“RSU”) awards at a weighted average grant-date fair value of \$96.12 per share to eligible employees. These awards are earned over a specified performance period. The fair value of stock-settled RSU awards is based on the market price of our stock at the grant date and is recognized as expense over the performance period, net of forfeitures.

Total stock-based compensation expense was \$6.0 million and \$9.4 million for the three and six months ended June 30, 2018, respectively. For the three and six months ended June 30, 2017, stock-based compensation expense was \$5.5 million and \$9.0 million, respectively.

Note 11: Benefit Plans

The components of net periodic benefit cost for the three months ended June 30 were as follows:

(\$ in millions)	Pension benefits		Other retirement benefits		Total	
	2018	2017	2018	2017	2018	2017
Service cost	\$ 2.7	\$ 2.6	\$ —	\$ —	\$ 2.7	\$ 2.6
Interest cost	2.4	2.4	—	0.1	2.4	2.5
Expected return on assets	(3.9)	(3.3)	—	—	(3.9)	(3.3)
Amortization of prior service credit	(0.5)	(0.4)	(0.1)	(0.2)	(0.6)	(0.6)
Recognized actuarial losses (gains)	1.0	1.2	(0.6)	(0.4)	0.4	0.8
Net periodic benefit cost	\$ 1.7	\$ 2.5	\$ (0.7)	\$ (0.5)	\$ 1.0	\$ 2.0

(\$ in millions)	Pension benefits		Other retirement benefits		Total	
	2018	2017	2018	2017	2018	2017
U.S. plans	\$ 1.2	\$ 1.8	\$ (0.7)	\$ (0.5)	\$ 0.5	\$ 1.3
International plans	0.5	0.7	—	—	0.5	0.7
Net periodic benefit cost	\$ 1.7	\$ 2.5	\$ (0.7)	\$ (0.5)	\$ 1.0	\$ 2.0

The components of net periodic benefit cost for the six months ended June 30 were as follows (\$ in millions):

(\$ in millions)	Pension benefits		Other retirement benefits		Total	
	2018	2017	2018	2017	2018	2017
Service cost	\$ 5.5	\$ 5.3	\$ —	\$ —	\$ 5.5	\$ 5.3
Interest cost	4.7	4.9	0.1	0.2	4.8	5.1
Expected return on assets	(7.8)	(6.7)	—	—	(7.8)	(6.7)
Amortization of prior service credit	(0.8)	(0.7)	(0.3)	(0.4)	(1.1)	(1.1)
Recognized actuarial losses (gains)	1.9	2.4	(1.1)	(1.1)	0.8	1.3
Net periodic benefit cost	\$ 3.5	\$ 5.2	\$ (1.3)	\$ (1.3)	\$ 2.2	\$ 3.9

	Pension benefits		Other retirement benefits		Total	
	2018	2017	2018	2017	2018	2017
U.S. plans	\$ 2.5	\$ 3.8	\$ (1.3)	\$ (1.3)	\$ 1.2	\$ 2.5
International plans	1.0	1.4	—	—	1.0	1.4
Net periodic benefit cost	\$ 3.5	\$ 5.2	\$ (1.3)	\$ (1.3)	\$ 2.2	\$ 3.9

In March 2017, the FASB issued guidance on the presentation of net periodic pension and postretirement benefit cost (net benefit cost). We adopted this guidance as of January 1, 2018, on a retrospective basis. Please refer to Note 2, *New Accounting Standards*, for additional information.

During the six months ended June 30, 2017, we contributed \$20.0 million to our U.S. qualified pension plan.

Effective January 1, 2019, except for interest crediting, benefit accruals under our U.S. qualified and non-qualified defined benefit pension plans will cease.

Note 12: Accumulated Other Comprehensive Loss

The following table presents the changes in the components of accumulated other comprehensive loss, net of tax, for the six months ended June 30, 2018:

(\$ in millions)	Losses on cash flow hedges	Unrealized gains on investment securities	Defined benefit pension and other postretirement plans	Foreign currency translation	Total
Balance, December 31, 2017	\$ (4.2)	\$ 0.5	\$ (39.0)	\$ (74.6)	\$ (117.3)
Other comprehensive income (loss) before reclassifications	1.5	—	0.5	(29.6)	(27.6)
Amounts reclassified out	1.4	—	(0.2)	—	1.2
Other comprehensive income (loss), net of tax	2.9	—	0.3	(29.6)	(26.4)
Balance, June 30, 2018	\$ (1.3)	\$ 0.5	\$ (38.7)	\$ (104.2)	\$ (143.7)

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A summary of the reclassifications out of accumulated other comprehensive loss is presented in the following table:

(\$ in millions) Detail of components	Three Months Ended June 30,		Six Months Ended June 30,		Location on Statement of Income
	2018	2017	2018	2017	
Losses on cash flow hedges:					
Foreign currency contracts	\$ (0.3)	\$ (0.2)	\$ (0.9)	\$ (0.3)	Net sales
Foreign currency contracts	(0.1)	(0.1)	(0.7)	(0.1)	Cost of goods and services sold
Interest rate swap contracts	—	(0.3)	—	(0.5)	Interest expense
Forward treasury locks	(0.1)	(0.1)	(0.2)	(0.2)	Interest expense
Total before tax	(0.5)	(0.7)	(1.8)	(1.1)	
Tax expense	0.1	0.2	0.4	0.3	
Net of tax	<u>\$ (0.4)</u>	<u>\$ (0.5)</u>	<u>\$ (1.4)</u>	<u>\$ (0.8)</u>	
Amortization of defined benefit pension and other postretirement plans:					
Prior service credit	\$ 0.6	\$ 0.6	\$ 1.1	\$ 1.1	(a)
Actuarial losses	(0.4)	(0.8)	(0.8)	(1.3)	(a)
Total before tax	0.2	(0.2)	0.3	(0.2)	
Tax expense	(0.1)	—	(0.1)	—	
Net of tax	<u>\$ 0.1</u>	<u>\$ (0.2)</u>	<u>\$ 0.2</u>	<u>\$ (0.2)</u>	
Total reclassifications for the period, net of tax	<u>\$ (0.3)</u>	<u>\$ (0.7)</u>	<u>\$ (1.2)</u>	<u>\$ (1.0)</u>	

(a) These components are included in the computation of net periodic benefit cost. Please refer to Note 11, *Benefit Plans*, for additional details.

Note 13: Other Expense

Other expense consists of:

(\$ in millions)	Three Months Ended June 30,		Six Months Ended June 30,	
	2018	2017	2018	2017
Restructuring and related charges:				
Severance and post-employment benefits	\$ 1.3	\$ —	\$ 3.3	\$ —
Asset-related charges	0.3	—	0.4	—
Other charges	0.6	—	1.8	—
Total restructuring and related charges	<u>2.2</u>	<u>—</u>	<u>5.5</u>	<u>—</u>
Venezuela deconsolidation	—	11.1	—	11.1
Development and licensing income	(0.2)	(0.4)	(0.4)	(0.8)
Contingent consideration	0.3	0.4	0.6	0.7
Other items	(1.2)	0.6	(1.5)	1.6
Total other expense	<u>\$ 1.1</u>	<u>\$ 11.7</u>	<u>\$ 4.2</u>	<u>\$ 12.6</u>

Restructuring and Related Charges

In February 2018, our Board of Directors approved a restructuring plan designed to realign our manufacturing capacity with demand. These changes are expected to be implemented over the following twelve to twenty-four months. The plan will require restructuring and related charges in the range of \$8.0 million to \$13.0 million and capital expenditures in the range of \$9.0 million to \$14.0 million. Once fully completed, we expect that the plan will provide us with annualized savings in the range of \$17.0 million to \$22.0 million.

During the three months ended June 30, 2018, we recorded \$2.2 million in restructuring and related charges associated with this plan, consisting of \$1.3 million for severance charges, \$0.3 million for non-cash asset write-downs associated with the discontinued use of certain equipment, and \$0.6 million for other charges. During the six months ended June 30, 2018, we recorded \$5.5 million in restructuring and related charges associated with this plan, consisting of \$3.3 million for severance charges, \$0.4 million for non-cash asset write-downs associated with the discontinued use of certain equipment, and \$1.8 million for other charges.

The following table presents activity related to our restructuring obligations related to the 2018 restructuring plan:

(\$ in millions)	Severance and benefits	Asset-related charges	Other charges	Total
Balance, December 31, 2017	\$ —	\$ —	\$ —	\$ —
Charges	3.3	0.4	1.8	5.5
Cash payments	(0.1)	—	—	(0.1)
Non-cash asset write-downs	—	(0.4)	(1.8)	(2.2)
Balance, June 30, 2018	<u>\$ 3.2</u>	<u>\$ —</u>	<u>\$ —</u>	<u>\$ 3.2</u>

On February 15, 2016, our Board of Directors approved a restructuring plan designed to repurpose several of our production facilities in support of growing high-value proprietary products and to realign operational and commercial activities to meet the needs of our new market-focused commercial organization. Please refer to Note 14, *Other Expense*, to the consolidated financial statements in our 2017 Annual Report for further discussion of the 2016 Plan. Our remaining restructuring obligations related to the 2016 Plan as of June 30, 2018 were \$1.0 million.

Other Items

During the three and six months ended June 30, 2017, as a result of the continued deterioration of conditions in Venezuela as well as our continued reduced access to USD settlement controlled by the Venezuelan government, we recorded a charge of \$11.1 million related to the deconsolidation of our Venezuelan subsidiary, following our determination that we no longer met the U.S. GAAP criteria for control of that subsidiary. This charge included the derecognition of the carrying amounts of our Venezuelan subsidiary's assets and liabilities, as well as the write-off of our investment in our Venezuelan subsidiary, related unrealized translation adjustments and the elimination of intercompany accounts. As of April 1, 2017, our consolidated financial statements exclude the results of our Venezuelan subsidiary.

In addition, during the three and six months ended June 30, 2018, we recorded development income of \$0.2 million and \$0.4 million, respectively, related to a nonrefundable customer payment of \$20.0 million received in June 2013 in return for the exclusive use of the SmartDose technology platform within a specific therapeutic area. During the three and six months ended June 30, 2017, we recorded development income of \$0.4 million and \$0.8 million, respectively, related to this nonrefundable customer payment. Please refer to Note 3, *Revenue*, for additional information.

Contingent consideration represents changes in the fair value of the SmartDose contingent consideration. Please refer to Note 9, *Fair Value Measurements*, for additional details.

Other items consist of foreign exchange transaction gains and losses, gains and losses on the sale of fixed assets, and miscellaneous income and charges.

Note 14: Income Taxes

The tax provision for interim periods is determined using the estimated annual effective consolidated tax rate, based on the current estimate of full-year earnings before taxes, adjusted for the impact of discrete quarterly items.

The provision for income taxes was \$6.0 million and \$2.9 million for the three months ended June 30, 2018 and 2017, respectively, and the effective tax rate was 9.9% and 7.1%, respectively. The provision for income taxes was \$18.5 million and \$5.1 million for the six months ended June 30, 2018 and 2017, respectively, and the effective tax rate was 16.2% and 5.1%, respectively.

During the three and six months ended June 30, 2018, we recorded a tax benefit of \$3.4 million and \$5.5 million, respectively, associated with our adoption in 2017 of guidance issued by the FASB regarding share-based payment transactions, as compared to a tax benefit of \$9.6 million and \$25.5 million for the same periods in 2017.

During the three and six months ended June 30, 2018, we recorded a net tax benefit of \$4.8 million to reflect a reduction to our one-time mandatory deemed repatriation tax of post-1986 undistributed foreign subsidiary earnings and profits. In April 2018, the U.S. Internal Revenue Service issued guidance which provided that certain foreign taxes accrued by specified corporations in the toll tax year reduce post-1986 earnings and profits. In addition, during the six months ended June 30, 2018, we recorded a net tax charge of \$0.3 million to adjust our estimated impact of the 2017 Tax Act. During the three and twelve months ended December 31, 2017, we had recorded a provisional charge for the estimated impact of the 2017 Tax Act, based upon our then-current understanding of the 2017 Tax Act and the guidance available at the time. We will continue to actively monitor the developments relating to the 2017 Tax Act, and will adjust our estimate as necessary during the one-year measurement period.

During the three and six months ended June 30, 2017, we recorded a tax benefit of \$3.5 million related to a planned repatriation of cash held by non-U.S. subsidiaries.

In response to the 2017 Tax Act, we reevaluated our position regarding permanent reinvestment of foreign subsidiary earnings and profits through 2017 (with the exception of China and Mexico) and elected to include in our provision for income taxes for the year ended December 31, 2017 an estimated liability of \$9.8 million related to foreign withholding taxes and state income taxes that will be incurred upon the distribution of those foreign subsidiary earnings and profits to the U.S. at a future date. Following additional analysis of the 2017 Tax Act, we are asserting, as of January 1, 2018, indefinite reinvestment related to our investment in all of our foreign subsidiaries.

Note 15: Commitments and Contingencies

From time to time, we are involved in product liability matters and other legal proceedings and claims generally incidental to our normal business activities. We accrue for loss contingencies when it is probable that a liability has been incurred and the amount of the loss can be reasonably estimated. While the outcome of current proceedings cannot be accurately predicted, we believe their ultimate resolution should not have a material adverse effect on our business, financial condition, results of operations or liquidity.

There have been no significant changes to the commitments and contingencies included in our 2017 Annual Report.

Note 16: Segment Information

Our business operations are organized into two reportable segments, Proprietary Products and Contract-Manufactured Products. Our Proprietary Products reportable segment offers proprietary packaging, containment and drug delivery products, along with analytical lab services, to biologic, generic and pharmaceutical drug customers. Our Contract-Manufactured Products reportable segment serves as a fully integrated business, focused on the

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design, manufacture, and automated assembly of complex devices, primarily for pharmaceutical, diagnostic, and medical device customers.

We evaluate the performance of our segments based upon, among other things, segment net sales and operating profit. Segment operating profit excludes general corporate costs, which include executive and director compensation, stock-based compensation, adjustments to annual incentive plan expense for over- or under-attainment of targets, certain pension and other retirement benefit costs, and other corporate facilities and administrative expenses not allocated to the segments. Also excluded are items that we consider not representative of ongoing operations. Such items are referred to as other unallocated items and generally include restructuring and related charges, certain asset impairments and other specifically-identified income or expense items.

The following table presents information about our reportable segments, reconciled to consolidated totals:

(\$ in millions)	Three Months Ended June 30,		Six Months Ended June 30,	
	2018	2017	2018	2017
Net sales:				
Proprietary Products	\$ 346.0	\$ 312.8	\$ 672.2	\$ 621.6
Contract-Manufactured Products	101.5	84.9	191.0	164.0
Intersegment sales elimination	—	(0.1)	—	(0.3)
Consolidated net sales	\$ 447.5	\$ 397.6	\$ 863.2	\$ 785.3
Operating profit (loss):				
Proprietary Products	\$ 71.7	\$ 56.7	\$ 134.5	\$ 121.8
Contract-Manufactured Products	9.0	10.5	18.5	19.3
Corporate	(18.2)	(14.1)	(33.8)	(27.5)
Other unallocated items	(2.2)	(11.1)	(5.5)	(11.1)
Total operating profit	\$ 60.3	\$ 42.0	\$ 113.7	\$ 102.5
Interest expense	2.2	2.2	4.1	4.3
Interest income	(0.3)	(0.3)	(0.9)	(0.6)
Other nonoperating income	(1.7)	(0.6)	(3.3)	(1.4)
Income before income taxes	\$ 60.1	\$ 40.7	\$ 113.8	\$ 100.2

The intersegment sales elimination, which is required for the presentation of consolidated net sales, represents the elimination of components sold between our segments.

Other unallocated items during the three and six months ended June 30, 2018, consisted of \$2.2 million and \$5.5 million, respectively, in restructuring and related charges. Other unallocated items during the three and six months ended June 30, 2017, consisted of a charge of \$11.1 million related to the deconsolidation of our Venezuelan subsidiary. Please refer to Note 13, *Other Expense*, for further discussion of these items.

In March 2017, the FASB issued guidance on the presentation of net periodic pension and postretirement benefit cost (net benefit cost). We adopted this guidance as of January 1, 2018, on a retrospective basis. As a result of this adoption, we reclassified net benefit cost components other than service cost from operating income to outside of operations. Net periodic benefit cost for the three months ended June 30, 2018 and 2017 was \$1.0 million and \$2.0 million, respectively, of which \$2.7 million and \$2.6 million, respectively, related to service cost and \$1.7 million and \$0.6 million, respectively, related to net benefit cost components other than service cost. Net periodic benefit cost for the six months ended June 30, 2018 and 2017 was \$2.2 million and \$3.9 million, respectively, of which \$5.5 million and \$5.3 million, respectively, related to service cost and \$3.3 million and \$1.4 million, respectively, related

to net benefit cost components other than service cost. Please refer to Note 2, *New Accounting Standards*, for additional information.

ITEM 2. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

OVERVIEW

The following discussion is intended to further the reader's understanding of the consolidated financial condition and results of operations of our Company. It should be read in conjunction with our condensed consolidated financial statements and accompanying notes elsewhere in this Quarterly Report on Form 10-Q ("Form 10-Q") as well as Management's Discussion and Analysis of Financial Condition and Results of Operations and the consolidated financial statements and accompanying notes included in our 2017 Annual Report. Our historical financial statements may not be indicative of our future performance. This Management's Discussion and Analysis of Financial Condition and Results of Operations contains a number of forward-looking statements, all of which are based on our current expectations and could be affected by the uncertainties and risks discussed in Part I, Item 1A of our 2017 Annual Report and in Part II, Item 1A of this Form 10-Q.

Throughout this section, references to "Notes" refer to the notes to our condensed consolidated financial statements (unaudited) in Part I, Item 1 of this Form 10-Q, unless otherwise indicated.

Non-U.S. GAAP Financial Measures

For the purpose of aiding the comparison of our year-over-year results, we may refer to net sales and other financial results excluding the effects of changes in foreign currency exchange rates. The constant-currency amounts are calculated by translating the current year's functional currency results at the prior-year period's exchange rate. We may also refer to consolidated operating profit and consolidated operating profit margin excluding the effects of unallocated items. The re-measured results excluding effects from currency translation and excluding the effects of unallocated items are not in conformity with U.S. GAAP and should not be used as a substitute for the comparable U.S. GAAP financial measures. The non-U.S. GAAP financial measures are incorporated into our discussion and analysis as management uses them in evaluating our results of operations, and believes that this information provides users a valuable insight into our results.

Our Operations

We are a leading global manufacturer in the design and production of technologically advanced, high-quality, integrated containment and delivery systems for injectable drugs and healthcare products. Our products include a variety of primary packaging, containment solutions, reconstitution and transfer systems, and drug delivery systems, as well as contract manufacturing and analytical lab services. Our customers include the leading biologic, generic, pharmaceutical, diagnostic, and medical device companies in the world. Our top priority is delivering quality products that meet the exact product specifications and quality standards customers require and expect. This focus on quality includes excellence in manufacturing, scientific and technical expertise and management, so we can partner with our customers to deliver safe, effective drug products to patients quickly and efficiently. The Company was incorporated under the laws of the Commonwealth of Pennsylvania on July 27, 1923.

Our business operations are organized into two reportable segments, Proprietary Products and Contract-Manufactured Products. Our Proprietary Products reportable segment offers proprietary packaging, containment and drug delivery products, along with analytical lab services, to biologic, generic and pharmaceutical drug customers. Our Contract-Manufactured Products reportable segment serves as a fully integrated business, focused on the design, manufacture, and automated assembly of complex devices, primarily for pharmaceutical, diagnostic, and medical device customers. We also maintain partnerships to share technologies and market products with affiliates in Japan and Mexico.

2018 Financial Performance Summary

Consolidated net sales increased by \$49.9 million, or 12.6%, for the three months ended June 30, 2018, as compared to the same period in 2017. Excluding foreign currency translation effects, consolidated net sales for the three months ended June 30, 2018 increased by \$35.9 million, or 9.0%, as compared to the same period in 2017.

Consolidated net sales increased by \$77.9 million, or 9.9%, for the six months ended June 30, 2018, as compared to the same period in 2017. Excluding foreign currency translation effects, consolidated net sales for the six months ended June 30, 2018 increased by \$36.6 million, or 4.7%, as compared to the same period in 2017.

As announced earlier this year, our Board of Directors approved a restructuring plan in February 2018 designed to realign our manufacturing capacity with demand. These changes are expected to be implemented over the following twelve to twenty-four months. The plan will require restructuring and related charges in the range of \$8.0 million to \$13.0 million and capital expenditures in the range of \$9.0 million to \$14.0 million. Once fully completed, we expect that the plan will provide the Company with annualized savings in the range of \$17.0 million to \$22.0 million. During the three months ended June 30, 2018, we recorded \$2.2 million in restructuring and related charges associated with this plan, consisting of \$1.3 million for severance charges, \$0.3 million for non-cash asset write-downs associated with the discontinued use of certain equipment, and \$0.6 million for other charges. During the six months ended June 30, 2018, we recorded \$5.5 million in restructuring and related charges associated with this plan, consisting of \$3.3 million for severance charges, \$0.4 million for non-cash asset write-downs associated with the discontinued use of certain equipment, and \$1.8 million for other charges.

Net income for the three months ended June 30, 2018 was \$56.1 million, or \$0.75 per diluted share, as compared to \$38.8 million, or \$0.51 per diluted share, for the same period in 2017. Net income for the three months ended June 30, 2018 included the impact of restructuring and related charges of \$1.6 million (net of \$0.6 million in tax), or \$0.01 per diluted share, a net tax benefit of \$4.8 million, or \$0.06 per diluted share, for the estimated impact of the 2017 Tax Act, and a tax benefit of \$3.4 million, or \$0.04 per diluted share, associated with our adoption in 2017 of guidance issued by the FASB regarding share-based payment transactions. Net income for the three months ended June 30, 2017 included the impact of a tax benefit of \$9.6 million, or \$0.13 per diluted share, associated with our adoption in 2017 of guidance issued by the FASB regarding share-based payment transactions and a charge of \$11.1 million, or \$0.15 per diluted share, related to the deconsolidation of our Venezuelan subsidiary.

Net income for the six months ended June 30, 2018 was \$99.7 million, or \$1.33 per diluted share, as compared to \$99.7 million, or \$1.32 per diluted share, for the same period in 2017. Net income for the six months ended June 30, 2018 included the impact of restructuring and related charges of \$4.3 million (net of \$1.2 million in tax), or \$0.05 per diluted share, a net tax benefit of \$4.5 million, or \$0.06 per diluted share, for the estimated impact of the 2017 Tax Act, and a tax benefit of \$5.5 million, or \$0.07 per diluted share, associated with our adoption in 2017 of guidance issued by the FASB regarding share-based payment transactions. Net income for the six months ended June 30, 2017 included the impact of a tax benefit of \$25.5 million, or \$0.34 per diluted share, associated with our adoption in 2017 of guidance issued by the FASB regarding share-based payment transactions and a charge of \$11.1 million, or \$0.15 per diluted share, related to the deconsolidation of our Venezuelan subsidiary.

At June 30, 2018, our cash and cash equivalents balance totaled \$225.5 million and our available borrowing capacity under our Credit Facility was \$268.3 million.

RESULTS OF OPERATIONS

We evaluate the performance of our segments based upon, among other things, segment net sales and operating profit. Segment operating profit excludes general corporate costs, which include executive and director compensation, stock-based compensation, adjustments to annual incentive plan expense for over- or under-attainment of targets, certain pension and other retirement benefit costs, and other corporate facilities and administrative expenses not allocated to the segments. Also excluded are items that we consider not representative of ongoing operations. Such items are referred to as other unallocated items and generally include restructuring and related charges, certain asset impairments and other specifically-identified income or expense items.

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Percentages in the following tables and throughout the *Results of Operations* section may reflect rounding adjustments.

Net Sales

The following table presents net sales, consolidated and by reportable segment, for the three months ended June 30, 2018 and 2017:

(\$ in millions)	Three Months Ended June 30,		% Change	
	2018	2017	As-Reported	Ex-Currency
Proprietary Products	\$ 346.0	\$ 312.8	10.6%	6.9%
Contract-Manufactured Products	101.5	84.9	19.6%	16.9%
Intersegment sales elimination	—	(0.1)	—	—
Consolidated net sales	\$ 447.5	\$ 397.6	12.6%	9.0%

Consolidated net sales increased by \$49.9 million, or 12.6%, for the three months ended June 30, 2018, as compared to the same period in 2017, including a favorable foreign currency translation impact of \$14.0 million. Excluding foreign currency translation effects, consolidated net sales for the three months ended June 30, 2018 increased by \$35.9 million, or 9.0%, as compared to the same period in 2017.

Proprietary Products – Proprietary Products net sales increased by \$33.2 million, or 10.6%, for the three months ended June 30, 2018, as compared to the same period in 2017, including a favorable foreign currency translation impact of \$11.6 million. Excluding foreign currency translation effects, net sales for the three months ended June 30, 2018 increased by \$21.6 million, or 6.9%, as compared to the same period in 2017, primarily due to growth in our high-value product offerings, including our administration systems and our Westar® and FluroTec®-coated components, as well as sales price increases.

Contract-Manufactured Products – Contract-Manufactured Products net sales increased by \$16.6 million, or 19.6%, for the three months ended June 30, 2018, as compared to the same period in 2017, including a favorable foreign currency translation impact of \$2.4 million. Excluding foreign currency translation effects, net sales for the three months ended June 30, 2018 increased by \$14.2 million, or 16.9%, as compared to the same period in 2017, despite the impact of the loss of a consumer-product customer in early 2018. Higher sales volume, particularly in Ireland, contributed 15.0 percentage points of the increase, and sales price increases contributed 1.9 percentage points of the increase.

The intersegment sales elimination, which is required for the presentation of consolidated net sales, represents the elimination of components sold between our segments.

The following table presents net sales, consolidated and by reportable segment, for the six months ended June 30, 2018 and 2017:

(\$ in millions)	Six Months Ended June 30,		% Change	
	2018	2017	As-Reported	Ex-Currency
Proprietary Products	\$ 672.2	\$ 621.6	8.2%	2.6%
Contract-Manufactured Products	191.0	164.0	16.5%	12.5%
Intersegment sales elimination	—	(0.3)	—	—
Consolidated net sales	\$ 863.2	\$ 785.3	9.9%	4.7%

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Consolidated net sales increased by \$77.9 million, or 9.9%, for the six months ended June 30, 2018, as compared to the same period in 2017, including a favorable foreign currency translation impact of \$41.3 million. Excluding foreign currency translation effects, consolidated net sales for the six months ended June 30, 2018 increased by \$36.6 million, or 4.7%, as compared to the same period in 2017.

Proprietary Products – Proprietary Products net sales increased by \$50.6 million, or 8.2%, for the six months ended June 30, 2018, as compared to the same period in 2017, including a favorable foreign currency translation impact of \$34.8 million. Excluding foreign currency translation effects, net sales for the six months ended June 30, 2018 increased by \$15.8 million, or 2.6%, as compared to the same period in 2017, as growth in our high-value product offerings, including our Westar and FluroTec-coated components and our administration systems, and sales price increases offset the impact of the deconsolidation of our Venezuelan subsidiary as of April 1, 2017.

Contract-Manufactured Products – Contract-Manufactured Products net sales increased by \$27.0 million, or 16.5%, for the six months ended June 30, 2018, as compared to the same period in 2017, including a favorable foreign currency translation impact of \$6.5 million. Excluding foreign currency translation effects, net sales for the six months ended June 30, 2018 increased by \$20.5 million, or 12.5%, as compared to the same period in 2017, despite the impact of the loss of a consumer-product customer in early 2018. Higher sales volume, particularly in Ireland, contributed 10.9 percentage points of the increase, and sales price increases contributed 1.6 percentage points of the increase.

The intersegment sales elimination, which is required for the presentation of consolidated net sales, represents the elimination of components sold between our segments.

Gross Profit

The following table presents gross profit and related gross profit margins, consolidated and by reportable segment:

(\$ in millions)	Three Months Ended June 30,		Six Months Ended June 30,	
	2018	2017	2018	2017
Proprietary Products:				
Gross Profit	\$ 128.8	\$ 110.8	\$ 250.0	\$ 232.1
Gross Profit Margin	37.2%	35.4%	37.2%	37.3%
Contract-Manufactured Products:				
Gross Profit	\$ 13.4	\$ 14.2	\$ 26.6	\$ 27.1
Gross Profit Margin	13.1%	16.8%	13.9%	16.6%
Consolidated Gross Profit	\$ 142.2	\$ 125.0	\$ 276.6	\$ 259.2
Consolidated Gross Profit Margin	31.8%	31.4%	32.0%	33.0%

Consolidated gross profit increased by \$17.2 million, or 13.8%, and \$17.4 million, or 6.7%, for the three and six months ended June 30, 2018, as compared to the same periods in 2017, including a favorable foreign currency translation impact of \$3.8 million and \$12.9 million for the three and six months ended June 30, 2018, respectively. Consolidated gross profit margin increased by 0.4 margin points for the three months ended June 30, 2018, as compared to the same period in 2017, and decreased by 1.0 margin points for the six months ended June 30, 2018, as compared to the same period in 2017.

Proprietary Products – Proprietary Products gross profit increased by \$18.0 million, or 16.2%, and \$17.9 million, or 7.7%, for the three and six months ended June 30, 2018, respectively, as compared to the same periods in 2017, including a favorable foreign currency translation impact of \$3.5 million and \$11.8 million for the three and six months ended June 30, 2018, respectively. Proprietary Products gross profit margin increased by 1.8 margin points for the three months ended June 30, 2018, as compared to the same period in 2017, due to production efficiencies, a

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favorable mix of products sold, and sales price increases, partially offset by increased labor, overhead, and depreciation costs, as well as the impact of under-absorbed overhead costs from our new facility in Waterford, Ireland and higher raw material costs. Proprietary Products gross profit margin decreased by 0.1 margin points for the six months ended June 30, 2018, as compared to the same period in 2017, as the impact of under-absorbed overhead costs from our new facility in Waterford, Ireland and the deconsolidation of our Venezuelan subsidiary as of April 1, 2017, as well as increased labor, overhead, and depreciation costs and higher raw material costs were mostly offset by production efficiencies and sales price increases.

Contract-Manufactured Products – Contract-Manufactured Products gross profit decreased by \$0.8 million, or 5.6%, and \$0.5 million, or 1.8%, for the three and six months ended June 30, 2018, respectively, as compared to the same periods in 2017, including a favorable foreign currency translation impact of \$0.3 million and \$1.1 million for the three and six months ended June 30, 2018, respectively. Contract-Manufactured Products gross profit margin decreased by 3.7 margin points for the three months ended June 30, 2018, as compared to the same period in 2017, due to unabsorbed overhead from plant consolidation activities, start-up costs associated with the launch of new programs, and increased sales of products with higher purchased-material content. Contract-Manufactured Products gross profit margin decreased by 2.7 margin points for the six months ended June 30, 2018, as compared to the same period in 2017, due to an unfavorable mix of product sales and lower profitability on development and tooling agreements, increased labor, overhead, and depreciation costs, and higher raw material costs, partially offset by production efficiencies at our recently-expanded facility in Dublin, Ireland and sales price increases.

Research and Development (“R&D”) Costs

The following table presents R&D costs, consolidated and by reportable segment:

(\$ in millions)	Three Months Ended June 30,		Six Months Ended June 30,	
	2018	2017	2018	2017
Proprietary Products	\$ 10.8	\$ 10.0	\$ 20.4	\$ 20.3
Contract-Manufactured Products	—	—	—	—
Consolidated R&D Costs	\$ 10.8	\$ 10.0	\$ 20.4	\$ 20.3

Consolidated R&D costs increased by \$0.8 million, or 8.0%, and \$0.1 million, or 0.5%, for the three and six months ended June 30, 2018, respectively, as compared to the same periods in 2017. Efforts remain focused on the continued investment in self-injection systems development and formulation development.

All of the R&D costs incurred during the three and six months ended June 30, 2018 related to Proprietary Products.

Selling, General and Administrative (“SG&A”) Costs

The following table presents SG&A costs, consolidated and by reportable segment and corporate:

(\$ in millions)	Three Months Ended June 30,		Six Months Ended June 30,	
	2018	2017	2018	2017
Proprietary Products	\$ 47.5	\$ 43.4	\$ 95.9	\$ 88.3
Contract-Manufactured Products	4.3	3.8	8.6	7.9
Corporate	18.2	14.1	33.8	27.6
Consolidated SG&A costs	\$ 70.0	\$ 61.3	\$ 138.3	\$ 123.8
<i>SG&A as a % of net sales</i>	<i>15.6%</i>	<i>15.4%</i>	<i>16.0%</i>	<i>15.8%</i>

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Consolidated SG&A costs increased by \$8.7 million, or 14.2%, and \$14.5 million, or 11.7%, for the three and six months ended June 30, 2018, respectively, as compared to the same periods in 2017, including the impact of foreign currency translation, which increased SG&A costs by \$1.3 million, or 2.1%, and \$3.6 million, or 2.9%, for the three and six months ended June 30, 2018, respectively.

Proprietary Products – Proprietary Products SG&A costs increased by \$4.1 million, or 9.4%, and \$7.6 million, or 8.6%, for the three and six months ended June 30, 2018, respectively, as compared to the same periods in 2017, primarily due to increases in compensation costs. Foreign currency translation increased Proprietary Products SG&A costs by \$1.2 million and \$3.5 million for the three and six months ended June 30, 2018, respectively.

Contract-Manufactured Products – Contract-Manufactured Products SG&A costs increased by \$0.5 million, or 13.2%, and \$0.7 million, or 8.9%, for the three and six months ended June 30, 2018, respectively, as compared to the same period in 2017, due to slight increases in compensation and miscellaneous costs.

Corporate – Corporate SG&A costs increased by \$4.1 million, or 29.1%, and \$6.2 million, or 22.5% for the three and six months ended June 30, 2018, respectively, as compared to the same period in 2017, primarily due to increases in compensation costs and outside services.

Other Expense

The following table presents other income and expense items, consolidated and by reportable segment and unallocated items:

(Income) Expense (\$ in millions)	Three Months Ended June 30,		Six Months Ended June 30,	
	2018	2017	2018	2017
Proprietary Products	\$ (1.2)	\$ 0.7	\$ (0.8)	\$ 1.7
Contract-Manufactured Products	0.1	(0.1)	(0.5)	(0.1)
Corporate	—	—	—	(0.1)
Unallocated items	2.2	11.1	5.5	11.1
Consolidated other expense	\$ 1.1	\$ 11.7	\$ 4.2	\$ 12.6

Other income and expense items, consisting of foreign exchange transaction gains and losses, gains and losses on the sale of fixed assets, development and licensing income, contingent consideration, and miscellaneous income and charges, are generally recorded within segment results.

Consolidated other expense decreased by \$10.6 million and \$8.4 million for the three and six months ended June 30, 2018, as compared to the same periods in 2017.

Proprietary Products – Proprietary Products other (income) expense changed by \$1.9 million and \$2.5 million for the three and six months ended June 30, 2018, as compared to the same period in 2017, primarily due to foreign exchange transaction gains in Europe.

Contract-Manufactured Products – Contract-Manufactured Products other expense (income) changed by \$0.2 million for the three months ended June 30, 2018, as compared to the same period in 2017, due to foreign exchange transaction losses in Europe. Contract-Manufactured Products other income increased by \$0.4 million for the six months ended June 30, 2018, as compared to the same period in 2017, due to gains on the sale of fixed assets.

Corporate – Corporate other income decreased by \$0.1 million for the six months ended June 30, 2018, as compared to the same period in 2017.

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Unallocated items – During the three and six months ended June 30, 2018, we recorded \$2.2 million and \$5.5 million, respectively, in restructuring and related charges. During the three and six months ended June 30, 2017, we recorded a charge of \$11.1 million related to the deconsolidation of our Venezuelan subsidiary. Please refer to Note 13, *Other Expense*, for further discussion of these items.

Operating Profit

The following table presents adjusted operating profit, consolidated and by reportable segment, corporate and unallocated items:

(\$ in millions)	Three Months Ended June 30,		Six Months Ended June 30,	
	2018	2017	2018	2017
Proprietary Products	\$ 71.7	\$ 56.7	\$ 134.5	\$ 121.8
Contract-Manufactured Products	9.0	10.5	18.5	19.3
Corporate	(18.2)	(14.1)	(33.8)	(27.5)
Adjusted consolidated operating profit	\$ 62.5	\$ 53.1	\$ 119.2	\$ 113.6
Adjusted consolidated operating profit margin	14.0%	13.4%	13.8%	14.5%
Unallocated items	(2.2)	(11.1)	(5.5)	(11.1)
Consolidated operating profit	\$ 60.3	\$ 42.0	\$ 113.7	\$ 102.5
Consolidated operating profit margin	13.5%	10.6%	13.2%	13.1%

Consolidated operating profit increased by \$18.3 million, or 43.6%, and \$11.2 million, or 10.9%, for the three and six months ended June 30, 2018, as compared to the same periods in 2017, including a favorable foreign currency translation impact of \$2.5 million and \$9.1 million for the three and six months ended June 30, 2018, respectively.

Proprietary Products – Proprietary Products operating profit increased by \$15.0 million, or 26.5%, and \$12.7 million, or 10.4%, for the three and six months ended June 30, 2018, respectively, as compared to the same periods in 2017, including a favorable foreign currency translation impact of \$2.2 million and \$8.1 million for the three and six months ended June 30, 2018, due to the factors described above.

Contract-Manufactured Products – Contract-Manufactured Products operating profit decreased by \$1.5 million, or 14.3%, and \$0.8 million, or 4.1%, for the three and six months ended June 30, 2018, respectively, as compared to the same periods in 2017, including a favorable foreign currency translation impact of \$0.3 million and \$1.0 million for the three and six months ended June 30, 2018, due to the factors described above.

Corporate – Corporate costs increased by \$4.1 million, or 29.1%, and \$6.3 million, or 22.9%, for the three and six months ended June 30, 2018, respectively, as compared to the same period in 2017, due to the factors described above.

Unallocated items – Please refer to the *Other Expense* section for details.

Interest Expense, Net

The following table presents interest expense, net, by significant component:

(\$ in millions)	Three Months Ended June 30,		Six Months Ended June 30,	
	2018	2017	2018	2017
Interest expense	\$ 2.4	\$ 2.7	\$ 4.6	\$ 5.4
Capitalized interest	(0.2)	(0.5)	(0.5)	(1.1)
Interest income	(0.3)	(0.3)	(0.9)	(0.6)
Interest expense, net	\$ 1.9	\$ 1.9	\$ 3.2	\$ 3.7

Interest expense, net, remained constant at \$1.9 million for the three months ended June 30, 2018, as compared to the same period in 2017, as lower interest expense resulting from less debt outstanding during the three months ended June 30, 2018, as compared to the same period in 2017, was offset by a decrease in capitalized interest due to the completion of several major projects in 2017, including certain components of our new facility in Waterford, Ireland. The Waterford facility will continue to undergo validation procedures during 2018, with commercial production expected to begin in the second half of 2018.

Interest expense, net, decreased by \$0.5 million, or 13.5%, for the six months ended June 30, 2018, as compared to the same period in 2017, due to lower interest expense resulting from less debt outstanding during the six months ended June 30, 2018, as compared to the same period in 2017, partially offset by a decrease in capitalized interest due to the completion of several major projects in 2017, as described above.

Other Nonoperating Income

Other nonoperating income increased by \$1.1 million and \$1.9 million for the three and six months ended June 30, 2018, as compared to the same periods in 2017, due to an increase in the expected return on assets and a decrease in recognized actuarial losses for the three and six months ended June 30, 2018, as compared to the same periods in 2017. Please refer to Note 2, *New Accounting Standards*, and Note 11, *Benefit Plans*, for information on guidance issued by the FASB on the presentation of net periodic pension and postretirement benefit cost (net benefit cost) that we adopted as of January 1, 2018, on a retrospective basis.

Income Taxes

The provision for income taxes was \$6.0 million and \$2.9 million for the three months ended June 30, 2018 and 2017, respectively, and the effective tax rate was 9.9% and 7.1%, respectively. The provision for income taxes was \$18.5 million and \$5.1 million for the six months ended June 30, 2018 and 2017, respectively, and the effective tax rate was 16.2% and 5.1%, respectively.

During the three and six months ended June 30, 2018, we recorded a tax benefit of \$3.4 million and \$5.5 million, respectively, associated with our adoption in 2017 of guidance issued by the FASB regarding share-based payment transactions, as compared to a tax benefit of \$9.6 million and \$25.5 million for the same periods in 2017.

During the three and six months ended June 30, 2018, we recorded a net tax benefit of \$4.8 million to reflect a reduction to our one-time mandatory deemed repatriation tax of post-1986 undistributed foreign subsidiary earnings and profits. In April 2018, the U.S. Internal Revenue Service issued guidance which provided that certain foreign taxes accrued by specified corporations in the toll tax year reduce post-1986 earnings and profits. In addition, during the six months ended June 30, 2018, we recorded a net tax charge of \$0.3 million to adjust our estimated impact of the 2017 Tax Act. During the three and twelve months ended December 31, 2017, we had recorded a provisional charge for the estimated impact of the 2017 Tax Act, based upon our then-current understanding of the 2017 Tax Act

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and the guidance available at the time. We will continue to actively monitor the developments relating to the 2017 Tax Act, and will adjust our estimate as necessary during the one-year measurement period.

During the three and six months ended June 30, 2017, we recorded a tax benefit of \$3.5 million related to a planned repatriation of cash held by non-U.S. subsidiaries.

Please refer to Note 14, *Income Taxes*, for further discussion of our income taxes.

Equity in Net Income of Affiliated Companies

Equity in net income of affiliated companies represents the contribution to earnings from our 25% ownership interest in Daikyo and our 49% ownership interest in four companies in Mexico. Equity in net income of affiliated companies increased by \$1.0 million, or 100.0%, for the three months ended June 30, 2018, as compared to the same period in 2017, primarily due to additional facility-related costs at Daikyo during the three months ended June 30, 2017. Equity in net income of affiliated companies decreased by \$0.2 million, or 4.3%, for the six months ended June 30, 2018, as compared to the same period in 2017, primarily due to the impact of gains on the sale of investment securities by Daikyo during the six months ended June 30, 2017, partially offset by additional facility-related costs at Daikyo during the six months ended June 30, 2017.

Net Income

Net income for the three months ended June 30, 2018 was \$56.1 million, which included the impact of restructuring and related charges of \$1.6 million (net of \$0.6 million in tax), a net tax benefit of \$4.8 million for the estimated impact of the 2017 Tax Act, and a tax benefit of \$3.4 million associated with our adoption in 2017 of guidance issued by the FASB regarding share-based payment transactions. Net income for the three months ended June 30, 2017 was \$38.8 million, which included the impact of a tax benefit of \$9.6 million associated with our adoption in 2017 of guidance issued by the FASB regarding share-based payment transactions and a charge of \$11.1 million related to the deconsolidation of our Venezuelan subsidiary.

Net income for the six months ended June 30, 2018 was \$99.7 million, which included the impact of restructuring and related charges of \$4.3 million (net of \$1.2 million in tax), a net tax benefit of \$4.5 million for the estimated impact of the 2017 Tax Act, and a tax benefit of \$5.5 million associated with our adoption in 2017 of guidance issued by the FASB regarding share-based payment transactions. Net income for the six months ended June 30, 2017 was \$99.7 million, which included the impact of a tax benefit of \$25.5 million associated with our adoption in 2017 of guidance issued by the FASB regarding share-based payment transactions and a charge of \$11.1 million related to the deconsolidation of our Venezuelan subsidiary.

FINANCIAL CONDITION, LIQUIDITY AND CAPITAL RESOURCES

Cash Flows

The following table presents cash flow data for the six months ended June 30:

(\$ in millions)	2018	2017
Net cash provided by operating activities	\$ 127.0	\$ 106.0
Net cash used in investing activities	\$ (45.7)	\$ (70.2)
Net cash used in financing activities	\$ (82.6)	\$ (19.5)

Net Cash Provided by Operating Activities – Net cash provided by operating activities increased by \$21.0 million for the six months ended June 30, 2018, as compared to the same period in 2017, primarily due to a \$20.0 million contribution to our U.S. qualified pension plan during the six months ended June 30, 2017.

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Net Cash Used in Investing Activities – Net cash used in investing activities decreased by \$24.5 million for the six months ended June 30, 2018, as compared to the same period in 2017, mostly due to a \$18.8 million decrease in capital spending due to the completion of several major projects in 2017, including certain components of our new facility in Waterford, Ireland.

Net Cash Used in Financing Activities – Net cash used in financing activities increased by \$63.1 million for the six months ended June 30, 2018, as compared to the same period in 2017, primarily due to an increase in purchases under our share repurchase programs.

Liquidity and Capital Resources

The table below presents selected liquidity and capital measures:

(\$ in millions)	June 30, 2018	December 31, 2017
Cash and cash equivalents	\$ 225.5	\$ 235.9
Working capital	\$ 479.3	\$ 464.0
Total debt	\$ 196.4	\$ 197.0
Total equity	\$ 1,281.9	\$ 1,279.9
Net debt-to-total invested capital	N/A	N/A

Cash and cash equivalents include all instruments that have maturities of ninety days or less when purchased. Working capital is defined as current assets less current liabilities. Net debt is defined as total debt less cash and cash equivalents, and total invested capital is defined as the sum of net debt and total equity. Net debt and total invested capital are non-U.S. GAAP financial measures that should not be used as a substitute for the comparable U.S. GAAP financial measures. The non-U.S. GAAP financial measures are incorporated into our discussion and analysis as management believes that this information provides users with a valuable insight into our overall performance and financial position.

Cash and cash equivalents – Our cash and cash equivalents balance at June 30, 2018 consisted of cash held in depository accounts with banks around the world and cash invested in high-quality, short-term investments. The cash and cash equivalents balance at June 30, 2018 included \$76.8 million of cash held by subsidiaries within the U.S., and \$148.7 million of cash held by subsidiaries outside of the U.S. In response to the 2017 Tax Act, we reevaluated our position regarding permanent reinvestment of foreign subsidiary earnings and profits through 2017 (with the exception of China and Mexico) and elected to include in our provision for income taxes for the year ended December 31, 2017 an estimated liability of \$9.8 million related to foreign withholding taxes and state income taxes that will be incurred upon the distribution of those foreign subsidiary earnings and profits to the U.S. at a future date. Following additional analysis of the 2017 Tax Act, we are asserting, as of January 1, 2018, indefinite reinvestment related to our investment in all of our foreign subsidiaries.

Working capital – Working capital at June 30, 2018 increased by \$15.3 million, or 3.3%, as compared to December 31, 2017, including a decrease of \$17.5 million due to foreign currency translation. Excluding the impact of currency exchange rates, cash and cash equivalents and inventories decreased by \$1.3 million and \$1.7 million, respectively, while accounts receivable and total current liabilities increased by \$50.5 million and \$12.8 million, respectively. The increase in accounts receivable was due to increased sales activity, longer customer payment terms, and our adoption of the new revenue recognition guidance. The increase in total current liabilities was primarily due to increases in income taxes payable and other current liabilities, partially offset by a decrease in accounts payable.

Debt and credit facilities – The \$0.6 million decrease in total debt at June 30, 2018, as compared to December 31, 2017, primarily resulted from foreign currency rate fluctuations.

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Our sources of liquidity include our Credit Facility. At June 30, 2018, we had \$28.9 million in outstanding long-term borrowings under this facility, of which \$4.5 million was denominated in Yen and \$24.4 million was denominated in Euro. These borrowings, together with outstanding letters of credit of \$2.8 million, resulted in a borrowing capacity available under our Credit Facility of \$268.3 million at June 30, 2018. We do not expect any significant limitations on our ability to access this source of funds.

Pursuant to the financial covenants in our debt agreements, we are required to maintain established interest coverage ratios and to not exceed established leverage ratios. In addition, the agreements contain other customary covenants, none of which we consider restrictive to our operations. At June 30, 2018, we were in compliance with all of our debt covenants.

We believe that cash on hand and cash generated from operations, together with availability under our Credit Facility, will be adequate to address our foreseeable liquidity needs based on our current expectations of our business operations, capital expenditures and scheduled payments of debt obligations.

Commitments and Contractual Obligations

A table summarizing the amounts and estimated timing of future cash payments resulting from commitments and contractual obligations was provided in our 2017 Annual Report. During the three months ended June 30, 2018, there were no material changes outside of the ordinary course of business to our commitments and contractual obligations.

OFF-BALANCE SHEET ARRANGEMENTS

At June 30, 2018, we had no off-balance sheet financing arrangements other than operating leases, unconditional purchase obligations incurred in the ordinary course of business, and outstanding letters of credit related to various insurance programs, as noted in our 2017 Annual Report.

CRITICAL ACCOUNTING POLICIES AND ESTIMATES

There have been no changes to the Critical Accounting Policies and Estimates disclosed in Part II, Item 7 of our 2017 Annual Report, except for changes relating to our adoption of ASC 606 on January 1, 2018. Please refer to Note 3, *Revenue*, for our revenue recognition policy as of January 1, 2018.

NEW ACCOUNTING STANDARDS

For information on new accounting standards that were adopted, and those issued but not yet adopted, during the three months ended June 30, 2018, and the impact, if any, on our financial position or results of operations, see Note 2, *New Accounting Standards*.

CAUTIONARY STATEMENT REGARDING FORWARD-LOOKING STATEMENTS

Our disclosure and analysis in this Form 10-Q contains some forward-looking statements that are based on management's beliefs and assumptions, current expectations, estimates and forecasts. We also provide forward-looking statements in other materials we release to the public, as well as oral forward-looking statements. Such statements provide our current expectations or forecasts of future events. They do not relate strictly to historical or current facts. We have attempted, wherever possible, to identify forward-looking statements by using words such as "plan," "expect," "believe," "intend," "will," "estimate," "continue" and other words of similar meaning in conjunction with, among other things, discussions of future operations and financial performance, as well as our strategy for growth, product development, market position and expenditures. All statements that address operating performance or events or developments that we expect or anticipate will occur in the future - including statements relating to sales and earnings per share growth, cash flows or uses, and statements expressing views about future operating results - are forward-looking statements.

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Forward-looking statements are based on current expectations of future events. The forward-looking statements are, and will be, based on management's then-current views and assumptions regarding future events and operating performance, and speak only as of their dates. Investors should realize that, if underlying assumptions prove inaccurate or unknown 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.

The following are some important factors that could cause our actual results to differ from our expectations in any forward-looking statements:

- sales demand and our ability to meet that demand;
- competition from other providers in our businesses, including customers' in-house operations, and from lower-cost producers in emerging markets, which can impact unit volume, price and profitability;
- customers' changing inventory requirements and manufacturing plans that alter existing orders or ordering patterns for the products we supply to them;
- the timing, regulatory approval and commercial success of customer products that incorporate our products and systems;
- whether customers agree to incorporate our products and delivery systems with their new and existing drug products, the ultimate timing and successful commercialization of those products and systems, which involves substantial evaluations of the functional, operational, clinical and economic viability of our products, and the rate, timing and success of regulatory approval for the drug products that incorporate our components and systems;
- the timely and adequate availability of filling capacity, which is essential to conducting definitive stability trials and the timing of first commercialization of customers' products in Daikyo Crystal Zenith® prefilled syringes;
- average profitability, or mix, of the products sold in any reporting period, including lower-than-expected sales growth of our high-value proprietary product offerings;
- maintaining or improving production efficiencies and overhead absorption;
- dependence on third-party suppliers and partners, some of which are single-source suppliers of critical materials and products, including our Japanese partner and affiliate, Daikyo;
- the loss of key personnel or highly-skilled employees;
- the availability and cost of skilled employees required to meet increased production, managerial, research and other needs, including professional employees and persons employed under collective bargaining agreements;
- interruptions or weaknesses in our supply chain, including from reasons beyond our control such as extreme weather, longer-term climate changes, natural disasters, pandemic, war, accidental damage, or unauthorized access to our or our customers' information and systems, which could cause delivery delays or restrict the availability of raw materials, key purchased components and finished products;
- the successful and timely implementation of price increases necessary to offset rising production costs, including raw material prices, particularly petroleum-based raw materials;
- the cost and progress of development, regulatory approval and marketing of new products;
- our ability to obtain and maintain licenses in any jurisdiction in which we do business;
- the relative strength of USD in relation to other currencies, particularly the Euro, SGD, the Danish Krone, Yen, Venezuelan Bolivar, Colombian and Argentinian Peso, and Brazilian Real; and

- the potential adverse effects of global healthcare legislation on customer demand, product pricing and profitability.

This list sets forth many, but not all, of the factors that could affect our ability to achieve results described in any forward-looking statements. Investors should understand that it is not possible to predict or identify all of the factors and should not consider this list to be a complete statement of all potential risks and uncertainties. For further discussion of these and other factors, see the risk factors disclosed in Part I, Item 1A of our 2017 Annual Report. Except as required by law or regulation, we do not intend to update any forward-looking statements.

ITEM 3. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

There have been no material changes in our exposure to market risk or the information provided in Part II, Item 7A of our 2017 Annual Report.

ITEM 4. CONTROLS AND PROCEDURES

Disclosure controls are controls and procedures designed to reasonably ensure that information required to be disclosed in our reports filed under the Exchange Act, such as this quarterly report, is recorded, processed, summarized and reported within the time periods specified in the SEC's rules and forms. Disclosure controls include, without limitation, controls and procedures designed to ensure that information required to be disclosed in our reports filed under the Securities Exchange Act of 1934, as amended, is accumulated and communicated to our management, including our Chief Executive Officer ("CEO") and Chief Financial Officer ("CFO"), or persons performing similar functions, as appropriate, to allow timely decisions regarding required disclosure. Our disclosure controls include some, but not all, components of our internal control over financial reporting.

Evaluation of Disclosure Controls and Procedures

An evaluation was performed under the supervision and with the participation of our management, including our CEO and CFO, of the effectiveness of our disclosure controls and procedures (as defined in Rule 13a-15(e) under the Securities Exchange Act of 1934), as of the end of the period covered by this quarterly report on Form 10-Q. Based on this evaluation, our CEO and CFO have concluded that, as of June 30, 2018, our disclosure controls and procedures are effective.

Changes in Internal Controls

During the quarter ended June 30, 2018, there have been no changes to our internal control over financial reporting that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

On January 1, 2018, we adopted ASC 606. Although our adoption of ASC 606 resulted in no change to our internal control over financial reporting that materially affected, or is reasonably likely to materially affect, our internal control over financial reporting, we did implement changes to our internal controls relating to revenue. These changes included the development of new policies based on a five-step model provided in ASC 606, enhanced contract review requirements, and other ongoing monitoring activities. These controls were designed to provide assurance at a reasonable level of the fair presentation of our condensed consolidated financial statements and related disclosures.

PART II. OTHER INFORMATION

ITEM 1. LEGAL PROCEEDINGS

None.

ITEM 1A. RISK FACTORS

There are no material changes to the risk factors disclosed in Part I, Item 1A of our 2017 Annual Report.

ITEM 2. UNREGISTERED SALES OF EQUITY SECURITIES AND USE OF PROCEEDS

The following table shows information with respect to purchases of our common stock made during the three months ended June 30, 2018 by us or any of our “affiliated purchasers” as defined in Rule 10b-18(a)(3) under the Exchange Act:

Period	Total number of shares purchased (1)(2)(3)	Average price paid per share (1)(2)(3)	Total number of shares purchased as part of publicly announced plans or programs (3)	Maximum number (or approximate dollar value) of shares that may yet be purchased under the plans or programs (3)
April 1 – 30, 2018	7,716	\$ 92.00	—	260,000
May 1 – 31, 2018	260,160	88.02	260,000	—
June 1 – 30, 2018	—	—	—	—
Total	267,876	\$ 88.14	260,000	—

- (1) Includes 160 shares purchased on behalf of employees enrolled in the Non-Qualified Deferred Compensation Plan for Designated Employees (Amended and Restated Effective January 1, 2008). Under the plan, Company match contributions are delivered to the plan’s investment administrator, who then purchases shares in the open market and credits the shares to individual plan accounts.
- (2) Includes 7,716 shares of common stock acquired from employees who tendered already-owned shares to satisfy the withholding tax obligations on the vesting of restricted stock awards, as part of the 2016. Plan.
- (3) In February 2018, we announced a share repurchase program for calendar-year 2018 authorizing the repurchase of up to 800,000 shares of our common stock from time to time on the open market or in privately-negotiated transactions as permitted under the Securities Exchange Act of 1934 Rule 10b-18. The number of shares to be repurchased and the timing of such transactions will depend on a variety of factors, including market conditions. During the three months ended June 30, 2018, we purchased 260,000 shares of our common stock under the program at a cost of \$22.9 million, or an average price of \$88.03 per share. During the six months ended June 30, 2018, we purchased 800,000 shares of our common stock under the program at a cost of \$70.8 million, or an average price of \$88.51 per share.

ITEM 6. EXHIBITS

The list of exhibits in the Exhibit Index to this report is incorporated herein by reference.

SIGNATURE

Pursuant to the requirements of the Securities Exchange Act of 1934, West Pharmaceutical Services, Inc. has duly caused this report to be signed on its behalf by the undersigned thereunto duly authorized.

WEST PHARMACEUTICAL SERVICES, INC.
(Registrant)

By: /s/ Bernard J. Birkett
Bernard J. Birkett
Senior Vice President, Chief Financial Officer and Treasurer

July 31, 2018

EXHIBIT INDEX

<u>Exhibit #</u>	<u>Description</u>
3.1	Our Amended and Restated Articles of Incorporation are incorporated by reference from our Form 10-Q report for the quarter ended March 31, 2015.
3.2	Our Bylaws, as amended through May 5, 2015, are incorporated by reference from our Form 10-Q report for the quarter ended March 31, 2015.
4.1	Form of stock certificate for common stock is incorporated by reference from our annual report on Form 10-K dated May 6, 1999.
4.2	Article 5, 6, 8(c) and 9 of our Amended and Restated Articles of Incorporation are incorporated by reference from our Form 10-Q report for the quarter ended March 31, 2015.
4.3	Article I and V of our Bylaws, as amended through May 5, 2015, are incorporated by reference from our Form 10-Q report for the quarter ended March 31, 2015.
4.4 ⁽¹⁾	Instruments defining the rights of holders of long-term debt securities of West and its subsidiaries have been omitted.
10.1	Employment Agreement, dated May 29, 2018, between us and Bernard J. Birkett, is incorporated by reference from our Form 8-K dated June 21, 2018.
10.2 ⁽²⁾	Amended Agreement, dated and effective July 2, 2018, between Daikyo Seiko, Ltd. and us.
31.1	Certification by the Chief Executive Officer Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
31.2	Certification by the Chief Financial Officer Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
32.1*	Certification by the Chief Executive Officer Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
32.2*	Certification by the Chief Financial Officer Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
101.INS	XBRL Instance Document
101.SCH	XBRL Taxonomy Extension Schema Document
101.CAL	XBRL Taxonomy Extension Calculation Linkbase Document
101.LAB	XBRL Taxonomy Extension Label Linkbase Document
101.PRE	XBRL Taxonomy Extension Presentation Linkbase Document
101.DEF	XBRL Taxonomy Extension Definition Linkbase Document

⁽¹⁾ We agree to furnish to the SEC, upon request, a copy of each instrument with respect to issuances of long-term debt of the Company and its subsidiaries.

⁽²⁾ Certain portions of this exhibit have been omitted pursuant to a confidential treatment request submitted to the SEC.

* Furnished, not filed.

CONFIDENTIAL

July 2, 2018

Morihiro Sudo
Daikyo Seiko, Ltd.
126-1, Kurohakama-Cho
Sano-shi
Tochigi 327-0813 Japan

Dear Mori:

This Letter (“Letter”) is intended to memorialize the agreement and understanding between West Pharmaceutical Services, Inc. (“West”) and Daikyo Seiko, Ltd. (“Daikyo”) regarding certain commercial terms relating to the Amended and Restated Technology Exchange and CrossLicense Agreement (the “CrossLicense Agreement”) and the Distributorship Agreement (the “Distributorship Agreement,” and, together with the CrossLicense Agreement, the “Agreements”), each dated effective January 18, 2017.

The CrossLicense Agreement provides for the exchange of technology relating to the manufacture of closures, vials, medical device components and similar products, and the licensing of know-how and patents relating to such products. Under the Distributorship Agreement, West serves as a non-exclusive distributor for certain Daikyo products on a global basis, outside of Japan and certain other Asian countries identified therein.

Fixed Royalty Rate: Calculation of Rate. The parties agree that the royalty rate for sales of products or technologies using any Special Material, Formula or Process, as set forth in the CrossLicense Agreement, is hereby modified, and shall now be equal to [**] of products incorporating such Special Material, Formula or Process, subject to the following provisions. This rate shall apply to all Special Materials, Formula and Processes that are subject to ongoing royalty payments under the CrossLicense Agreement, and it shall apply only to royalties that are due on an ongoing basis under the CrossLicense Agreement. For any technology where a one-time license fee was paid or where no ongoing royalty obligations are due or payable under the CrossLicense Agreement, then this rate will not apply to such technology and no royalties or other payments will be required for such technologies (except in the case of a Significant Technological Improvement, as defined below). With regard to devices, components or products that incorporate a Special Material, Formula or Process along with other technologies or materials, the net sales price used to calculate the royalty rate shall be based on the price of the Special Material, Formula or Process’ proportional value to the total sales value, as consistent with the CrossLicense Agreement.

SmartDose Injector Technology. Under the CrossLicense Agreement, the parties agreed that Daikyo would provide assistance to West with regard to the design and manufacture of cartridges suitable for use in West’s SmartDose® patch injector (“SmartDose Injector”) in consideration for West transferring to Daikyo information regarding the design, filling, packaging and manufacturing of ported bags and related products. The parties agree that no royalties or license fees are or shall be due or payable by Daikyo to West in connection with the transfer of information relating to ported bags and related products, or by West to Daikyo in connection with Daikyo’s assistance relating to the SmartDose Injector technology, or in connection with any sales by West of products incorporating SmartDose Injector technology, except in each case in the event of a Significant Technological Improvement, as defined below. Without limiting the foregoing, the parties agree that no royalties, license fees or other amounts are or shall be due or payable by West to Daikyo in connection with its use of CZ Resin for the SmartDose Injector technology.

Insert Needle Syringe Technology: Other Devices Incorporating CZ Resin. The parties acknowledge and agree that in connection with the CrossLicense Agreement, and pursuant to the terms set forth in the Technology Transfer Agreement between the parties dated October 31, 2007, as amended by an Amendment to Technology

Transfer Agreement between the parties dated July 1, 2011 (together, the “Tech Transfer Agreement”), West paid Daikyo a one-time license fee equal to [**] and transferred to Daikyo certain Know-How related to e-beam and steam sterilization technology in consideration for the transfer to West of certain technology identified therein as relating to the Daikyo Crystal Zenith® Staked Needle Syringe. The parties hereby acknowledge and agree that the technology transferred to West in the Tech Transfer Agreement actually described the Daikyo Crystal Zenith® Insert Needle Syringe (“Insert Needle Syringe”) technology, rather than the Daikyo Crystal Zenith® Staked Needle Syringe technology. Accordingly, the parties hereby agree that all references to “Daikyo Crystal Zenith® Staked Needle Syringe” and “Staked Needle Syringe” in the Tech Transfer Agreement shall be replaced with “Daikyo Crystal Zenith® Insert Needle Syringe” and “Insert Needle Syringe,” respectively. The parties further agree that no royalties, license fees or other amounts are or shall be due or payable by West to Daikyo, or by Daikyo to West, in connection with the transfer of such technology or West’s use of such technology, except in the event of a Significant Technological Improvement, as defined below. Without limiting the foregoing, the parties agree that no royalties, license fees or other amounts are or shall be due or payable by West to Daikyo in connection with its use of CZ Resin for the Insert Needle Syringe technology. With regard to any other devices (i.e., other than the SmartDose Injector, Insert Needle Syringe or any other devices utilizing CZ Resin as of the date hereof) manufactured by West or one of its third party subcontractors that utilize CZ Resin, West shall pay Daikyo the fixed royalty rate noted above, equal to [**] of the products incorporating CZ Resin, with the net sales price used to calculate the royalty rate being based on the price of CZ Resin’s proportional value to the total sales value, as consistent with the CrossLicense Agreement.

Significant Technological Improvements. In the event there is a significant technological improvement or enhancement to the Insert Needle Syringe or SmartDose Injector technology that is created or developed solely by Daikyo and transferred to West (a “Significant Technological Improvement”), as mutually agreed in writing by the parties, then a royalty equal to [**] of products incorporating such Significant Technological Improvement shall be due to Daikyo based on the Special Material, Formula or Process used in connection therewith. The net sales price used to calculate the royalty rate shall be based on the price of the Special Material, Formula or Process’ proportional value to the total sales value, as consistent with the CrossLicense Agreement.

Services under Distributorship Agreement. Daikyo and West acknowledge that West has the required expertise, resources and infrastructure to support the analytical and technical services, quality, regulatory, marketing and sales requirements for Daikyo products throughout the Territory (as such term is defined in the Distributorship Agreement). Daikyo and West also acknowledge that Daikyo relies significantly on West and the West expertise, resources and infrastructure in such Territory for the sale of its products, and further that Daikyo is not able to support the sales of its products in such Territory except in a few isolated instances for longstanding customers whom Daikyo must accommodate. Given the foregoing, the parties are in agreement that West’s support for the sale of Daikyo products in such Territory is critical to the long-term success of Daikyo, and accordingly, Daikyo expects that West will be responsible for all sales of Daikyo products in such Territory, except for the few isolated instances of customers who have longstanding direct buy relationships with Daikyo and where, after discussion, the parties determine it is necessary for Daikyo to sell directly to ensure there is no interruption to a customer’s supply chain. Daikyo also expects that West will provide the primary customer support in connection with all such sales by West.

Daikyo Address for Notices. The parties hereby acknowledge and agree that Daikyo’s address for all notices permitted or required to be given under the Agreements is changed so that it is now Daikyo’s address as set forth above in this Letter.

Except as modified by this Letter, the terms of the Agreements shall remain in full force and effect, and capitalized terms not defined in this Letter shall have the meanings set forth in the respective Agreements. Please indicate that you are in agreement with the terms of this Letter by signing below and returning an executed copy for our files.

Very truly yours,

West Pharmaceutical Services, Inc.

By: /s/ Eric M. Green

Eric M. Green, President & Chief Executive Officer

Accepted and Agreed to by:

Daikyo Seiko, Ltd.

By: /s/ Morihiro Sudo

Morihiro Sudo, President

CERTIFICATION

I, Eric M. Green, certify that:

1. I have reviewed this quarterly report on Form 10-Q of West Pharmaceutical Services, Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer(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.

/s/ Eric M. Green

Eric M. Green
President and Chief Executive Officer

Date: July 31, 2018

CERTIFICATION

I, Bernard J. Birkett, certify that:

1. I have reviewed this quarterly report on Form 10-Q of West Pharmaceutical Services, Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer(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.

/s/ Bernard J. Birkett

Bernard J. Birkett

Senior Vice President, Chief Financial Officer and Treasurer

Date: July 31, 2018

**CERTIFICATION PURSUANT TO 18 U.S.C. SECTION 1350
AS ADOPTED PURSUANT TO SECTION 906 OF
THE SARBANES-OXLEY ACT OF 2002**

In connection with the Quarterly Report on Form 10-Q of West Pharmaceutical Services, Inc. (the "Company") for the period ended June 30, 2018, as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Eric M. Green, President and Chief Executive Officer of the Company, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that:

- (1) The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended; and
- (2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

/s/ Eric M. Green

Eric M. Green
President and Chief Executive Officer

Date: July 31, 2018

**CERTIFICATION PURSUANT TO 18 U.S.C. SECTION 1350
AS ADOPTED PURSUANT TO SECTION 906 OF
THE SARBANES-OXLEY ACT OF 2002**

In connection with the Quarterly Report on Form 10-Q of West Pharmaceutical Services, Inc. (the "Company") for the period ended June 30, 2018, as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Bernard J. Birkett, Senior Vice President, Chief Financial Officer and Treasurer of the Company, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that:

- (1) The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended; and
- (2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

/s/ Bernard J. Birkett

Bernard J. Birkett

Senior Vice President, Chief Financial Officer and Treasurer

Date: July 31, 2018

