UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, DC 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 September 30, 2019
or

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

For the transition period from to

COMMISSION FILE NO. 0-26224

INTEGRA LIFESCIENCES HOLDINGS CORPORATION
(EXACT NAME OF REGISTRANT AS SPECIFIED IN ITS CHARTER)

Delaware	**51-0317849**
(STATE OR OTHER JURISDICTION OF INCORPORATION OR ORGANIZATION)	**(I.R.S. EMPLOYER IDENTIFICATION NO.)**
311 Enterprise Drive **Plainsboro , New Jersey** **(ADDRESS OF PRINCIPAL EXECUTIVE OFFICES)**	**08536** **(ZIP CODE)**

Registrant's Telephone Number, Including Area Code: (609) 275-0500

Former Name, Former Address and Former Fiscal Year, if Changed Since Last Report:

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

TITLE OF EACH CLASS	TRADING SYMBOL	NAME OF EACH EXCHANGE ON WHICH REGISTERED
COMMON STOCK	**IART**	**NASDAQ**

Indicate by check mark whether the registrant: (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes No

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes No

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, 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	Accelerated filer
Non-accelerated filer	Smaller reporting company
Emerging growth company	

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

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Act). Yes No

Indicate by check mark whether the registrant has filed all documents and reports required to be filed by Section 12, 13 or 15(d) of the Securities Exchange Act of 1934 subsequent to the distribution of securities under a plan confirmed by a court. Yes No

The number of shares of the registrant's Common Stock, $0.01 par value, outstanding as of October 22, 2019 was 85,865,669.

INTEGRA LIFESCIENCES HOLDINGS CORPORATION
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PART I. FINANCIAL INFORMATION

Item 1. Financial Statements

INTEGRA LIFESCIENCES HOLDINGS CORPORATION
CONDENSED CONSOLIDATED STATEMENTS OF OPERATIONS
AND COMPREHENSIVE INCOME / (LOSS)
(UNAUDITED)
(In thousands, except per share amounts)

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2019	2018	2019	2018
Total revenue, net	$ 379,095	$ 365,854	$ 1,122,430	$ 1,089,126
Costs and expenses:				
Cost of goods sold	142,636	143,245	415,219	425,032
Research and development	19,003	20,309	53,280	57,742
In-process research and development	59,889	—	61,566	—
Selling, general and administrative	173,098	173,355	513,345	513,518
Intangible asset amortization	5,056	5,268	21,340	15,944
Total costs and expenses	399,682	342,177	1,064,750	1,012,236
Operating income (loss)	(20,587)	23,677	57,680	76,890
Interest income	2,913	75	8,051	325
Interest expense	(13,962)	(14,478)	(40,495)	(50,750)
Other income, net	4,127	1,750	8,461	6,422
Income (loss) before income taxes	(27,509)	11,024	33,697	32,887
Provision (benefit) for income taxes	101	(2,271)	(1,185)	(2,776)
Net income (loss)	$ (27,610)	$ 13,295	$ 34,882	$ 35,663
Net income (loss) per share				
Basic	$ (0.32)	$ 0.16	$ 0.41	$ 0.43
Diluted	$ (0.32)	$ 0.15	$ 0.40	$ 0.43
Weighted average common shares outstanding (See Note 13):				
Basic	85,688	85,193	85,536	82,058
Diluted	85,688	86,299	86,581	83,142
Comprehensive income (loss) (See Note 14)	$ (46,521)	$ 12,330	$ (7,288)	$ 33,731

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

INTEGRA LIFESCIENCES HOLDINGS CORPORATION
CONDENSED CONSOLIDATED BALANCE SHEETS
(UNAUDITED)
(In thousands, except per share amounts)

	September 30, 2019	December 31, 2018
ASSETS		
Current assets:		
Cash and cash equivalents	$ 207,981	$ 138,838
Trade accounts receivable, net of allowances of $4,006 and $3,719	281,119	265,737
Inventories, net	302,622	280,347
Prepaid expenses and other current assets	92,091	90,160
Total current assets	883,813	775,082
Property, plant and equipment, net	319,384	300,112
Right of use asset - operating leases	97,738	—
Intangible assets, net	1,040,350	1,079,496
Goodwill	945,282	926,475
Deferred tax assets, net	27,005	6,805
Other assets	33,008	19,917
Total assets	$ 3,346,580	$ 3,107,887
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities:		
Current portion of borrowings under senior credit facility	$ 45,000	$ 22,500
Current portion of lease liability - operating leases	11,835	—
Accounts payable, trade	94,158	76,050
Contract liabilities	3,984	3,764
Accrued compensation	74,415	75,693
Accrued expenses and other current liabilities	73,249	84,545
Total current liabilities	302,641	262,552
Long-term borrowings under senior credit facility	1,274,049	1,210,513
Long-term borrowings under securitization facility	110,000	121,200
Lease liability - operating leases	96,820	—
Deferred tax liabilities	59,730	57,778
Other liabilities	118,366	80,048
Total liabilities	1,961,606	1,732,091
Commitments and contingencies (Refer to Note 16)		
Stockholders' equity:		
Preferred stock; no par value; 15,000 authorized shares; none outstanding	—	—
Common stock; $0.01 par value; 240,000 authorized shares; 88,689 and 88,044 issued at September 30, 2019 and December 31, 2018, respectively	886	880
Additional paid-in capital	1,208,549	1,192,601
Treasury stock, at cost; 2,869 shares and 2,881 shares at September 30, 2019 and December 31, 2018, respectively	(120,101)	(120,615)
Accumulated other comprehensive loss	(87,615)	(45,443)
Retained earnings	383,255	348,373
Total stockholders' equity	1,384,974	1,375,796
Total liabilities and stockholders' equity	$ 3,346,580	$ 3,107,887

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

INTEGRA LIFESCIENCES HOLDINGS CORPORATION
CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS
(UNAUDITED)
(In thousands)

	Nine Months Ended September 30,	
	2019	**2018**
OPERATING ACTIVITIES:		
Net income	$ 34,882	$ 35,663
Adjustments to reconcile net income to net cash provided by operating activities:		
Depreciation and amortization	81,584	83,053
Non-cash in-process research and development expense	59,889	—
Non-cash impairment charges	5,764	4,941
Deferred income tax	(10,536)	789
Amortization of debt issuance costs	4,084	4,953
Loss on disposal of property and equipment	844	969
Change in fair value of contingent consideration and other	10	1,214
Share-based compensation	15,744	15,786
Changes in assets and liabilities, net of business acquisitions:		
Accounts receivable	(17,519)	1,180
Inventories	(30,553)	(3,441)
Prepaid expenses and other current assets	(8,162)	3,432
Other non-current assets	6,650	(1,397)
Accounts payable, accrued expenses and other current liabilities	366	9,418
Contract liabilities	(1,395)	(111)
Other non-current liabilities	597	546
Net cash provided by operating activities	142,249	156,995
INVESTING ACTIVITIES:		
Purchases of property and equipment	(47,343)	(52,056)
Proceeds from note receivable	752	679
Proceeds from sale of property and equipment	36	298
Cash (paid) provided for business acquisitions, net of cash acquired	(30,509)	26,704
Acquired in-process research and development	(64,995)	—
Net cash used in investing activities	(142,059)	(24,375)
FINANCING ACTIVITIES:		
Proceeds from borrowings of long-term indebtedness	215,800	50,000
Payments on debt	(143,250)	(460,000)
Payment of debt issuance costs	—	(4,388)
Proceeds from the issuance of common stock, net of issuance costs	—	349,590
Net cash paid for financing liabilities from business acquisitions	—	(33,843)
Proceeds from exercised stock options	6,948	9,239
Cash taxes paid in net equity settlement	(6,272)	(7,415)
Net cash (used in) / provided by financing activities	73,226	(96,817)
Effect of exchange rate changes on cash and cash equivalents	(4,273)	(4,747)
Net increase in cash and cash equivalents	69,143	31,056
Cash and cash equivalents at beginning of period	138,838	174,935
Cash and cash equivalents at end of period	$ 207,981	$ 205,991

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

INTEGRA LIFESCIENCES HOLDINGS CORPORATION
CONDENSED CONSOLIDATED STATEMENTS OF CHANGES IN SHAREHOLDER'S EQUITY
(UNAUDITED)
(In thousands)

	Three Months Ended September 30, 2019							
	Common Stock		Treasury Stock		Additional Paid-In Capital	Accumulated Other Comprehensive Loss	Retained Earnings	Total Equity
	Shares	Amount	Shares	Amount				
	(In thousands)							
Balance, June 30, 2019	88,351	$ 883	(2,869)	$ (120,107)	$ 1,198,010	$ (68,700)	$ 410,865	$ 1,420,951
Net loss	—	—	—	—	—	—	(27,610)	(27,610)
Other comprehensive loss, net of tax	—	—	—	—	—	(18,915)	—	(18,915)
Issuance of common stock for vesting of share based awards, net of shares withheld for taxes	338	3	—	6	4,665	—	—	4,674
Share-based compensation	—	—	—	—	5,874	—	—	5,874
Balance, September 30, 2019	88,689	$ 886	(2,869)	$ (120,101)	$ 1,208,549	$ (87,615)	$ 383,255	$ 1,384,974

	Nine Months Ended September 30, 2019							
	Common Stock		Treasury Stock		Additional Paid-In Capital	Accumulated Other Comprehensive Loss	Retained Earnings	Total Equity
	Shares	Amount	Shares	Amount				
	(In thousands)							
Balance, December 31, 2018	88,044	$ 880	(2,881)	$ (120,615)	$ 1,192,601	$ (45,443)	$ 348,373	$ 1,375,796
Net income	—	$ —	—	—	—	—	34,882	34,882
Other comprehensive loss, net of tax	—	$ —	—	—	—	(42,172)	—	(42,172)
Issuance of common stock for vesting of share based awards, net of shares withheld for taxes	645	$ 6	12	514	157	—	—	677
Share-based compensation	—	$ —	—	—	15,791	—	—	15,791
Balance, September 30, 2019	88,689	$ 886	(2,869)	$ (120,101)	$ 1,208,549	$ (87,615)	$ 383,255	$ 1,384,974

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

INTEGRA LIFESCIENCES HOLDINGS CORPORATION
CONDENSED CONSOLIDATED STATEMENTS OF CHANGES IN SHAREHOLDER'S EQUITY
(UNAUDITED)
(In thousands)

	Three Months Ended September 30, 2018							
	Common Stock		Treasury Stock		Additional Paid-In Capital	Accumulated Other Comprehensive Loss	Retained Earnings	Total Equity
	Shares	Amount	Shares	Amount				
	(In thousands)							
Balance, June 30, 2018	87,772	$ 877	(2,890)	$ (120,732)	$ 1,177,125	$ (25,306)	$ 309,941	$ 1,341,905
Net income	—	—	—	—	—	—	13,295	13,295
Other comprehensive loss, net of tax	—	—	—	—	—	(965)	—	(965)
Issuance of common stock	261	3	—	—	5,499	—	—	5,502
Issuance of common stock for vesting of share based awards, net of shares withheld for taxes	(17)		7	5	(220)	—	—	(215)
Share-based compensation	—	—	—	—	5,559	—	—	5,559
Balance, September 30, 2018	88,016	$ 880	(2,883)	$ (120,727)	$ 1,187,963	$ (26,271)	$ 323,236	$ 1,365,081

	Nine Months Ended September 30, 2018							
	Common Stock		Treasury Stock		Additional Paid-In Capital	Accumulated Other Comprehensive Loss	Retained Earnings	Total Equity
	Shares	Amount	Shares	Amount				
	(In thousands)							
Balance, December 31, 2017	81,306	$ 813	(2,927)	$ (121,644)	$ 821,758	$ (23,807)	$ 285,186	$ 962,306
Net income	—	—	—	$ —	—	$ —	35,663	35,663
Adoption of Update No. 2014-09	—	—	—	—	—	—	1,854	1,854
Other comprehensive loss, net of tax	—	—	—	—	—	(2,464)	533	(1,931)
Issuance of common stock	597	6	—	—	8,671	—	—	8,677
Issuance of common stock through employee stock purchase plan	—	—	—	—	553	—	—	553
Issuance of common stock for vesting of share based awards, net of shares withheld for taxes	75	1	44	917	(8,332)	—	—	(7,414)
Equity offering	6,038	60	—	—	349,538	—	—	349,598
Share-based compensation	—	—	—	—	15,775	—	—	15,775
Balance, September 30, 2018	88,016	$ 880	(2,883)	$ (120,727)	$ 1,187,963	$ (26,271)	$ 323,236	$ 1,365,081

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

INTEGRA LIFESCIENCES HOLDINGS CORPORATION
NOTES TO UNAUDITED CONDENSED CONSOLIDATED FINANCIAL STATEMENTS (UNAUDITED)

1. BASIS OF PRESENTATION

General

The terms “we,” “our,” “us,” “Company” and “Integra” refer to Integra LifeSciences Holdings Corporation, a Delaware corporation, and its subsidiaries unless the context suggests otherwise.

In the opinion of management, the September 30, 2019 unaudited condensed consolidated financial statements contain all adjustments (consisting only of normal recurring adjustments) necessary for a fair statement of the financial position, results of operations and cash flows of the Company. Certain information and footnote disclosures normally included in financial statements prepared in accordance with generally accepted accounting principles have been condensed or omitted in accordance with the instructions to Form 10-Q and Rule 10-01 of Regulation S-X. These unaudited condensed consolidated financial statements should be read in conjunction with the Company’s consolidated financial statements for the year ended December 31, 2018 included in the Company’s Annual Report on Form 10-K. The December 31, 2018 consolidated balance sheet was derived from audited financial statements, but does not include all disclosures required by accounting principles generally accepted in the United States. Operating results for the three and nine month period ended September 30, 2019 are not necessarily indicative of the results to be expected for the entire year.

The preparation of consolidated financial statements is in conformity with generally accepted accounting principles in the United States ("GAAP") which requires management to make estimates and assumptions that affect the reported amount of assets and liabilities, the disclosure of contingent liabilities, and the reported amounts of revenues and expenses. Significant estimates affecting amounts reported or disclosed in the consolidated financial statements include allowances for doubtful accounts receivable and sales returns and allowances, net realizable value of inventories, valuation of intangible assets including amortization periods for acquired intangible assets, discount rates and estimated projected cash flows used to value and test impairments of long-lived assets and goodwill, estimates of projected cash flows and depreciation and amortization periods for long-lived assets, computation of taxes, valuation allowances recorded against deferred tax assets, the valuation of stock-based compensation, valuation of derivative instruments, valuation of pension assets and liabilities, valuation of contingent liabilities, the fair value of debt instruments and loss contingencies. These estimates are based on historical experience and on various other assumptions that are believed to be reasonable under the current circumstances. Actual results could differ from these estimates.

Equity Offering

In May 2018, the Company commenced and closed on a public offering of common stock. The Company issued6.0 million shares of common stock and received total proceeds, net of underwriting fees and offering expenses, of approximately $349.6 million. The net proceeds from the offering were used to reduce outstanding borrowings under the revolving credit portion of the Company's Senior Credit Facility.

Recently Issued Accounting Standards

In February 2016, the FASB issued ASU No. 2016-02,*Leases (Topic 842) (the New Lease Standard).* The New Lease Standard requires that lessees recognize virtually all of its leases on the balance sheet by recording a right-of-use asset and lease liability (other than leases that meet the definition of a "short-term lease"). This update became effective for all annual periods and interim reporting periods beginning after December 15, 2018.

The Company adopted the New Lease Standard as of January 1, 2019 using a modified retrospective transition. Under this method, financial results reported in periods prior to January 1, 2019 are unchanged. The Company elected the ‘package of practical expedients’ which permits the company not to reassess the prior conclusions about lease identification, lease classification and initial direct costs under the new standard. The Company also elected the use-of-hindsight practical expedient. As most of the leases do not provide an implicit rate, the Company used our collateralized incremental borrowing rate based on the information available at the lease implementation date in determining the present value of the lease payments. The adoption of the New Lease Standard had an initial impact on the consolidated balance sheet due to the recognition of $76.4 million of lease liabilities with corresponding right-of-use assets ("ROU") of$67.3 million for operating leases. The difference between lease liabilities and right-of-use assets is primarily attributed to unamortized lease incentives which will be amortized over the term of each respective lease.

In June 2016, the FASB issued ASU No. 2016-13,*Financial Instruments - Credit Losses (Topic 326)*: *Measurement of Credit Losses on Financial Instruments.* The ASU is intended to improve financial reporting by requiring timelier recording of credit losses on loans and other financial instruments held by financial institutions and other organizations. The ASU requires the measurement of all expected credit losses for financial assets including trade receivables held at the reporting date based on historical experience, current conditions, and reasonable and supportable forecasts. Financial institutions and other organizations will now use forward-looking information to better inform their credit loss estimates. The ASU is effective for

fiscal years, and interim periods within those fiscal years, beginning after December 15, 2019. The Company is evaluating the impact, if any, that this pronouncement will have on the financial position and results of operations.

In August 2018, the FASB issued ASU 2018-14, *Compensation-Retirement Benefits-Defined Benefit Plans-General (Subtopic 715-20): Disclosure Framework-Changes to the Disclosure Requirements for Defined Benefit Plans.* The new guidance modifies the disclosure requirements for employers that sponsor defined benefit pension or other postretirement plans, including removing certain previous disclosure requirements, adding certain new disclosure requirements, and clarifying certain other disclosure requirements. The ASU will be effective for fiscal years beginning after December 15, 2020, including interim periods within those fiscal years. Early adoption is permitted. The adoption is not expected to have a material impact on the Condensed and Consolidated Financial Statements.

In August 2018, the FASB issued ASU No. 2018-15, *Intangibles - Goodwill and Other - Internal-Use Software (Subtopic 350-40)* relating to a customer's accounting for implementation, set-up, and other upfront costs incurred in a cloud computing arrangement that is hosted by a vendor (e.g., a service contract). Under the new guidance, a customer will apply the same criteria for capitalizing implementation costs as it would for an arrangement that has a software license. The new guidance also prescribes the balance sheet, income statement, and cash flow classification of the capitalized implementation costs and related amortization expense, and requires additional quantitative and qualitative disclosures. The ASU is effective for fiscal years, and interim periods within those fiscal years, beginning after December 15, 2019. Early application is permitted. The Company can choose to adopt the new guidance (1) prospectively to eligible costs incurred on or after the date this guidance is first applied or (2) retrospectively. The Company is evaluating the impact, if any, that this pronouncement will have on the financial position and results of operations.

There are no other recently issued accounting pronouncements that are expected to have any significant effect on the Company's financial position, results of operations or cash flows.

2. BUSINESS DEVELOPMENT

Arkis BioSciences Inc.

On July 29, 2019, the Company acquired Arkis BioSciences Inc. ("Arkis") for an acquisition purchase price of $30.6 million (the "Arkis Acquisition") plus contingent consideration of up to $25.5 million, that may be payable based on the successful completion of certain development and commercial milestones. The contingent consideration had an acquisition date fair value of $13.1 million. Arkis was a privately-held company that marketed the CerebroFlo® external ventricular drainage (EVD) catheter with Endexo® technology, a permanent additive designed to reduce the potential for catheter obstruction due to thrombus formation.

Assets Acquired and Liabilities Assumed at Fair Value

The Arkis Acquisition has been accounted for using the acquisition method of accounting. This method requires that assets acquired and liabilities assumed in a business combination to be recognized at their fair values as of the acquisition date. As of September 30, 2019, certain amounts relating to the valuation of intangible assets and tax related matters have not been finalized. The finalization of these matters may result in changes to goodwill.

The following table summarizes the preliminary fair values of the assets acquired and liabilities assumed at the acquisition date:

	Preliminary Valuation as of September 30, 2019	Weighted Average Life
	(Dollars in thousands)	
Cash	$ 90	
Other current assets	751	
Property, plant and equipment	159	
Intangible assets:		
CerebroFlo developed technology	20,100	15 years
Enabling technology license	1,980	14 years
Goodwill	27,297	
Total assets acquired	50,377	
Accounts payable, accrued expenses and other liabilities	2,908	
Contingent consideration	13,100	
Deferred tax liabilities, net	3,769	
Net assets acquired	**$ 30,600**	

Intangible Assets

The estimated fair value of the intangible assets was determined using the income approach, which is a valuation technique that provides an estimate of the fair value of an asset based on market participant expectations of the cash flows an asset would generate over its remaining useful life. Some of the more significant assumptions inherent in the development of those asset valuations include the estimated net cash flows for each year for each asset (including net revenues, cost of sales, R&D costs, selling and marketing costs, and working capital/contributory asset charges), the appropriate discount rate to select in order to measure the risk inherent in each future cash flow stream, the assessment of each asset's life cycle, and competitive trends impacting the asset and each cash flow stream.

The Company used a discount rate of 14.5% to arrive at the present value for the acquired intangible assets to reflect the rate of return a market participant would expect to earn and incremental commercial uncertainty in the cash flow projections. No assurances can be given that the underlying assumptions used to prepare the discounted cash flow analysis will not change. For these and other reasons, actual results may vary significantly from estimated results.

Goodwill

The Company allocated goodwill related to the Arkis Acquisition to the Codman Specialty Surgical segment. Goodwill is the excess of the consideration transferred over the net assets recognized and represents the expected revenue and cost synergies of the combined company and assembled workforce. One of the key factors that contributes to the recognition of goodwill, and a driver for the Company's acquisition of Arkis, is the planned expansion of the Endexo technology with the existing products within the Codman Specialty Surgical segment. Goodwill recognized as a result of this acquisition is non-deductible for income tax purposes.

Contingent Consideration

The Company determines the acquisition date fair value of contingent consideration obligations based on a probability-weighted income approach derived from revenue estimates and a probability assessment with respect to the likelihood of achieving contingent obligations. The fair value measurement is based on significant inputs not observable in the market and thus represents a Level 3 measurement as defined using the fair value concepts in ASC 820. The resultant probability-weighted cash flows are discounted using an appropriate effective annual interest rate. At each reporting date, the contingent consideration obligation will be revalued to estimated fair value and changes in fair value will be reflected as income or expense in our consolidated statement of operations. Changes in the fair value of the contingent consideration obligations may result from changes in discount periods and rates, changes in the timing and amount of revenue estimates and changes in probability assumptions with respect to the likelihood of achieving the various contingent payment obligations. Adverse changes in assumptions utilized in our contingent consideration fair value estimates could result in an increase in our contingent consideration obligation and a corresponding charge to operating results.

As part of the acquisition, the Company is required to pay the former shareholders of Arkis up to$25.5 million based on the timing of certain development milestones of $10 million and commercial sales milestones of $15.5 million, respectively. The Company used a probability weighted income approach to calculate the fair value of the contingent consideration that

considered the possible outcomes of scenarios related to each specified milestone. The Company estimated the fair value of the contingent consideration to be $13.1 million at the acquisition date.

Deferred Tax Liabilities

Deferred tax liabilities result from identifiable intangible assets' fair value adjustments. These adjustments create excess book basis over tax basis which is tax-effected by the statutory tax rates of applicable jurisdictions.

The pro forma results are not presented for this acquisition as they are immaterial.

Rebound Therapeutics Corporation

On September 9, 2019, the Company acquired Rebound Therapeutics Corporation ("Rebound"), developers of a single-use medical device known as the AURORA Surgiscope® System ("Aurora") which enables minimally invasive access, using optics and illumination, for visualization, diagnostic and therapeutic use in neurosurgery (the "Rebound transaction"). Under the terms of the Rebound transaction, the Company made an upfront payment of $67.1 million and are committed to pay up to $35.0 million of contingent development milestones upon achievement of certain regulatory milestones. The acquisition of Rebound was primarily concentrated in one single identifiable asset and thus, for accounting purposes, the Company has concluded that the acquired assets do not meet the accounting definition of a business. The initial payment was allocated primarily to Aurora, resulting in a $59.9 million in-process research and development expense. The balance of approximately $7.2 million, which included $2.1 million of cash and cash equivalents and a net deferred tax asset of$4.2 million, was allocated to the remaining net assets acquired. The deferred tax asset primarily resulted from a federal net operating loss carry forward.

Integrated Shoulder Collaboration, Inc.

On January 4, 2019, the Company entered into a licensing agreement with Integrated Shoulder Collaboration, Inc ("ISC"). Under the terms of the agreement, the Company paid ISC $1.7 million for the exclusive, worldwide license to commercialize its short stem and stemless shoulder system. A patent related to short stem and stemless shoulder systems was issued to ISC during the first quarter of 2019. ISC is eligible to receive royalties on sales of the short stem and stemless shoulder system. The Company has the option to acquire ISC at a date four years subsequent to the first commercial sale, which becomes mandatory upon the achievement of a certain sales thresholds of the short stem and stemless shoulder system, for an amount not to exceed $80.0 million. The transaction was accounted for as an asset acquisition as the Company concluded that it acquired primarily one asset. The total upfront payment of$1.7 million was expensed as a component of in-process research and development expense and the future milestone and option payments will be recorded if the corresponding events become probable.

The pro forma results are not presented for this acquisition as they are immaterial.

3. REVENUES FROM CONTRACTS WITH CUSTOMERS

Summary of Accounting Policies on Revenue Recognition

Revenue is recognized upon the transfer of control of promised products or services to the customers in an amount that reflects the consideration the Company expects to receive in exchange for those products and services.

Total revenue, net, includes product sales, product royalties and other revenues, such as fees received for services.

For products shipped with FOB shipping point terms, the control of the product passes to the customer at the time of shipment. For shipments in which the control of the product is transferred when the customer receives the product, the Company recognizes revenue upon receipt by the customer. Certain products that the Company produces for private label customers have no alternative use and the Company has a right of payment for performance to date. Revenues from those products are recognized over the period that the Company manufactures these products, which is typically one to three months. The Company uses the input method to measure the manufacturing activities completed to date, which depicts the progress of the Company's performance obligation of transferring control of goods being manufactured for private label customers.

A portion of the Company's product revenue is generated from consigned inventory maintained at hospitals and distributors, and also from inventory physically held by field sales representatives. For these types of product sales, the Company retains control until the product has been used or implanted, at which time revenue is recognized.

Revenues from sale of products and services are evidenced by either a contract with the customer or a valid purchase order and an invoice which includes all relevant terms of sale. For product sales, invoices are generally issued upon the transfer of control (or upon the completion of the manufacturing in the case of the private label transactions recognized over time) and are typically payable thirty days after the invoice date. The Company performs a review of each specific customer's creditworthiness and ability to pay prior to acceptance as a customer. Further, the Company performs periodic reviews of its customers' creditworthiness prospectively.

Performance Obligations

The Company's performance obligations consist mainly of transferring control of goods and services identified in the contracts, purchase orders, or invoices. The Company has no significant multi-element contracts with customers.

Significant Judgments

Usage-based royalties and licenses are estimated based on the provisions of contracts with customers and recognized in the same period that the royalty-based products are sold by the Company's strategic partners. The Company estimates and recognizes royalty revenue based upon communication with licensees, historical information, and expected sales trends. Differences between actual reported licensee sales and those that were estimated are adjusted in the period in which they become known, which is typically the following quarter. Historically, such adjustments have not been significant.

The Company estimates returns, price concessions, and discount allowances using the expected value method based on historical trends and other known factors. Rebate allowances are estimated using the most likely method based on each customer contract.

The Company's return policy, as set forth in its product catalogs and sales invoices, requires review and authorization in advance prior to the return of product. Upon the authorization, a credit will be issued for the goods returned within a set amount of days from the shipment, which is generally ninety days.

The Company disregards the effects of a financing component if the Company expects, at contract inception, that the period between the transfer and customer payment for the goods or services will be one year or less. The Company has no significant revenues recognized on payments expected to be received more than one year after the transfer of control of products or services to customers.

Contract Asset and Liability

Revenues recognized from the Company's private label business that are not invoiced to the customers as a result of recognizing revenue over time are recorded as a contract asset included in the prepaid expenses and other current assets account in the consolidated balance sheet.

Other operating revenues may include fees received under service agreements. Non-refundable fees received under multiple-period service agreements are recognized as revenue as the Company satisfies the performance obligations to the other party. A portion of the transaction price allocated to the performance obligations to be satisfied in the future periods is recognized as contract liability.

The following table summarizes the changes in the contract asset and liability balances for thenine months ended September 30, 2019:

Contract Asset		
Contract asset, January 1, 2019	$	4,193
Transferred to trade receivable of contract asset included in beginning of the year contract asset		(4,193)
Contract asset, net of transferred to trade receivables on contracts during the period		9,371
Contract asset, September 30, 2019	$	9,371

Contract Liability		
Contract liability, January 1, 2019	$	12,716
Recognition of revenue included in beginning of year contract liability		(6,343)
Contract liability, net of revenue recognized on contracts during the period		4,766
Foreign currency translation		(5)
Contract liability, September 30, 2019	$	11,134

At September 30, 2019, the short-term portion of the contract liability of$4.0 million and the long-term portion of $7.1 million were included in accrued expenses and other current liabilities and other liabilities in the consolidated balance sheet.

As of September 30, 2019, the Company is expected to recognize approximately 42.0% of our unsatisfied (or partially unsatisfied) performance obligations as revenue through 2020, with the remaining balance to be recognized in 2021 and thereafter.

Shipping and Handling Fees

The Company elected to account for shipping and handling activities as a fulfillment cost rather than a separate performance obligation. Amounts billed to customers for shipping and handling are included as part of the transaction price and recognized as revenue when control of underlying products is transferred to the customer. The related shipping and freight charges incurred by the Company are included in the cost of goods sold.

Product Warranties

Certain of the Company's medical devices, including monitoring systems and neurosurgical systems, are designed to operate over long periods of time. These products are sold with warranties which may extend for up to two years from the date of purchase. The warranties are not considered a separate performance obligation. The Company estimates its product warranties using the expected value method based on historical trends and other known factors. The Company includes them in accrued expenses and other current liabilities in the consolidated balance sheet.

Taxes Collected from Customers

The Company elected to exclude from the measurement of the transaction price all taxes assessed by a governmental authority that are both imposed on and concurrent with a specific revenue-producing transaction and collected by the entity from a customer.

Disaggregated Revenue

The following table presents revenues disaggregated by the major sources of revenues for the three andnine months ended September 30, 2019 and 2018 (amounts in thousands):

	Three Months Ended September 30, 2019	Three Months Ended September 30, 2018	Nine Months Ended September 30, 2019	Nine Months Ended September 30, 2018
	(amounts in thousands)			
Neurosurgery	$ 180,103	$ 171,680	$ 523,929	$ 509,166
Precision Tools and Instruments	72,881	67,355	212,881	205,488
Total Codman Specialty Surgical	252,984	239,035	736,810	714,654
Wound Reconstruction and Care	82,213	80,472	239,458	230,809
Extremity Orthopedics	20,852	20,524	65,299	65,438
Private Label	23,046	25,823	80,863	78,225
Total Orthopedics and Tissue Technologies	126,111	126,819	385,620	374,472
Total revenue	$ 379,095	$ 365,854	$ 1,122,430	$ 1,089,126

Prior period amounts were reclassified between categories within the Orthopedics and Tissue Technologies segment to conform to the current period presentation.

See Note 15, *Segment and Geographical Information*, for details of revenues based on the location of the customer.

Effect of Adoption of ASC Topic 606

On January 1, 2018, the Company adopted Topic 606 using the modified retrospective method applied to all contracts which were not completed as of January 1, 2018. Results of operations for the reporting periods after January 1, 2018 are presented under Topic 606, while prior period amounts are not adjusted and continue to be reported in accordance with Topic 605, *Revenue Recognition*.

The adoption of Topic 606 resulted in an increase to the opening retained earnings of$1.9 million, which was recorded net of taxes as of January 1, 2018 to reflect the change in timing of the recognition of revenue related to the Company's private label business from point in time to over time during the manufacturing process and goods in transit for which control was transferred to customers at the time of shipment. The total assets and liabilities increased by $7.1 million and $5.2 million, respectively, as of January 1, 2018.

The impact of adoption in the year of implementation of Topic 606 to the Company's consolidated statement of operations for the three andnine months ended September 30, 2018 was as follows:

	Three Months Ended September 30, 2018		Nine Months Ended September 30, 2018	
	As Reported	Excluding Impact of Topic 606	As Reported	Excluding Impact of Topic 606
	(Amounts in thousands)			
Statement of Operations				
Total revenue, net	$ 365,854	$ 368,990	$ 1,089,126	$ 1,089,153
Cost of goods sold	143,245	143,918	425,032	424,969
Income tax benefit	(2,271)	(1,092)	(2,776)	(2,754)
Net income	13,295	14,579	35,663	35,731

4. INVENTORIES

Inventories, net consisted of the following:

	September 30, 2019	December 31, 2018
	(In thousands)	
Finished goods	$ 191,250	$ 179,885
Work in process	51,438	47,715
Raw materials	59,934	52,747
	$ 302,622	$ 280,347

5. GOODWILL AND OTHER INTANGIBLE ASSETS

Changes in the carrying amount of goodwill for the nine-month period ended September 30, 2019 were as follows:

	Codman Specialty Surgical	Orthopedics and Tissue Technologies	Total
		(In thousands)	
Goodwill at December 31, 2018	$ 625,760	$ 300,715	$ 926,475
Arkis Acquisition	27,297	—	27,297
Foreign currency translation	(5,843)	(2,647)	(8,490)
Goodwill at September 30, 2019	$ 647,214	$ 298,068	$ 945,282

The components of the Company's identifiable intangible assets were as follows:

		September 30, 2019		
	Weighted Average Life	Cost	Accumulated Amortization	Net
		(Dollars in thousands)		
Completed technology	19 years	$ 873,973	$ (201,067)	$ 672,906
Customer relationships	13 years	221,580	(114,498)	107,082
Trademarks/brand names	28 years	103,463	(27,433)	76,030
Codman tradename	Indefinite	160,841	—	160,841
Supplier relationships	27 years	34,721	(17,590)	17,131
All other	4 years	10,727	(4,367)	6,360
		$ 1,405,305	$ (364,955)	$ 1,040,350

	December 31, 2018			
	Weighted Average Life	Cost	Accumulated Amortization	Net
		(Dollars in thousands)		
Completed technology	19 years	$ 855,679	$ (167,384)	$ 688,295
Customer relationships	13 years	231,448	(106,859)	124,589
Trademarks/brand names	28 years	104,061	(24,764)	79,297
Codman tradename	Indefinite	162,054	—	162,054
Supplier relationships	27 years	34,721	(16,519)	18,202
All other	4 years	10,958	(3,899)	7,059
		$ 1,398,921	$ (319,425)	$ 1,079,496

Goodwill and Intangible Assets with Indefinite Lives

The Company tests goodwill and intangible assets with indefinite lives for impairment annually in the third quarter in accordance with ASC Topic 350. Additionally, the Company may perform interim tests if an event occurs or circumstances change that could potentially reduce the fair value of a reporting unit or indefinite lived intangible asset below its carrying amount. The carrying value of each reporting unit is determined by assigning the assets and liabilities, including the existing goodwill and intangible assets, to those reporting units.

The Company tests goodwill for impairment by either performing a qualitative evaluation or a quantitative test. The qualitative evaluation is an assessment of factors, including reporting unit specific operating results as well as industry, market and general economic conditions, to determine whether it is more likely than not that the fair values of a reporting unit is less than its carrying amount, including goodwill. The Company may elect to bypass this qualitative evaluation for some or all of its reporting units and perform a quantitative test. During the third quarter of 2019 the Company began with the qualitative evaluation, which was sufficient to find no impairment.

For intangible assets with indefinite lives, the Company elected to bypass the qualitative evaluation for its Codman tradename intangible asset and perform a quantitative test during the third quarter 2019. In performing this test, the Company utilized a discount rate of 12.5%. The assumptions used in evaluating the Codman tradename for impairment are subject to change and are tracked against historical results by management. Based on the results of the quantitative test, the Company recorded no impairment to the Codman tradename intangible asset.

Definite Lived Intangible Assets

Product rights and other definite-lived intangible assets are tested periodically for impairment in accordance with ASC Topic 360 when events or changes in circumstances indicate that an asset's carrying value may not be recoverable. The impairment testing involves comparing the carrying amount of the asset or asset group to the forecasted undiscounted future cash flows. In the event the carrying value of the asset exceeds the undiscounted future cash flows, the carrying value is considered not recoverable and an impairment exists. An impairment loss is measured as the excess of the asset's carrying value over its fair value, calculated using discounted future cash flows. The computed impairment loss is recognized in the period that the impairment occurs.

During the third quarter of 2018, the Company recorded an impairment charge of $4.9 million in cost of goods sold related to completed technology assets acquired from Koby Ventures II, L.P dba Metasurg ("Metasurg Technology") due to recent contract negotiations and revised future projections. The remaining net book value of these intangible assets total $2.3 million as of September 30, 2018. Metasurg Technology is included in the Orthopedic and Tissue Technology segment. Of the total impairment charge of $4.9 million, $2.5 million was related to an out-of-period adjustment included in the three and nine months ended September 30, 2018. The out-of-period adjustment is attributed to the timing of performing the impairment test based on the contract termination associated with the intangible asset. The Company determined that the adjustment was not material to the consolidated financial statements for any previously reported annual or interim period and the adjustment to correct the misstatements is not material to the three or nine months ended September 30, 2018.

In April 2019, a contract manufacturing customer of the private label product line received a notification from the FDA ordering them to remove their product from the market. During the second quarter of 2019, the Company recorded an impairment charge of $5.8 million in intangible asset amortization in the consolidated statement of operations related to the customer relationship intangible asset acquired from TEI Biosciences, Inc. and TEI Medical Inc. (collectively "TEI") due to revised future projections based on a pending contract termination.

Based on quarter-end exchange rates, amortization expense (including amounts reported in cost of product revenues) is expected to be approximately $16.6 million for the remainder of 2019, $66.6 million in 2020, $65.5 million in 2021, $62.0 million in 2022, $61.1 million in 2023, $60.3 million in 2024 and $549.0 million thereafter.

6. DEBT

Amended and Restated Senior Credit Agreement

On May 3, 2018, the Company entered into the fifth amendment and restatement (the "May 2018 Amendment") of its Senior Credit Facility (the "Senior Credit Facility") with a syndicate of lending banks with Bank of America, N.A., as Administrative Agent. The May 2018 Amendment extended the maturity date to May 3, 2023 and decreased the applicable rate, as described below. The Company continues to have the aggregate principal amount of $2.2 billion available to it through the following facilities:

i. a $900.0 million Term Loan facility; and
ii. a $1.3 billion revolving credit facility, which includes a $60.0 million sublimit for the issuance of standby letters of credit and a $60.0 million sublimit for swingline loans.

In connection with the May 2018 Amendment, the Company's maximum consolidated total leverage ratio in the financial covenants (as defined in the Senior Credit Facility) was modified to the following:

Fiscal Quarter	Maximum Consolidated Total Leverage Ratio
Execution of May 2018 Amendment through March 31, 2019	5.50 : 1.00
June 30, 2019 through March 31, 2020	5.00 : 1.00
June 30, 2020 through March 31, 2021	4.50 : 1.00
June 30, 2021 and thereafter	4.00 : 1.00

Borrowings under the Senior Credit Facility bear interest, at the Company's option, at a rate equal to the following:

i. the Eurodollar Rate (as defined in the Senior Credit Facility) in effect from time to time plus the applicable rate (ranging from 1.00% to 1.75%), or
ii. the highest of:
    1. the weighted average overnight Federal funds rate, as published by the Federal Reserve Bank of New York, plus 0.50%, plus the applicable rate (ranging from 0% to 0.75%),
    2. the prime lending rate of Bank of America, N.A. plus the applicable rate (ranging from 0% to 0.75%), and
    3. the one-month Eurodollar Rate plus 1.00% plus the applicable rate (ranging from 0% to 0.75%).

The applicable rates are based on the Company's consolidated total leverage ratio (defined as the ratio of (a) consolidated funded indebtedness less cash that is not subject to any restriction on the use or investment thereof to (b) consolidated EBITDA at the time of the applicable borrowing).

The Company will pay an annual commitment fee (ranging from 0.15% to 0.30%), based on the Company's consolidated total leverage ratio, on the amount available for borrowing under the revolving credit facility.

The Senior Credit Facility is collateralized by substantially all of the assets of the Company's U.S. subsidiaries, excluding intangible assets. The Senior Credit Facility is subject to various financial and negative covenants and at September 30, 2019, the Company was in compliance with all such covenants. In connection with the May 2018 Amendment, the Company capitalized $4.2 million of financing costs and wrote off $0.8 million of previously capitalized financing costs during the second quarter of 2018.

At September 30, 2019 and December 31, 2018, there was $440.0 million and $345.0 million outstanding, respectively, under the revolving credit component of the Senior Credit Facility at weighted average interest rates of 3.4% and 4.0%, respectively. At September 30, 2019 and December 31, 2018, there was $888.8 million and $900.0 million outstanding, respectively, under the Term Loan component of the Senior Credit Facility at a weighted average interest rate of 3.4% and 3.9%, respectively. At September 30, 2019, $45.0 million of the Term Loan component of the Senior Credit Facility is classified as current on the consolidated balance sheet.

Securitization Facility

During the fourth quarter of 2018, the Company entered into an accounts receivable securitization facility (the "Securitization Facility") under which accounts receivable of certain domestic subsidiaries are sold on a non-recourse basis to a special purpose entity ("SPE"), which is a bankruptcy-remote, consolidated subsidiary of the Company. Accordingly, the assets of the SPE are not available to satisfy the obligations of the Company or any of its subsidiaries. From time to time, the SPE may

finance such accounts receivable with a revolving loan facility secured by a pledge of such accounts receivable. The amount of outstanding borrowings on the Securitization Facility at any one time is limited to $150.0 million. The Securitization Facility Agreement ("Securitization Agreement") is for an initial three-year term and may be extended. The Securitization Agreement governing the Securitization Facility contains certain covenants and termination events. An occurrence of an event of default or a termination event under this Securitization Agreement may give rise to the right of its counterparty to terminate this facility. As of September 30, 2019, the Company was in compliance with the covenants and none of the termination events had occurred. At September 30, 2019, the Company had $110.0 million of outstanding borrowings under its Securitization Facility at a weighted average interest rate of3.1%.

The fair value of outstanding borrowings of the Senior Credit Facility's revolving credit and Term Loan components atSeptember 30, 2019 were approximately $430.1 million and, $875.7 million, respectively. The fair value of the outstanding borrowing of the Securitization Facility at September 30, 2019 was approximately $109.1 million. These fair values were determined by using a discounted cash flow model based on current market interest rates available to the Company. These inputs are corroborated by observable market data for similar liabilities and therefore classified within Level 2 of the fair value hierarchy. Level 2 inputs represent inputs that are observable for the asset or liability, either directly or indirectly, and are other than active market observable inputs that reflect unadjusted quoted prices for identical assets or liabilities.

Letters of credit outstanding as of September 30, 2019 and December 31, 2018 totaled $0.8 million. There were no amounts drawn as of September 30, 2019.

Contractual repayments of the Term Loan component of the Senior Credit Facility are due as follows:

Year Ended December 31,	Principal Repayment (In thousands)
Remainder of 2019	$ 11,250
2020	45,000
2021	56,250
2022	67,500
2023	708,750
	$ 888,750

The outstanding balance of the revolving credit component of the Senior Credit Facility is due on May 3, 2023.

7. DERIVATIVE INSTRUMENTS

Interest Rate Hedging

The Company’s interest rate risk relates to U.S. dollar denominated variable interest rate borrowings. The Company uses interest rate swap derivative instruments to manage earnings and cash flow exposure resulting from changes in interest rates. These interest rate swaps apply a fixed interest rate on a portion of our expected LIBOR-indexed floating-rate borrowings. The Company held the following interest rate swaps as ofSeptember 30, 2019 and December 31, 2018 (amounts in thousands):

Hedged Item	Current Notional Amount	Designation Date	Effective Date	Termination Date	Fixed Interest Rate	September 30, 2019 Estimated Fair Value Assets (Liabilities)	December 31, 2018 Estimated Fair Value Assets (Liabilities)
3-month USD LIBOR Loan	$ 50,000	June 22, 2016	December 31, 2016	June 30, 2019	1.062%	$ —	$ 410
3-month USD LIBOR Loan	50,000	June 22, 2016	December 31, 2016	June 30, 2019	1.062%	—	415
1-month USD LIBOR Loan	50,000	July 12, 2016	December 31, 2016	June 30, 2019	0.825%	—	418
3-month USD LIBOR Loan	50,000	February 6, 2017	June 30, 2017	June 30, 2020	1.834%	23	619
1-month USD LIBOR Loan	100,000	February 6, 2017	June 30, 2017	June 30, 2020	1.652%	45	1,287
1-month USD LIBOR Loan	100,000	March 27, 2017	December 31, 2017	June 30, 2021	1.971%	(769)	1,246
1-month USD LIBOR Loan	150,000	December 13, 2017	January 1, 2018	December 31, 2022	2.201%	(3,647)	1,491
1-month USD LIBOR Loan	150,000	December 13, 2017	January 1, 2018	December 31, 2022	2.201%	(3,612)	1,460
1-month USD LIBOR Loan	100,000	December 13, 2017	July 1, 2019	June 30, 2024	2.423%	(4,463)	418
1-month USD LIBOR Loan	50,000	December 13, 2017	July 1, 2019	June 30, 2024	2.423%	(2,268)	162
1-month USD LIBOR Loan	200,000	December 13, 2017	January 1, 2018	December 31, 2024	2.313%	(8,702)	2,076
1-month USD LIBOR Loan	75,000	October 10, 2018	July 1, 2020	June 30, 2025	3.220%	(6,798)	(2,594)
1-month USD LIBOR Loan	75,000	October 10, 2018	July 1, 2020	June 30, 2025	3.199%	(6,786)	(2,551)
1-month USD LIBOR Loan	75,000	October 10, 2018	July 1, 2020	June 30, 2025	3.209%	(6,896)	(2,568)
1-month USD LIBOR Loan	100,000	December 18, 2018	December 30, 2022	December 31, 2027	2.885%	(6,683)	(797)
1-month USD LIBOR Loan	100,000	December 18, 2018	December 30, 2022	December 31, 2027	2.867%	(6,629)	(873)
Total interest rate derivatives designated as cash flow hedge	$ 1,475,000					$ (57,185)	$ 619

The Company has designated these derivative instruments as cash flow hedges. The Company assesses the effectiveness of these derivative instruments and has recorded the changes in the fair value of the derivative instrument designated as a cash flow hedge as unrealized gains or losses in accumulated other comprehensive income ("AOCI"), net of tax, until the hedged item affected earnings, at which point any gain or loss was reclassified to earnings. If the hedged cash flow does not occur, or if it becomes probable that it will not occur, the Company will reclassify the remaining amount of any gain or loss on the related cash flow hedge recorded in AOCI to interest expense at that time.

During the nine months ended September 30, 2019, interest rate swaps with an aggregate notional amount of $150 million matured.

Foreign Currency Hedging

From time to time the Company enters into foreign currency hedge contracts intended to protect the U.S. dollar value of certain forecasted foreign currency denominated transactions. The Company assesses the effectiveness of the contracts that are designated as hedging instruments. The changes in fair value of foreign currency cash flow hedges are recorded in AOCI, net of tax, until the hedged item affects earnings. Once the related hedged item affects earnings, the Company reclassifies amounts recorded in AOCI to earnings. If the hedged forecasted transaction does not occur, or if it becomes probable that it will not occur, the Company will reclassify the amount of any gain or loss on the related cash flow hedge to earnings at that time. For contracts not designated as hedging instruments, the changes in fair value of the contracts are recognized in other income (expense), net in the consolidated statements of operation, along with the offsetting foreign currency gain or loss on the underlying assets or liabilities.

The success of the Company's hedging program depends, in part, on forecasts of certain activity denominated in foreign currency. The Company may experience unanticipated currency exchange gains or losses to the extent that there are differences between forecasted and actual activities during periods of currency volatility. In addition, changes in currency exchange rates related to any unhedged transactions may affect earnings and cash flows.

Cross-Currency Rate Swaps

On October 2, 2017, the Company entered into cross-currency swap agreements to convert a notional amount of $300.0 million equivalent to 291.2 million of CHF denominated intercompany loans into U.S. dollars. The CHF-denominated intercompany loans were the result of the purchase of intellectual property by a subsidiary in Switzerland as part of the Codman Acquisition. The objective of these cross-currency swaps is to reduce volatility of earnings and cash flows associated with changes in the foreign currency exchange rate. Under the terms of these contracts, which have been designated as cash flow hedges, the Company will make interest payments in Swiss Francs and receive interest in U.S. dollars. Upon the maturity of these contracts, the Company will pay the principal amount of the loans in Swiss Francs and receive U.S. dollars from the counterparties.

The Company held the following cross-currency rate swaps as of September 30, 2019 (dollar amounts in thousands):

						September 30, 2019
	Effective Date	Termination Date	Fixed Rate	Aggregate Notional Amount		Fair Value Asset (Liability)
Pay CHF Receive U.S.$	October 2, 2017	October 2, 2020	1.75% 4.38%	CHF 64,710 $ 66,667		$ 1,737
Pay CHF Receive U.S.$	October 2, 2017	October 2, 2021	1.85% 4.46%	CHF 48,533 $ 50,000		1,327
Pay CHF Receive U.S.$	October 2, 2017	October 2, 2022	1.95% 4.52%	CHF 145,598 $ 150,000		4,050
Total						$ 7,114

During the nine months ended September 30, 2019, the Company settled a cross-currency swap designated as a cash flow hedge of an intercompany loan with an aggregate notional amount of $33.3 million. The original maturity date was October 2, 2020, however, as the intercompany loan settlement was consummated, the cross-currency swap was settled simultaneously. As a result of the settlement, the Company recorded a loss of $0.4 million in other income, net in the consolidated statement of operations.

The Company held the following cross-currency rate swaps as of December 31, 2018 (dollar amounts in thousands):

						December 31, 2018
	Effective Date	Termination Date	Fixed Rate	Aggregate Notional Amount		Fair Value Asset (Liability)
Pay CHF Receive U.S.$	October 2, 2017	October 2, 2020	1.75% 4.38%	CHF 97,065 $ 100,000		$ (215)
Pay CHF Receive U.S.$	October 2, 2017	October 2, 2021	1.85% 4.46%	CHF 48,533 $ 50,000		(422)
Pay CHF Receive U.S.$	October 2, 2017	October 2, 2022	1.95% 4.52%	CHF 145,598 $ 150,000		(2,193)
Total						$ (2,830)

The cross-currency swaps are carried on the consolidated balance sheet at fair value, and changes in the fair values are recorded as unrealized gains or losses in AOCI. For the three and nine months ended September 30, 2019, the Company recorded gains of $5.7 million and $3.9 million, respectively, in other income, net for the foreign currency rate translation to offset the losses recognized on the intercompany loans. For the three and nine months ended September 30, 2018, the Company recorded loss of $2.6 million and gain of $2.2 million in other income, net for the foreign currency rate translation to offset the gains or losses recognized on the intercompany loans.

For the three and nine months ended September 30, 2019, the Company recorded a gain of $9.7 million and gain of $15.4 million, respectively, in AOCI related to the change in fair value of the cross-currency swaps. For the three and nine months ended September 30, 2018, the Company recorded losses of $3.1 million and gains of $3.0 million in AOCI related to the change in fair value of the cross-currency swaps.

For the three and nine months ended September 30, 2019, the Company recorded gains of $1.8 million and $5.5 million in other income, net included in the consolidated statements of operations related to the interest rate differential of the cross-currency swaps. For the three and nine months ended September 30, 2018, the Company recorded gains of $1.9 million and $5.9 million in other income, net included in the consolidated statements of operations related to the interest rate differential of the cross-currency swap.

As of September 30, 2019, an estimated gain of $6.5 million is expected to be reclassified within the next twelve months to other income, net from AOCI. As of September 30, 2019, the Company does not expect any gains or losses will be reclassified into earnings as a result of the discontinuance of these cash flow hedges because the original forecasted transaction will not occur.

Net Investment Hedges

The Company manages certain foreign exchange risks through a variety of strategies, including hedging. The Company is exposed to foreign exchange risk from its international operations through foreign currency purchases, net investments in foreign subsidiaries, and foreign currency assets and liabilities created in the normal course of business. On October 1, 2018, the Company entered into cross-currency swap agreements designated as net investment hedges to partially offset the effects of foreign currency on foreign subsidiaries.

The Company held the following cross-currency rate swaps designated as net investment hedges as of September 30, 2019 and December 31, 2018, respectively (dollar amounts in thousands):

						September 30, 2019	December 31, 2018
	Effective Date	Termination Date	Fixed Rate	Aggregate Notional Amount		Fair Value Asset (Liability)	Fair Value Asset (Liability)
Pay EUR Receive U.S.$	October 3, 2018	September 30, 2021	—% 3.01%	EUR $	70,738 82,000	$ 6,141	$ 1,359
Pay EUR Receive U.S.$	October 3, 2018	September 30, 2023	—% 2.57%	EUR $	51,760 60,000	4,532	(421)
Pay EUR Receive U.S.$	October 3, 2018	September 30, 2025	—% 2.19%	EUR $	38,820 45,000	2,911	(150)
Pay GBP Receive U.S.$	October 3, 2018	September 30, 2025	1.67% 2.71%	GBP $	128,284 167,500	11,678	2,360
Pay CHF Receive GBP	October 3, 2018	September 30, 2025	—% 1.67%	CHF GBP	165,172 128,284	(6,561)	(3,780)
Total						$ 18,701	$ (632)

The cross-currency swaps were carried on the consolidated balance sheet at fair value and changes in the fair values were recorded as unrealized gains or losses in AOCI. For the three and nine months ended September 30, 2019, the Company recorded gains of $17.1 million and $26.6 million in AOCI related to the change in fair value of the cross-currency swaps.

For the three and nine months ended September 30, 2019, the Company recorded gains of $2.5 million and $7.2 million in interest income included in the consolidated statements of operations related to the interest rate differential of the cross-currency swaps.

The estimated gain that is expected to be reclassified to interest income from AOCI as of September 30, 2019 within the next twelve months is $9.6 million.

Counterparty Credit Risk

The Company manages its concentration of counterparty credit risk on its derivative instruments by limiting acceptable counterparties to a group of major financial institutions with investment grade credit ratings, and by actively monitoring their credit ratings and outstanding positions on an ongoing basis. Therefore, the Company considers the credit risk of the counterparties to be low. Furthermore, none of the Company's derivative transactions are subject to collateral or other security arrangements, and none contain provisions that depend upon the Company's credit ratings from any credit rating agency.

Fair Value of Derivative Instruments

The Company has classified all of its derivative instruments within Level 2 of the fair value hierarchy because observable inputs are available for substantially the full terms of the derivative instruments. The fair value of the interest rate swaps and the cross-currency swaps was developed using a market approach based on publicly available market yield curves and the terms of the related swap. The Company performs ongoing assessments of counterparty credit risk.

The following table summarizes the fair value for derivatives designated as hedging instruments in the condensed consolidated balance sheets as of September 30, 2019 and December 31, 2018:

	Fair Value as of	
Location on Balance Sheet [1]:	**September 30, 2019**	**December 31, 2018**
	(In thousands)	
Derivatives designated as hedges — Assets:		
Prepaid expenses and other current assets		
Cash Flow Hedges		
Interest rate swap[2]	$ 68	$ 4,654
Cross-currency swap	6,453	7,615
Net Investment Hedges		
Cross-currency swap	9,552	8,888
Other assets		
Cash Flow Hedges		
Interest rate swap[2]	—	5,350
Cross-currency swap	662	—
Net Investment Hedges		
Cross-currency swap	18,347	1,774
Total derivatives designated as hedges — Assets	$ 35,082	$ 28,281
Derivatives designated as hedges — Liabilities:		
Accrued expenses and other current liabilities		
Cash Flow Hedges		
Interest rate swap[2]	$ 5,376	$ —
Other liabilities		
Cash Flow Hedges		
Interest rate swap[2]	51,878	9,385
Cross-currency swap	—	10,445
Net Investment Hedges		
Cross-currency swap	9,199	11,294
Total derivatives designated as hedges — Liabilities	$ 66,453	$ 31,124

(1) The Company classifies derivative assets and liabilities as non-current based on the cash flows expected to be incurred within the following 12 months.

(2) At September 30, 2019 and December 31, 2018, the notional amount related to the Company's interest rate swaps were $1.3 billion and $1.5 billion, respectively.

The following presents the effect of derivative instruments designated as cash flow hedges on the accompanying condensed consolidated statement of operations during the three and nine months ended September 30, 2019 and 2018:

	Balance in AOCI Beginning of Quarter	Amount of Gain (Loss) Recognized in AOCI	Amount of Gain (Loss) Reclassified from AOCI into Earnings	Balance in AOCI End of Quarter	Location in Statements of Operations
			(In thousands)		
Three Months Ended September 30, 2019					
Cash Flow Hedges					
Interest rate swap	$ (43,160)	$ (13,789)	$ 237	$ (57,186)	Interest expense
Cross-currency swap	(2,284)	9,661	7,520	(143)	Other income, net
Net Investment Hedges					
Cross-currency swap	4,053	17,136	2,488	18,701	Interest income
	$ (41,391)	$ 13,008	$ 10,245	$ (38,628)	
Three Months Ended September 30, 2018					
Cash Flow Hedges					
Interest rate swap	$ 22,344	$ 5,059	$ 473	$ 26,930	Interest expense
Cross-currency swap	(7,892)	(3,067)	(707)	(10,252)	Other income, net
	$ 14,452	$ 1,992	$ (234)	$ 16,678	

	Balance in AOCI Beginning of Year	Amount of Gain (Loss) Recognized in AOCI	Amount of Gain (Loss) Reclassified from AOCI into Earnings	Balance in AOCI End of Quarter	Location in Statements of Operations
			(In thousands)		
Nine Months Ended September 30, 2019					
Cash Flow Hedges					
Interest rate swap	$ 619	$ (54,841)	$ 2,964	$ (57,186)	Interest expense
Cross-currency swap	(6,190)	15,418	9,371	(143)	Other income, net
Net Investment Hedges					
Cross-currency swap	$ (632)	$ 26,558	$ 7,225	$ 18,701	Interest income
	$ (6,203)	$ (12,865)	$ 19,560	$ (38,628)	
Nine Months Ended September 30, 2018					
Cash Flow Hedges					
Interest rate swap	$ 592	$ 26,307	$ (31)	$ 26,930	Interest expense
Cross-currency swap	$ (5,104)	$ 3,000	$ 8,148	$ (10,252)	Other income, net
	$ (4,512)	$ 29,307	$ 8,117	$ 16,678	

8. STOCK-BASED COMPENSATION

As of September 30, 2019, the Company had stock options, restricted stock awards, performance stock units, contract stock awards and restricted stock unit awards outstanding under two plans, the 2001 Equity Incentive Plan (the "2001 Plan") and the 2003 Equity Incentive Plan (the "2003 Plan," and collectively, the "Plans").

Stock options issued under the Plans become exercisable over specified periods, generally within four years from the date of grant for officers and employees, and within one year from date of grant for directors and generally expire eight years from the grant date for employees, and from six to ten years for directors and certain executive officers. The Company values stock option grants using the binomial distribution model. Restricted stock issued under the Plans vests over specified periods, generally three years after the date of grant. The vesting of performance stock issued under the Plans is subject to service and performance conditions.

Stock Options

As of September 30, 2019, there were approximately $5.3 million of total unrecognized compensation costs related to unvested stock options. These costs are expected to be recognized over a weighted-average period of approximately three years. There were 202,752 stock options granted during the nine months ended September 30, 2019. For the nine months ended September 30, 2019, the weighted average grant date fair value for stock options was $18.74 per option.

Awards of Restricted Stock and Performance Stock

Performance stock and restricted stock awards generally have requisite service periods of three years. Performance stock units are subject to graded vesting conditions based on revenue goals of the Company. The Company expenses their fair value over the requisite service period. The Company expenses the fair value of restricted stock awards on a straight-line basis over the requisite service period. As of September 30, 2019, there were approximately $28.1 million of total unrecognized compensation costs related to these unvested awards. The Company expects to recognize these costs over a weighted-average period of approximately two years. The Company granted 318,410 restricted stock awards and 118,903 performance stock awards during the nine months ended September 30, 2019. For the nine months ended September 30, 2019, the weighted average grant date fair value for restricted stock awards and performance stock units was $55.19 and $55.91 per award, respectively.

The Company has no formal policy related to the repurchase of stock for the purpose of satisfying stock-based compensation obligations.

The Company also maintains an Employee Stock Purchase Plan (the "ESPP"), which provides eligible employees with the opportunity to acquire shares of common stock at periodic intervals by means of accumulated payroll deductions. The ESPP is a non-compensatory plan based on its terms.

9. DEFINED BENEFIT PLANS

The Company maintains defined benefit pension plans that cover certain employees in Austria, France, Japan, Germany and Switzerland.

Net periodic benefit costs for the Company's defined benefit pension plans for the three and nine months ended September 30, 2019 were $1.0 million and $2.1 million, respectively. The components of the net periodic benefit costs other than the service cost component of $0.7 million and $2.0 million for the three and nine months ended September 30, 2019, respectively, are included in other income, net in the consolidated statements of operations.

Net periodic benefit costs for the Company's defined benefit pension plans for the three and nine months ended September 30, 2018 were $0.5 million and $1.7 million, respectively. The components of the net periodic benefit costs other than the service cost component of $0.7 million and $1.4 million for the three and nine months ended September 30, 2018, respectively, are included in other income, net in the consolidated statements of operations.

The estimated fair values of plan assets were $28.6 million and $31.1 million as of September 30, 2019 and December 31, 2018, respectively. The net plan assets of the pension plans are invested in common trusts as of September 30, 2019 and December 31, 2018. Common trusts are classified as Level 2 in the fair value hierarchy. The fair value of common trusts is valued at the net asset value based on the fair values of the underlying investments of the trusts as determined by the sponsor of the trusts. The investment strategy of the Company's defined benefit plans is both to meet the liabilities of the plans as they fall due and to maximize the return on invested assets within an appropriate risk profile.

10. LEASES AND RELATED PARTY LEASES

The Company leases administrative, manufacturing, research and distribution facilities and vehicles through operating lease agreements. The Company has no finance leases as of September 30, 2019. Many of the Company's leases include both lease (e.g., fixed payments including rent) and non-lease components (e.g., common-area or other maintenance costs). For vehicles, the Company has elected the practical expedient to group lease and non-lease components.

Most facility leases include one or more options to renew. The exercise of lease renewal options is typically at the Company's sole discretion, therefore, the majority of renewals to extend the lease terms are not included in the ROU assets and lease liabilities as they are not reasonably certain of exercise. The Company regularly evaluates renewal options and when they are reasonably certain of exercise, the renewal period is included in the lease term.

As most of the Company's leases do not provide an implicit rate, the Company uses a collateralized incremental borrowing rate based on the information available at the lease commencement date in determining the present value of the lease payments.

Total operating lease expense for the nine months ended September 30, 2019 and September 30, 2018, was $14.2 million and $11.8 million respectively, which includes $0.2 million, in related party operating lease expense.

Supplemental balance sheet information related to operating leases at September 30, 2019 were as follows:

	September 30, 2019
	(In thousands, except lease term and discount rate)
ROU assets	$ 97,738
Current lease liabilities	$ 11,835
Non-current lease liabilities	96,820
Total lease liabilities	$ 108,655
Weighted average remaining lease term (in years):	
Leased facilities	12.9
Leased vehicles	2.8
Weighted average discount rate:	
Leased facilities	5.4%
Leased vehicles	3.2%

Supplemental cash flow information related to leases was as follows for the nine months ended September 30, 2019 (in thousands):

	September 30, 2019
	(In thousands)
Cash paid for amounts included in the measurement of lease liabilities:	
Operating cash flows from operating leases	$ 10,680
ROU assets obtained in exchange for lease liabilities:	
Operating leases	41,860

Future minimum lease payments under operating leases at September 30, 2019 were as follows:

	Related Parties	Third Parties	Total
		(In thousands)	
2019	$ 74	$ 4,489	$ 4,563
2020	296	13,289	13,585
2021	296	12,691	12,987
2022	296	13,641	13,937
2023	296	11,414	11,710
Thereafter	1,724	102,743	104,467
Total minimum lease payments	$ 2,982	$ 158,267	$ 161,249
Less: Imputed interest			52,594
Total lease liabilities			108,655
Less: Current lease liabilities			11,835
Long-term lease liabilities			96,820

During 2018, the Company entered into an operating lease with a term of 18 years for a new corporate headquarters in Princeton, NJ. The lease commenced during the second quarter of 2019 and the Company recorded a ROU asset and lease liability of $35.6 million.

Future minimum lease payments under operating leases at December 31, 2018 were as follows:

	Related Parties	Third Parties	Total
		(In thousands)	
2019	$ 296	$ 16,472	$ 16,768
2020	296	13,510	13,806
2021	296	12,197	12,493
2022	296	12,937	13,233
2023	296	10,707	11,003
Thereafter	1,724	100,675	102,399
Total minimum lease payments	$ 3,204	$ 166,498	$ 169,702

Total operating lease expense for the year ended December 31, 2018 was $16.3 million and included $0.3 million, in related party lease expense.

There were no future minimum lease payments under capital leases at December 31, 2018.

Related Party Leases

The Company leases its manufacturing facility in Plainsboro, New Jersey, from a general partnership that is 50% owned by a corporation whose shareholders are trusts, whose beneficiaries include family members of the Company's principal stockholder and former director. The term of the current lease agreement is through October 31, 2032 at an annual rate of approximately $0.3 million per year. The current lease agreement also provides (i) a 5-year renewal option for the Company to extend the lease from November 1, 2032 through October 31, 2037 at the fair market rental rate of the premises, and (ii) another 5-year renewal option to extend the lease from November 1, 2037 through October 31, 2042 at the fair market rental rate of the premises.

11. TREASURY STOCK

As of September 30, 2019 and December 31, 2018, there were 2.9 million shares of treasury stock outstanding with a cost of $120.1 million and $120.6 million, respectively, at a weighted average cost per share of $41.87.

On December 11, 2018, the Board of Directors (the "Board") authorized the Company to repurchase up to $225.0 million of the Company's common stock. The program allows the Company to repurchase its shares opportunistically from time to time. The repurchase authorization expires in December 2020. Purchases may be affected through one or more open market transactions, privately negotiated transactions, transactions structured through investment banking institutions, or a combination of the foregoing. As of September 30, 2019, there remained $225.0 million available for repurchase under this authorization. This stock repurchase authorization replaces the previous $150.0 million stock repurchase authorization, approved by the Board in 2016.

There were no cash treasury stock repurchases during the nine months ended September 30, 2019 and 2018.

12. INCOME TAXES

The following table provides a summary of the Company's effective tax rate:

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2019	2018	2019	2018
Reported tax rate	(0.4)%	(20.6)%	(3.5)%	(8.4)%

The Company's effective income tax rates for the three months ended September 30, 2019 and 2018 were (0.4)% and (20.6)%, respectively. For the three months ended September 30, 2019, the increase in the rate is primarily driven by the impact of the Rebound transaction, which resulted in a $59.9 million in–process research and development (IPR&D) expense. This amount is not deductible for tax purposes. Additionally, the Company recorded a tax expense of $1.6 million of tax reform–related adjustments, due to updates in IRS guidance.

The Company's effective income tax rates for the nine months ended September 30, 2019 and 2018 were (3.5)% and (8.4)%, respectively. For the nine months ended September 30, 2019, the increase in the rate is primarily driven by the impact of the Rebound transaction, which resulted in a $59.9 million IPR&D expense. This amount is not deductible for tax purposes. Additionally, the Company recorded a tax expense of $1.6 million for tax reform-related adjustments due to updates in IRS guidance. This was offset by a tax benefit of $10.8 million ($0.13 per share) related to a federal tax holiday in Switzerland, which was finalized during the quarter ended March 31, 2019. The Company received a federal tax credit in Switzerland of 12 million CHF, which may be used over a seven year period, ending in 2024. The nine months ended September 30, 2018, included an additional tax benefit of $1.2 million related to share–based compensation, when compared to the same period in 2019.

As of September 30, 2019, the Company has not provided deferred income taxes on unrepatriated earnings from foreign subsidiaries as they are deemed indefinitely reinvested. Such taxes would primarily be attributable to foreign withholding taxes and local income taxes when such earnings are distributed. As such, the Company has determined the tax impact of repatriating these earnings would not be material as of September 30, 2019.

13. NET INCOME (LOSS) PER SHARE

The Company computes EPS in accordance with Accounting Standards Codification ("ASC") Topic 260, "Earnings Per Share" ("ASC 260") and related guidance, which requires two calculations of EPS to be disclosed: basic and diluted. Basic EPS is computed by dividing net (loss) by the weighted average ordinary shares outstanding during a period. Diluted EPS is based on the treasury stock method and includes the effect from potential issuance of ordinary shares, such as shares issuable pursuant to the exercise of stock options and restricted stock units. Ordinary share equivalents have been excluded where their inclusion would be anti-dilutive.

Basic and diluted net income (loss) per share was as follows:

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2019	2018	2019	2018
	(In thousands, except per share amounts)			
Basic net income per share:				
Net income (loss)	$ (27,610)	$ 13,295	$ 34,882	$ 35,663
Weighted average common shares outstanding	85,688	85,193	85,536	82,058
Basic net income (loss) per common share	$ (0.32)	$ 0.16	$ 0.41	$ 0.43
Diluted net income per share:				
Net income (loss)	$ (27,610)	$ 13,295	$ 34,882	$ 35,663
Weighted average common shares outstanding — Basic	85,688	85,193	85,536	82,058
Effect of dilutive securities:				
Stock options and restricted stock	—	1,106	1,045	1,084
Weighted average common shares for diluted earnings per share	85,688	86,299	86,581	83,142
Diluted net income (loss) per common share	$ (0.32)	$ 0.15	$ 0.40	$ 0.43

14. COMPREHENSIVE INCOME (LOSS)

Comprehensive income (loss) was as follows:

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2019	2018	2019	2018
	(In thousands)			
Net income (loss)	$ (27,610)	$ 13,295	$ 34,882	$ 35,663
Foreign currency translation adjustment	(18,651)	(2,353)	(17,960)	(16,359)
Change in unrealized gain (loss) on derivatives, net of tax	(775)	1,386	(24,714)	14,419
Pension liability adjustment, net of tax	515	2	504	8
Comprehensive income (loss), net	$ (46,521)	$ 12,330	$ (7,288)	$ 33,731

Changes in accumulated other comprehensive loss by component between December 31, 2018 and September 30, 2019 are presented in the table below, net of tax:

	Gains and Losses on Derivatives	Defined Benefit Pension Items	Foreign Currency Items	Total
	(In thousands)			
Balance at January 1, 2019	$ (4,813)	$ (736)	$ (39,894)	$ (45,443)
Other comprehensive loss	(9,763)	(2)	(17,963)	(27,728)
Amounts reclassified from accumulated other comprehensive loss	14,950	(506)	—	14,444
Net current-period other comprehensive income (loss)	(24,713)	504	(17,963)	(42,172)
Balance at September 30, 2019	$ (29,526)	$ (232)	$ (57,857)	$ (87,615)

For the nine months ended September 30, 2019, the Company reclassified gains of $7.2 million and $7.8 million from accumulated other comprehensive loss to other income, net, and interest income, respectively.

15. SEGMENT AND GEOGRAPHIC INFORMATION

The Company internally manages two global reportable segments and reports the results of its businesses to its chief operating decision maker. The two reportable segments and their activities are described below.

- The Codman Specialty Surgical segment includes (i) the Neurosurgery business, which sells a full line of products for neurosurgery and neuro critical care such as tissue ablation equipment, dural repair products, cerebral spinal fluid management devices, intracranial monitoring equipment, and cranial stabilization equipment and (ii) the precision tools and instruments business, which sells more than 60,000 instrument patterns and surgical and lighting products to hospitals, surgery centers, dental, podiatry, and veterinary offices.
- The Orthopedics and Tissue Technologies segment includes such offerings as skin and wound repair, bone and joint fixation implants in the upper and lower extremities, bone grafts and nerve and tendon repair products.

The Corporate and other category includes (i) various executive, finance, human resource, information systems, legal functions, (ii) brand management, and (iii) share-based compensation costs.

The operating results of the various reportable segments as presented are not comparable to one another because (i) certain operating segments are more dependent than others on corporate functions for unallocated general and administrative and/or operational manufacturing functions and (ii) the Company does not allocate certain manufacturing costs and general and administrative costs to the operating segment results. Net sales and profit by each reportable segment for the three and nine months ended September 30, 2019 and 2018 are as follows:

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2019	2018	2019	2018
	(In thousands)			
Segment Net Sales				
Codman Specialty Surgical	$ 252,984	$ 239,035	$ 736,810	$ 714,654
Orthopedics and Tissue Technologies	126,111	126,819	385,620	374,472
Total revenues	$ 379,095	$ 365,854	$ 1,122,430	$ 1,089,126
Segment Profit				
Codman Specialty Surgical	$ 101,129	$ 91,871	$ 291,750	$ 272,480
Orthopedics and Tissue Technologies	30,383	35,515	112,664	105,094
Segment profit	131,512	127,386	404,414	377,574
Amortization	(5,056)	(5,268)	(21,340)	(15,944)
Corporate and other	(147,043)	(98,441)	(325,394)	(284,740)
Operating income	$ (20,587)	$ 23,677	$ 57,680	$ 76,890

The Company does not allocate any assets to the reportable segments. No asset information is reported to the chief operating decision maker and disclosed in the financial information for each segment.

The Company attributes revenues to geographic areas based on the location of the customer. Total revenue by major geographic area consisted of the following:

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2019	2018	2019	2018
	(In thousands)			
United States	$ 266,280	$ 260,870	$ 796,397	$ 769,509
Europe	49,242	47,472	148,753	150,650
Asia Pacific	42,079	37,022	114,810	108,304
Rest of World	21,494	20,490	62,470	60,663
Total Revenues	$ 379,095	$ 365,854	$ 1,122,430	$ 1,089,126

16. COMMITMENTS AND CONTINGENCIES

Contingent Consideration

The Company determined the fair value of contingent consideration during the nine-month period ended September 30, 2019 and 2018 to reflect the change in estimates, additions, payments, transfers and the time value of money during the period.

A reconciliation of the opening balances to the closing balances of these Level 3 measurements for the nine months ended September 30, 2019 and 2018 is as follows (in thousands):

Nine Months Ended September 30, 2019	Contingent Consideration Liability Related to Acquisition of Arkis (See Note 2)	Contingent Consideration Liability Related to Acquisition of Derma Sciences
	Long-term	Long-term
Balance as of January 1, 2019	$ —	$ 230
Additions from acquisition of Arkis	13,100	—
Balance as of September 30, 2019	$ 13,100	$ 230

Nine months Ended September 30, 2018	Contingent Considerations Liabilities Related to Acquisition of Derma Sciences		Contingent Consideration Liability Related to Acquisition of Confluent Surgical, Inc.	Location in Financial Statements
	Short-term	Long-term	Short-term	
Balance as of January 1, 2018	$ 315	$ 1,387	$ 22,478	
Transfers from long-term to current portion	1,387	(1,387)	—	
Payments	(2,000)	—	(19,000)	
Loss from change in fair value of contingent consideration liabilities	298	230	1,522	Selling, general and administrative
Balance as of September 30, 2018	$ —	$ 230	$ 5,000	

Confluent Surgical

On January 15, 2014, the Company acquired all outstanding shares of Confluent Surgical, Inc., ("Confluent Surgical"). The purchase price included contingent consideration. The potential maximum undiscounted contingent consideration of $30.0 million consisted of $25.0 million upon obtaining certain U.S. governmental approvals (the "U.S. Contingent Consideration") and $5.0 million upon obtaining certain European governmental approvals, both related to the completion of the transition of the Confluent Surgical business. The fair values of contingent consideration related to the acquisition of Confluent Surgical were estimated using a discounted cash flow model using a discount rate of 2.2%. During the first quarter of 2018, the Company received the U.S. governmental approvals and adjusted the related contingent consideration liability to $19.0 million, which the Company paid in April 2018. During the third quarter of 2018, the Company received certain European governmental approvals. The Company paid the remaining $5.0 million of contingent consideration related to Confluent Surgical in October of 2018.

Derma Sciences

The Company assumed contingent consideration incurred by Derma Sciences, Inc. ("Derma Sciences") related to its acquisitions of BioD and the intellectual property related to Medihoney products. The Company accounted for the contingent liabilities by recording their fair value on the date of the acquisition based on a probability weighted income approach. The Company has paid $33.3 million related to the aforementioned contingent liabilities. One contingent liability remains which relates to net sales of Medihoney products exceeding certain amounts defined in the agreement between the Company and Derma Sciences. The potential maximum undiscounted payment amounts to $3.0 million. The estimated fair value as of September 30, 2019, December 31, 2018 and September 30, 2018 was $0.2 million.

BioD

On April 7, 2017, the Company's indirect wholly-owned subsidiary, BioD filed an action in the Superior Court of New Jersey, Chancery Division, Middlesex County seeking a declaration that the resignation of Russell Olsen, the former CEO of BioD, was “for Good Reason” (as defined in Olsen’s employment agreement); a finding that Olsen breached the implied covenant of good faith and fair dealing, committed legal fraud, equitable fraud and negligent misrepresentation; and an award of damages for such actions, including a return of severance fees paid to Olsen. BioD was acquired in August 2016 by Derma Sciences, which Integra subsequently acquired in February 2017. After receiving a job offer from Integra that Olsen believed materially diminished his title and authority, on February 24, 2017 Olsen indicated his intention to terminate his position with BioD for Good Reason, as otherwise permitted by his employment agreement with BioD. Shortly thereafter, Cynthia Weatherly (as representative of the former equity owners of BioD) claimed in a letter to Derma Sciences that Olsen’s resignation was a “termination Without Cause” (as also defined in Olsen’s employment agreement), which would arguably trigger an acceleration of the earn out under a merger agreement between Derma Sciences, BioD and other parties (the "BioD Merger Agreement"), which was entered into in July 2016, and require, as a result, the acceleration of the payment of $26.5 million by BioD. Integra assumed this contingent liability in connection with its acquisition of Derma Sciences. The action for a declaratory judgment was filed to clarify that Olsen’s termination was for Good Reason and not Without Cause. If the employment agreement was terminated for Good Reason, then the Company believes that the earn out provision under the BioD Merger Agreement should not be accelerated.

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

The following discussion and analysis of our financial condition and results of operations should be read in conjunction with our condensed consolidated financial statements and the related notes thereto appearing elsewhere in this report and our consolidated financial statements for the year ended December 31, 2018 included in our Annual Report on Form 10-K.

We have made statements in this report which constitute forward-looking statements within the meaning of Section 27A of the Securities Act of 1933 and Section 21E of the Securities Exchange Act of 1934 (the “Exchange Act”). These forward-looking statements are subject to a number of risks, uncertainties and assumptions about the Company and other matters. Our actual results could differ materially from those anticipated in these forward-looking statements as a result of many factors, including but not limited to those set forth under the heading “Risk Factors” in our Annual Report on Form 10-K for the year ended December 31, 2018, and under the heading "Risk Factors" in this report. We undertake no obligation to publicly update or revise any forward-looking statements, whether as a result of new information, future events or otherwise.

You can identify these forward-looking statements by forward-looking words such as “believe,” “may,” “might,” “could,” “will,” “estimate,” “continue,” “anticipate,” “intend,” “seek,” “plan,” “expect,” “should,” “would” and similar expressions in this report.

GENERAL

Integra, headquartered in Plainsboro, New Jersey, is a world leader in medical technology. The company was founded in 1989 with the acquisition of an engineered collagen technology platform used to repair and regenerate tissue. Since then, Integra has developed numerous product lines from this technology for applications ranging from burn and deep tissue wounds, to the repair of dura mater in the brain, and the repair of nerves and tendons. The company has expanded its base regenerative technology business to include surgical instruments, neurosurgical products, advanced wound care, and orthopedic hardware through a combination of several global acquisitions and by developing products internally to further meet the needs of its customers.

We manufacture and sell our products in two reportable business segments: Codman Specialty Surgical and Orthopedics and Tissue Technologies. Our Codman Specialty Surgical products offer specialty surgical implants and instrumentation for a broad range of specialties. This segment includes products and solutions for dural access and repair, precision tools and instruments, advanced energy, cerebral spinal fluid ("CSF") management and neuro monitoring including market-leading product portfolios used in neurosurgery operation suites and critical care units. Our Orthopedics and Tissue Technologies product portfolios consist of differentiated regenerative technology products for soft tissue repair and tissue regeneration products, and small bone fixation and joint replacement hardware products for both upper extremities and lower extremities. This business also includes private label sales of a broad set of our regenerative and wound care medicine technologies.

We manufacture many of our products in facilities located in the United States (the "U.S."), Canada, France, Germany, Ireland, Switzerland, and Puerto Rico. We also source most of our handheld surgical instruments, specialty metal and pyrocarbon implants, and dural sealant products through specialized third-party vendors.

Codman Specialty Surgical products are sold through a combination of directly employed sales representatives, distributors and wholesalers, depending on the customer call point.

Orthopedics and Tissue Technologies products are sold through directly employed sales representatives, distributors focused on their respective surgical specialties, and strategic partners.

Integra is committed to delivering high quality products that positively impact the lives of millions of patients and their families. We focus on four key pillars of our strategy: 1) building an execution-focused culture, 2) achieving relevant scale, 3) improving agility and innovation, and 4) leading in customer experience. We believe that by sharpening our focus on these areas through improved planning and communication, optimization of our infrastructure, and strategically aligned tuck-in acquisitions, we can build scale, increase competitiveness and achieve our long-term goals.

We aim to achieve growth in our revenues while maintaining strong financial results. While we pay attention to any meaningful trend in our financial results, we focus on measurements that are indicative of long-term profitable growth. These measurements include (1) revenue growth (including organic growth and acquisitions), (2) gross margins on total revenues, (3) earnings before interest, taxes, depreciation, and amortization, (4) earnings per diluted share of common stock, and (5) operating cash flows.

To this end, our executive leadership team has established the following key priorities aligned to the following areas of focus:

Strategic Acquisitions. An important part of our strategy is pursuing strategic transactions and licensing agreements that increase relevant scale in the clinical areas in which we compete. In 2019, integrating the Codman Neurosurgery business, which was acquired from Johnson and Johnson in 2017, remains a top priority. In the third quarter 2019, the Company completed all substantial Codman transition services activities. This acquisition expanded our portfolio of neurosurgery products and established us as the world leader in neurosurgery. It has also enabled us to bring our entire Integra portfolio to a global market.

Portfolio Optimization and New Product Introductions. We are investing in innovative product development to drive a multi-generational pipeline for our key product franchises. Our product development efforts focus on regenerative technologies and other projects with the potential for significant returns on investment. In 2018, we achieved

significant milestones in research and development by successfully launching nine new products. In the first half of 2019, we launched an incremental ten new products. In addition to new product development, we are funding studies to gather clinical evidence to support launches, ensure market access and improve reimbursement for existing products. We also continue to identify low-growth, low-margin products and product franchises for discontinuation and will continue to look at other ways of optimizing our portfolio.

Commercial Channel Investments. With acquisitions, new product introductions and a broader portfolio of products, investing in our sales channels is a core part of our strategy to create specialization and greater focus on reaching our customers and addressing their needs. Internationally, we have increased our commercial resources significantly in all markets and are making investments to support our sales organization and maximize our commercial opportunities. We now have a strong international sales channel that will deliver our current portfolio as well as position us for expansion. In addition, we continue to build upon our leadership brands across our product franchises to enable us to engage hospital systems through enterprise-wide contracts.

Customer Experience. We aspire to be ranked as a best-in-class provider and are committed to strengthen our relationships with all customers. We strive to consistently deliver outstanding customer service and continue to invest in technologies, systems and processes to improve the way our customers do business with us. Additionally, we expect to build on the success of our professional education programs to drive continued customer appreciation of our growing portfolio of medical technologies globally.

Equity Offering

In May 2018, the Company commenced and closed on a public offering of common stock. The Company issued 6.0 million shares of common stock and received total proceeds, net of underwriting fees and offering expenses of approximately $349.6 million. The net proceeds from the offering were used to reduce outstanding borrowings under the revolving credit portion of the Company's Senior Credit Facility.

Clinical and Product Development Activities

We continue to invest in collecting clinical evidence to support our existing products and new product launches, and to ensure that we obtain market access for broader and more cost-effective solutions. In 2018, we launched the CUSA® Clarity ultrasonic tissue ablation platform in Japan, Xtrasorb® Gentle Tack Silicone Foam Dressing, SurgiMend® MP Collagen Matrix, and Integra® Meshed Dermal Regeneration Template outside the U.S., and AmnioExcel® Plus Amniotic Allograft Membrane, Integra® XT Revision Total Ankle Replacement System, and Irrigating forceps in the U.S.

During 2019 we launched 10 new products. These include our new electrosurgery generator and irrigator system, a next generation ICP monitoring platform and an innovative customer-centric toolkit for our Certas™ Plus Programmable Valve along with additional shunt configurations. In addition, we launched the Panta® II TTC Arthrodesis Nail System in the U.S. The Panta II system is our new fusion nail used in ankle fixation. We also launched a Small Post Baseplate in our Reverse Shoulder System that accommodates smaller patients. We launched DuraGen® in Japan. DuraGen is the first and only non-autologous collagen xenograft approved for use as a dural substitute in Japan. We initiated the limited market release of enhancements to our Salto Talaris® Total Ankle System. We are focused on the development of core clinical applications in our our electromechanical technologies portfolio. We continue to work with several instrument partners to bring new surgical instrument patterns to the market. This enables us to add new instruments with minimal expense and invest in ongoing development, such as our Duo LED Surgical Headlight System. Also during 2019, we updated our CUSA Clarity platform to incorporate new ultrasonic tips and integrated electrosurgical capabilities. We continue to work on advanced shoulder products and are developing a pyrocarbon shoulder hemiarthroplasty product to add to our orthopedic reconstruction portfolio.

FDA Matters

On June 22, 2015, the FDA issued an Untitled Letter (the "Untitled Letter") alleging that BioD Logic LLC's ("BioD") morselized amniotic membrane tissue based products do not meet the criteria for regulation as HCT/Ps solely under Section 361 of the Public Health Services Act ("Section 361") and that, as a result, the morselized amniotic membrane tissue products would be regulated as a Drug or Biologic. Since the issuance of the Untitled Letter, BioD and the Company have been in discussions with the FDA to communicate their disagreement with the FDA’s assertion that certain products are more than minimally manipulated. The FDA has not changed its position that certain of the BioD acquired products are not eligible for marketing solely under Section 361. In November 2017, the FDA issued the final guidance document related to human tissue titled, “Regulatory Considerations for Human Cells, Tissues, and Cellular and Tissue-Based Products: Minimal Manipulation and Homologous Use” (the “HCT/P Final Guidance”). The HCT/P Final Guidance maintains the FDA’s position that products such as the Company’s morselized amniotic membrane tissue-based products do not meet the criteria for regulation solely as HCT/Ps. In addition, the FDA articulated a risk-based approach to enforcement and, while some uses for amniotic membrane tissue-based products would have as much as thirty-six months of enforcement discretion, other high risk uses could be subject to immediate enforcement action. The Company does not believe the uses for its amniotic membrane tissue-based products fall

into the high-risk category. As of September 30, 2019, the Company has not received any further notice of enforcement action from the FDA regarding its morselized amniotic tissue-based products. Nonetheless, we can make no assurances that the FDA will continue to exercise its enforcement discretion with respect to the Company's morselized amniotic membrane tissue-based products, and any potential action of the FDA could have a financial impact regarding the sales of such products. The Company has been considering and continues to consider regulatory approval pathways for its morselized amniotic membrane tissue-based products.

Revenues from BioD morselized amniotic membrane based products for the nine months ended September 30, 2019 were less than 1.0% of consolidated revenues.

On March 7, 2019, TEI Biosciences, Inc. a subsidiary of the Company received a Warning Letter (the "Warning Letter"), dated March 6, 2019, from the United States Food and Drug Administration (the "FDA"). The warning letter relates to quality systems issues at our manufacturing facility located in Boston, Massachusetts. The letter resulted from an inspection held at that facility in October and November 2018 and did not identify any new observations that were not already provided in the Form 483 that followed the inspection. The Company has provided detailed responses to the FDA as to its corrective actions on a monthly basis and, since the conclusion of the inspection, has undertaken significant efforts to remediate the observations and continues to do so. The warning letter does not restrict the Company's ability to manufacture or ship products or require the recall of any products. Nor does it restrict our ability to seek FDA 510(k) clearance of products. The letter states that requests for Certificates to Foreign Governments will not be granted until the violations have been corrected. Additionally, premarket approval applications for Class III devices to which the Quality System regulation violations are reasonably related will not be approved until the violations have been corrected. The TEI Boston facility manufactures extracellular bovine matrix (EBM) products. The Company does not expect to incur material incremental expense for remediation activities. The Company submitted its initial response to the FDA Warning Letter on March 28, 2019 and provides regular progress reports to the FDA. We cannot, however, give any assurances that the FDA will be satisfied with our response to the letter or as to the expected date of the resolution of the matters included in the letter. Until the issues cited in the letter are resolved to the FDA's satisfaction, the FDA may initiate additional regulatory action without further notice. Any adverse regulatory action, depending on its magnitude, may restrict us from effectively manufacturing, marketing and selling our products and could have a material adverse effect on our business, financial condition and results of operations.

Revenues of products manufactured in the TEI Boston facility for the nine months ended September 30, 2019 were approximately 4.0% of consolidated revenues.

RESULTS OF OPERATIONS

Executive Summary

Net income / (loss) for the three months ended September 30, 2019 was $(27.6) million, or $(0.32) per diluted share, as compared to $13.3 million or $0.15 per diluted share for the three months ended September 30, 2018. Net income for the nine months ended September 30, 2019 was $34.9 million, or $0.40 per diluted share, as compared to $35.7 million or $0.43 per diluted share for the nine months ended September 30, 2018.

The decrease in net income for the three months ended September 30, 2019 from the same period last year resulted from an increase in in-process research and development expense attributed to the Rebound transaction.

Income before taxes includes the following special charges:

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2019	2018	2019	2018
	(In thousands)			
Acquisition and integration-related charges[1]	$ 74,531	$ 23,515	$ 106,816	$ 76,108
Structural optimization charges	5,353	3,345	13,169	11,885
EU medical device regulation	1,978	—	3,200	—
Litigation (settlement) charges	(2,254)	1,637	46	3,139
Discontinued product lines charges	3,104	—	6,825	—
Impairment charges	—	4,941	5,764	4,941
Total	$ 82,712	$ 33,438	$ 135,820	$ 96,073

(1) The Company included $59.9 million of in-process research and development expense within acquisition and integration-related charges as a result of the Rebound transaction.

The items reported above are reflected in the condensed consolidated statements of operations as follows:

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2019	2018	2019	2018
	(In thousands)			
Cost of goods sold	$ 5,963	$ 16,314	$ 17,177	$ 36,242
In-process research and development expense	59,889	—	61,566	—
Selling, general and administrative	19,361	17,124	53,814	59,040
Impairment charges	—	—	5,764	—
Interest expense	—	—	—	791
Other expense	(2,501)	—	(2,501)	—
Total	$ 82,712	$ 33,438	$ 135,820	$ 96,073

We typically define special charges as items for which the amounts and/or timing of such expenses may vary significantly from period to period, depending upon our acquisition, integration and restructuring activities, and for which the amounts are non-cash in nature, or for which the amounts are not expected to recur at the same magnitude. We believe that given our ongoing strategy of seeking acquisitions, our continuing focus on rationalizing our existing manufacturing and distribution infrastructure and our continuing review of various product lines in relation to our current business strategy, some of the special charges discussed above could recur with similar materiality in the future.

We believe that the separate identification of these special charges provides important supplemental information to investors regarding financial and business trends relating to our financial condition and results of operations. Investors may find this information useful in assessing comparability of our operating performance from period to period, assessing the objectives that management has established, and against other companies in our industry. We provide this information to investors so that they can analyze our operating results in the same way that management does and to use this information in their assessment of our core business and valuation of Integra.

Revenues and Gross Margin on Product Revenues

Our revenues and gross margin on product revenues were as follows:

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2019	2018	2019	2018
Segment Net Sales	(Dollars in thousands)			
Codman Specialty Surgical	$ 252,984	$ 239,035	$ 736,810	$ 714,654
Orthopedics & Tissue Technologies	126,111	126,819	385,620	374,472
Total revenue	379,095	365,854	1,122,430	1,089,126
Cost of goods sold	142,636	143,245	415,219	425,032
Gross margin on total revenues	$ 236,459	$ 222,609	$ 707,211	$ 664,094
Gross margin as a percentage of total revenues	62.4%	60.8%	63.0%	61.0%

Three Months Ended September 30, 2019 as Compared to Three Months Ended September 30, 2018

Revenues and Gross Margin

For the three months ended September 30, 2019, total revenues increased by $13.2 million to $379.1 million from $365.9 million for the same period in 2018. Domestic revenues increased $5.4 million, or 2.1%, to $266.3 million and were 70.2% of total revenues for the three months ended September 30, 2019. International revenues increased by $7.9 million to $112.8 million for the three months ended September 30, 2019 compared to $105.0 million during the same period in the prior year. The net increase of $13.2 million was a result of growth in primarily the Codman Specialty Surgical segment of $16.9 million offset by a $2.4 million unfavorable impact of foreign exchange, which mainly impacts the Codman Specialty Surgical segment and a $1.3 million unfavorable impact due to discontinued and divested products.

Codman Specialty Surgical revenues were $253.0 million, an increase of 5.8% from the prior-year period. The increase primarily resulted from sales of our programmable valve and dural repair products, which increased mid-single-digits compared to the prior year driven by new product introductions and sales of DuraGen in Japan. Additionally, sales of CUSA capital and related disposables increased high-single digits compared to the prior year. Precision Tools and Instruments revenues increased high-single digits

compared to the same period last year primarily due to increase in revenue in our Mayfield product line and surgical instrument products.

Orthopedics and Tissue Technologies revenues were $126.1 million, a decrease of 0.6% from the prior-year period. In our Wound Reconstruction and Care portfolio, sales of our plastics and reconstructive surgery products grew double digits, and sales of our outpatient wound care products increased mid-single digits. These increases were offset by declines in our private label business which decreased by low-double digits over the prior period. Extremity Orthopedic sales increased low-single digits compared to the same period last year driven by strong double-digit growth of our ankle and shoulder products.

Gross margin increased to $236.5 million for the three-month period ended September 30, 2019, an increase of $13.9 million from $222.6 million for the same period last year. Gross margin as a percentage of total revenue increased to 62.4% for the third quarter of 2019 from 60.8% in the same period last year. This increase primarily related to a reduction in Codman acquisition and integration costs in the current period compared to the same period last year.

Operating Expenses

The following is a summary of operating expenses as a percent of total revenues:

	Three Months Ended September 30,	
	2019	2018
Research and development	5.0%	5.6%
In-process research and development expense	15.8%	—%
Selling, general and administrative	45.7%	47.4%
Intangible asset amortization	1.3%	1.4%
Total operating expenses	67.8%	54.4%

Total operating expenses, which consist of selling, general and administrative expenses, research and development expenses, in-process research and development expense and amortization expenses, increased $58.1 million, or 29.2%, to $257.0 million in the three months ended September 30, 2019, compared to $198.9 million in the same period last year. This increase was driven by the $59.9 million of in-process research and development expense in the third quarter of 2019 due to the Rebound transaction.

Non-Operating Income and Expenses

The following is a summary of non-operating income and expenses:

	Three Months Ended September 30,	
	2019	2018
	(In thousands)	
Interest income	$ 2,913	$ 75
Interest expense	(13,962)	(14,478)
Other income, net	4,127	1,750

Interest Income and Interest Expense

Interest expense for the three months ended September 30, 2019 decreased by $0.5 million, primarily resulting from a decrease in our weighted average interest rate and a decrease in the outstanding balance of our Senior Credit Facility compared to the same period in 2018. The weighted average interest rate for the three months ended September 30, 2019 decreased nominally to 3.4% compared to 3.7% for the same period in the prior year.

Interest income for the three months ended September 30, 2019 increased by $2.8 million compared to 2018 primarily due to the interest rate differential on cross-currency swaps designated as net investment hedges that were entered into during the fourth quarter of 2018.

Other Income, net

Other income, net for the three months ended September 30, 2019, increased by $2.4 million compared to the same period last year primarily driven from a legal settlement received during the three months ended September 30, 2019.

Income Taxes

	Three Months Ended September 30,	
	2019	2018
	(In thousands)	
Income before income taxes	$ (27,509)	$ 11,024
Income tax (benefit) expense	101	(2,271)
Effective tax rate	(0.4)%	(20.6)%

The Company's effective income tax rates for the three months ended September 30, 2019 and 2018 were (0.4)% and (20.6)%, respectively. For the three months ended September 30, 2019, the increase in the rate is primarily driven by the impact of the Rebound transaction, which resulted in a $59.9 million in-process research and development expense. This amount is not deductible for tax purposes. Additionally, the Company recorded a tax expense of $1.6 million of tax reform-related adjustments, due to updates in IRS guidance.

The Company expects its effective income tax rate for the full year to be approximately 18.9%, driven primarily by the excess tax benefit from share-based compensation, the Switzerland tax holiday, and a favorable jurisdictional mix of pretax income in foreign operations relative to U.S.-based operations. This estimate could be revised in the future as additional information is presented to the Company.

The effective tax rate may vary from period to period depending on, among other factors, the geographic and business mix of taxable earnings and losses, tax planning and settlements with various taxing authorities. We consider these factors and others, including our history of generating taxable earnings, in assessing our ability to realize tax assets on a quarterly basis.

While it is often difficult to predict the final outcome or the timing of resolution of any particular matter with the various Federal, state, and foreign tax authorities, we believe that our reserves reflect the most probable outcome of known tax contingencies. Settlement of any particular issue would usually require the use of cash. Favorable resolution would be recognized as a reduction to our annual effective tax rate in the year of resolution. The tax reserves are presented in the balance sheet within other liabilities, except for amounts relating to items that we expect to pay in the coming year, which would be classified as current income taxes payable.

Nine Months Ended September 30, 2019 as Compared to Nine Months Ended September 30, 2018

Revenues and Gross Margin

For the nine months ended September 30, 2019, total revenues increased by $33.3 million to $1,122.4 million from $1,089.1 million during the prior-year period. Domestic revenues increased $26.8 million, or 3.5%, to $796.3 million and were 71% of total revenues. International revenues increased by $6.4 million to $326.1 million for nine months ended September 30, 2019 compared to $319.6 million during the same period in the prior year. The net increase of $33.3 million was a result of growth in both segments of $51.4 million offset by a $11.7 million unfavorable impact of foreign exchange, which mainly impacts the Codman Specialty Surgical segment and a $6.4 million unfavorable impact due to discontinued and divested products.

Codman Specialty Surgical revenues were $736.8 million, an increase of 3.1% from the prior-year period. Growth in Codman Specialty Surgical revenues were driven by sales of our dural repair, CUSA capital and related disposables, and programmable valve products. Precision Tools and Instruments revenues increased low-single digits compared to the prior period.

Orthopedics and Tissue Technologies revenues were $385.6 million, an increase of 3.0% from the prior-year period. In our Wound Reconstruction and Care portfolio, sales of our core tissue products including PriMatrix and SurgiMend increased low and mid

double-digits. Our private label business sales increased by low-single digits over the prior period. Extremity Orthopedic sales were flat compared to the same period last year.

Gross margin increased to $707.2 million for the nine-month period ended September 30, 2019, an increase from $664.1 million for the same period last year. Gross margin as a percentage of total revenue increased to 63.0% for the year to date period from 61.0% for the same period last year. This increase primarily related to a reduction in Codman acquisition and integration costs.

Operating Expenses

The following is a summary of operating expenses as a percent of total revenues:

	Nine Months Ended September 30,	
	2019	2018
Research and development	4.7%	5.3%
In-process research and development expense	5.5%	—%
Selling, general and administrative	45.7%	47.1%
Intangible asset amortization	1.9%	1.5%
Total operating expenses	57.8%	53.9%

Total operating expenses, which consist of selling, general and administrative expenses, research and development expenses, in-process research and development expense and amortization expenses, increased $62.3 million, or 10.6%, to $649.5 million for the first nine months of 2019, compared to $587.2 million in the same period last year. This increase was primarily driven by the $59.9 million in the third quarter of 2019 due to the Rebound transaction.

Non-Operating Income and Expenses

The following is a summary of non-operating income and expenses:

	Nine Months Ended September 30,	
	2019	2018
	(In thousands)	
Interest income	$ 8,051	$ 325
Interest expense	(40,495)	(50,750)
Other income, net	8,461	6,422

Interest Income and Interest Expense

Interest expense for the nine month period ended September 30, 2019 decreased by $10.3 million primarily resulting from a decrease in our weighted average interest rate and a decrease in the outstanding balance of our Senior Credit Facility compared to the same period in 2018. The weighted average interest rate for the three months ended September 30, 2019 decreased nominally to 3.4% compared to 3.7% for the same period in the prior year.

Interest income for the nine month period ended September 30, 2019 increased by $7.7 million compared to 2018 primarily due to the interest rate differential on cross-currency swaps designated as net investment hedges that were entered into during the fourth quarter of 2018.

Other Income, net

Other income, net for the nine months ended September 30, 2019, increased by $2.0 million compared to the same period last year primarily driven from a legal settlement received during the nine months ended September 30, 2019.

Income Taxes

	Nine Months Ended September 30,	
	2019	2018
	(In thousands)	
Income before income taxes	$ 33,697	$ 32,887
Income tax benefit	(1,185)	(2,776)
Effective tax rate	(3.5)%	(8.4)%

The Company's effective income tax rates for the nine months ended September 30, 2019 and 2018 were (3.5)% and (8.4)%, respectively.

For the nine months ended September 30, 2019, the increase in the rate is primarily driven by the impact of the Rebound transaction, which resulted in a $59.9 million in-process research and development expense. This amount is not deductible for tax purposes. Additionally, the Company recorded a tax expense of $1.6 million for tax reform-related adjustments due to updates in IRS guidance. This was offset by a tax benefit of $10.8 million ($0.13 per share) related to a federal tax holiday in Switzerland, which was finalized during the quarter ended March 31, 2019. The Company received a federal tax credit in Switzerland of 12 million CHF, which may be used over a seven year period, ending in 2024. The nine months ended September 30, 2018, included an additional tax benefit of $1.2 million related to share-based compensation, when compared to the same period in 2019.

The Company expects its effective income tax rate for the full year to be approximately 18.9%, driven primarily by the excess tax benefit from share-based compensation, the Switzerland tax holiday, and a favorable jurisdictional mix of taxable income in foreign operations relative to U.S.-based operations. This estimate could be revised in the future as additional information is presented to the Company.

The effective tax rate may vary from period to period depending on, among other factors, the geographic and business mix of taxable earnings and losses, tax planning and settlements with the various taxing authorities. We consider these factors and others, including our history of generating taxable earnings, in assessing our ability to realize deferred tax assets on a quarterly basis.

While it is often difficult to predict the final outcome or the timing of resolution of any particular matter with the various Federal, state and foreign tax authorities, we believe that our reserves reflect the most probable outcome of known tax contingencies. Settlement of any particular issue would usually require the use of cash. Favorable resolution would be recognized as a reduction to our annual effective tax rate in the year of resolution. The tax reserves are presented in the balance sheet within other liabilities, except for amounts relating to items it expects to pay in the coming year which are classified as current income taxes payable.

GEOGRAPHIC PRODUCT REVENUES AND OPERATIONS

We attribute revenues to geographic areas based on the location of the customer. Total revenue by major geographic area consisted of the following:

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2019	2018	2019	2018
	(In thousands)			
United States	$ 266,280	$ 260,870	$ 796,397	$ 769,509
Europe	49,242	47,472	148,753	150,650
Asia Pacific	42,079	37,022	114,810	108,304
Rest of World	21,494	20,490	62,470	60,663
Total Revenues	$ 379,095	$ 365,854	$ 1,122,430	$ 1,089,126

We generate significant revenues outside the U.S., a portion of which are U.S. dollar-denominated transactions conducted with customers who generate revenue in currencies other than the U.S. dollar. As a result, currency fluctuations between the U.S. dollar and the currencies in which those customers do business could have an impact on the demand for our products in foreign countries. Local economic conditions, regulatory compliance or political considerations, the effectiveness of our sales representatives and distributors, local competition and changes in local medical practice all may combine to affect our sales into markets outside the U.S.

Domestic revenues increased to $266.3 million, or 70% of total revenues, for the three months ended September 30, 2019 from $260.9 million, or 71% of total revenues for the three months ended September 30, 2018. Growth in domestic revenues was driven by dural repair, programmable valves and our core tissue products. European sales increased by $1.8 million for the three months ended September 30, 2019 compared to the same period last year, resulting primarily from sales of our core tissue products offset by unfavorable impacts of foreign exchange. Sales to customers in Asia Pacific and the Rest of the World for the three months ended September 30, 2019 increased by $6.1 million compared to the same period last year primarily driven by increases in dural repair products partially offset by unfavorable impacts of foreign exchange. Foreign exchange fluctuations on international revenues in total had an unfavorable impact of $2.4 million for the three months ended September 30, 2019 compared to the same period in 2018.

Domestic revenues increased to $796.4 million, or 71% of total revenues, for the nine months ended September 30, 2019 from $769.5 million, or 71% of total revenues. Growth in domestic revenues was driven by programmable valves and our core tissue products. European sales decreased by $1.9 million for the nine months ended September 30, 2019 compared to the

same period last year, resulting primarily from unfavorable impacts of foreign exchange. Sales to customers in Asia Pacific and the Rest of the World for the nine months ended September 30, 2019 increased by $8.3 million, primarily driven by increases in our dural repair, and Wound Reconstruction and Care portfolio products partially offset by unfavorable impacts of foreign exchange. Foreign exchange fluctuations on international revenues had an unfavorable impact of $11.7 million on revenues for the nine months ended September 30, 2019 compared to the same period in 2018.

LIQUIDITY AND CAPITAL RESOURCES

Cash and Marketable Securities

We had cash and cash equivalents totaling approximately $208.0 million and $138.8 million at September 30, 2019 and December 31, 2018 respectively, which are valued based on Level 1 measurements in the fair value hierarchy. At September 30, 2019, our non-U.S. subsidiaries held approximately $177.1 million of cash and cash equivalents that are available for use outside the U.S. The Company asserts that it has the ability and intends to indefinitely reinvest the undistributed earnings from its foreign operations unless there is no material tax cost to remit the earnings into the U.S.

Cash Flows

	Nine Months Ended September 30,	
	2019	2018
	(In thousands)	
Net cash provided by operating activities	$ 142,249	$ 156,995
Net cash used in investing activities	(142,059)	(24,375)
Net cash (used in) / provided by financing activities	73,226	(96,817)
Effect of exchange rate fluctuations on cash	(4,273)	(4,747)

Cash Flows Provided by Operating Activities

We generated operating cash flows of $142.2 million for the nine months ended September 30, 2019, a decrease of $14.7 million from $157.0 million for the same period in 2018. Net income after non-cash adjustments increased for the nine months ended September 30, 2019 by approximately $44.9 million compared to the same period in 2018, which resulted primarily from increased sales and an improvement in our gross margin compared to 2018. The changes in assets and liabilities, net of business acquisitions, decreased cash flows from operating activities by $50.0 million for the nine months ended September 30, 2019 compared to an increase of $9.6 million for the same period in 2018. The decrease in 2019 is primarily driven by increased investment in inventories related to new product launches and legal entity manufacturing changes associated with the Codman Neurosurgery acquisition integration. In addition, decreases are driven by growth in accounts receivable in foreign jurisdictions with increased payment terms.

Cash Flows Used in Investing Activities

During the nine months ended September 30, 2019, we paid $47.3 million for capital expenditures, most of which were directed to our new Mansfield, Massachusetts facility, Princeton, New Jersey facility and commercial expansion. Further, we paid $95.5 million for the Arkis Acquisition and Rebound Transaction, net of cash acquired.

During the nine months ended September 30, 2018, we paid $52.1 million for capital expenditures, most of which were directed to the expansion of a manufacturing facility and commercial expansion. We received $26.7 million from the Codman Neurosurgery acquisition as a working capital adjustment.

Cash Flows Used in Financing Activities

Our principal sources of cash from financing activities in thenine months ended September 30, 2019 were $215.8 million from borrowings under our Senior Credit Facility and Securitization Facility and $6.9 million in proceeds from the exercise of stock options. These were offset by repayments of $143.3 million on the revolving portion of our Senior Credit Facility and Securitization Facility and $6.2 million cash taxes paid in net equity settlement.

Our principal sources of cash from financing activities in the nine months ended September 30, 2018 were $349.6 million from the issuance of common stock and $50.0 million in borrowings under our Senior Credit Facility. These were offset by repayments of $460.0 million on the revolving portion of our Senior Credit Facility and $33.8 million in net cash paid for financing liabilities from business acquisitions.

Upcoming Debt Maturities

The first quarterly installment of the Company's Term Loan component of its Senior Credit Facility was paid on September 30, 2019. The Company has classified $45.0 million as a current liability in the Company's consolidated balance sheet to reflect payments due within a year.

Amended and Restated Senior Credit Agreement and Related Hedging Activities

See Note 6 - *Debt* to the current period's condensed consolidated financial statements for a discussion of our amended and restated Senior Credit Agreement and Note 7 - *Derivative Instruments* for discussion of our hedging activities.

Share Repurchase Plan

On December 11, 2018, the Board of Directors authorized the Company to repurchase up to $225.0 million of the Company's common stock. The program allows the Company to repurchase its shares opportunistically from time to time. The repurchase authorization expires in December 2020. Purchases may be affected through one or more open market transactions, privately negotiated transactions, transactions structured through investment banking institutions, or a combination of the foregoing. This stock repurchase authorization replaces the previous $150.0 million stock repurchase authorization, approved by the Board in 2016.

The Company has not repurchased any shares of common stock under these authorizations throughSeptember 30, 2019.

Dividend Policy

We have not paid any cash dividends on our common stock since our formation. Our Senior Credit Facility limits the amount of dividends that we may pay. Any future determinations to pay cash dividends on our common stock will be at the discretion of our Board of Directors and will depend upon our financial condition, results of operations, cash flows and other factors deemed relevant by the Board of Directors.

Capital Resources

We believe that our cash and available borrowings under the Senior Credit Facility are sufficient to finance our operations and capital expenditures for the foreseeable future. Our future capital requirements will depend on many factors, including the growth of our business, the timing and introduction of new products and investments, strategic plans and acquisitions, among others. Additional sources of liquidity available to us include short term borrowings and the issuance of long term debt and equity securities.

Off-Balance Sheet Arrangements

The Company has no off–balance sheet financing arrangements during the nine months ended September 30, 2019 that have or are reasonably likely to have, a current or future effect on our financial condition, changes in financial condition, revenues or expenses, results of operations, liquidity, capital expenditures or capital resources that are material to our interests.

Contractual Obligations and Commitments

As of September 30, 2019, we were obligated to pay the following amounts under various agreements:

		Payments Due by Calendar Year			
	Total	Remaining 2019	2020-2021	2022-2023	Thereafter
		(In millions)			
Revolving Credit Facility (1)	$ 440.0	$ —		$ 440.0	$ —
Term Loan	888.9	11.3	101.3	776.3	—
Securitization Facility (1)	110.0	—	110.0	—	—
Interest (2)	97.1	7.5	56.4	33.2	—
Employment Agreements (3)	1.5	0.5	1.0	—	—
Operating Leases (4)	161.2	4.6	26.6	25.6	104.4
Purchase Obligations	9.9	9.7	0.2	—	—
Other	4.6	0.7	0.8	1.2	1.9
Total	$ 1,713.2	$ 34.3	$ 296.3	$ 1,276.3	$ 106.3

(1) The Company may borrow and make payments against the revolving credit portion of its Senior Credit Facility and Securitization Facility from time to time and considers all of the outstanding amounts to be long term based on its current intent and ability to repay the borrowing outside of the next twelve-month period.

(2) Interest is calculated on the term loan portion of the Senior Credit Facility based on current interest rates paid by the Company. [As the revolving credit facility and Securitization Facility can be repaid at any time, no interest has been included in the calculation.]

(3) Amounts shown under Employment Agreements do not include compensation resulting from a change in control.

(4) During 2018, the Company entered into an operating lease with a term of 18 years for a new corporate headquarters in Princeton, NJ which commenced during the second quarter of 2019. The Company recorded a ROU asset and lease liability of $35.6 million. The gross payments over the lease term of approximately $67.0 million are included in the table above.

The Company has excluded its contingent consideration obligation related to a prior and current year acquisitions from the contractual obligations table above; this liability had a total estimated fair value of $13.3 million at September 30, 2019. This liability has been excluded because the amount to be paid and the potential payment date is not fixed.

The Company has excluded its option to acquire Integrated Shoulder Collaboration Inc., which becomes mandatory upon achievement of a certain sales threshold, for an amount not to exceed $80.0 million. This liability has been excluded because the amount to be paid and the potential payment date is not fixed.

The Company has excluded its future pension contribution obligations from the table above. This has been excluded because the future amounts to be paid and the potential payment dates are not fixed.

The Company has excluded the liability for uncertain tax benefits from the contractual obligations table above, including interest and penalties, totaling $0.7 million at September 30, 2019. This liability for uncertain tax benefits has been excluded because we cannot make a reliable estimate of the period in which the uncertain tax benefits may be realized.

OTHER MATTERS

Critical Accounting Estimates

The critical accounting estimates included in our Annual Report on Form 10-K for the fiscal year ended December 31, 2018 have not materially changed.

Recently Issued Accounting Standards

Information regarding new accounting pronouncements is included in Note 1 - *Basis of Presentation* to the current period's condensed consolidated financial statements.

ITEM 3. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

We are exposed to various market risks, including changes in foreign currency exchange rates and interest rates that could adversely affect our results of operations and financial condition. To manage the volatility relating to these typical business exposures, we may enter into various derivative transactions when appropriate. We do not hold or issue derivative instruments for trading or other speculative purposes.

Foreign Currency Exchange and Other Rate Risks

We operate on a global basis and are exposed to the risk that changes in foreign currency exchange rates could adversely affect our financial condition, results of operations and cash flows. We are primarily exposed to foreign currency exchange rate risk with respect to transactions and net assets denominated in Euros ("EUR"), British pounds ("GBP"), Swiss francs ("CHF"), Canadian dollars, Japanese yen, Mexican pesos, Brazilian reais, Australian dollars and Chinese yuan. We manage the foreign currency exposure centrally, on a combined basis, which allows us to net exposures and to take advantage of any natural offsets. To mitigate the impact of currency fluctuations on transactions denominated in nonfunctional currencies, we periodically enter into derivative financial instruments in the form of foreign currency exchange forward contracts with major financial institutions. We temporarily record realized and unrealized gains and losses on these contracts that qualify as cash flow hedges in other comprehensive income, and then recognize them in other income or expense when the hedged item affects net earnings.

From time to time, we enter into foreign currency forward exchange contracts to manage currency exposures for transactions denominated in a currency other than an entity's functional currency. As a result, the impact of foreign currency gains/losses recognized in earnings are partially offset by gains/losses on the related foreign currency forward exchange contracts in the same reporting period.

On October 1, 2018, the Company entered into cross-currency swap agreements designated as net investment hedges to partially offset the effects of foreign currency translation on foreign subsidiaries. The total notional amount of our instruments designated as net investment hedges at September 30, 2019 were $354.5 million and GBP 128.3 million. Under the terms of

these contracts, which have been designated as net investment hedges, we will make interest payments in GBP and receive interest in U.S. dollars and GBP. Upon the maturity of these contracts, the Company will pay the notional amounts in EUR, GBP and CHF and receive U.S. dollars and GBP from the counterparties.

On October 2, 2017, we entered into cross currency swap agreements to convert a notional amount of $300.0 million equivalent to 291.2 million of Swiss Franc denominated intercompany loans into U.S. dollars. The CHF denominated intercompany loans were the result of the purchase of intellectual property by a subsidiary in Switzerland as part of the Codman Acquisition. The objective of these cross-currency swaps is to reduce volatility of earnings and cash flows associated with changes in the foreign currency exchange rate. Under the terms of these contracts, which have been designated as cash flow hedges, we will make interest payments in CHF and receive interest in U.S. dollars. Upon the maturity of these contracts, the Company will pay the principal amount of the loans in Swiss Francs and receive U.S. dollars from the counterparties.

During the nine month period ended September 30, 2019, the Company settled a cross-currency swap designated as a cash flow hedge of an intercompany loan with an aggregate notional amount of $33.3 million. The original termination date was October 2, 2020, however, as the intercompany loan settlement was consummated, the cross-currency swap was settled simultaneously. As a result of the settlement, the Company recorded a loss of $0.4 million in other income, net in the consolidated statement of operations.

The total notional amount of our cross-currency swap agreements designated as cash flow hedges at September 30, 2019 were $266.7 million.

We maintain written policies and procedures governing our risk management activities. With respect to cash flow hedges, changes in cash flows attributable to hedged transactions are generally expected to be completely offset by changes in the fair value of hedge instruments. Consequently, foreign currency exchange contracts would not subject us to material risk resulting from exchange rate movements, because gains and losses on these contracts offset gains and losses on the assets, liabilities or transactions being hedged.

The results of operations discussed herein have not been materially affected by inflation.

Interest Rate Risk

Cash and Cash Equivalents - We are exposed to the risk of interest rate fluctuations on the interest income earned on our cash and cash equivalents. A hypothetical 100 basis point movement in interest rates applicable to our cash and cash equivalents outstanding at September 30, 2019 would increase interest income by approximately $2.1 million on an annual basis. No significant decrease in interest income would be expected as our cash balances are earning interest at rates of approximately one basis point. We are subject to foreign currency exchange risk with respect to cash balances maintained in foreign currencies.

Debt - Our interest rate risk relates primarily to U.S. dollar LIBOR-indexed borrowings. We use interest rate derivative instruments to manage our earnings and cash flow exposure to changes in interest rates. These interest rate swaps fix the interest rate on a portion of our expected LIBOR-indexed floating-rate borrowings. See Note 7, *Derivative Instruments*, for the details of interest rate swaps.

The total notional amount of interest rate swaps in effect as of September 30, 2019 was $900 million. Based on our outstanding borrowings as of September 30, 2019, a 100 basis points change in interest rates would have impacted interest expense on the unhedged portion of the debt by $5.3 million on an annualized basis.

ITEM 4. CONTROLS AND PROCEDURES

Evaluation of Disclosure Controls and Procedures

We maintain disclosure controls and procedures that are designed to provide reasonable assurance that information required to be disclosed in our Exchange Act report is recorded, processed, summarized and reported within the time periods specified in the Securities and Exchange Commission's rules and forms and that such information is accumulated and communicated to our management, including our principal executive officer and principal financial officer, as appropriate, to allow timely decisions regarding required disclosure. Disclosure controls and procedures, no matter how well designed and operated, can provide only reasonable assurance of achieving the desired control objectives, and management is required to apply its judgment in evaluating the cost-benefit relationship of possible controls and procedures. Management has designed our disclosure controls and procedures to provide reasonable assurance of achieving the desired control objectives.

As required by Exchange Act Rule 13a-15(b), we have carried out an evaluation, under the supervision and with the participation of our management, including our principal executive officer and principal financial officer, of the effectiveness of the design and operation of our disclosure controls and procedures as of September 30, 2019. Based upon this evaluation, our principal executive officer and principal financial officer concluded that our disclosure controls and procedures were effective as of September 30, 2019 to provide such reasonable assurance.

Changes in Internal Control Over Financial Reporting

There were no changes in our internal control over financial reporting (as defined in Rule 13a-15(f) under the Exchange Act) that occurred during the quarter ended September 30, 2019 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

In response to business integration activities, the Company has and will continue to further align and streamline the design and operation of the financial control environment to be responsive to the changing business model.

PART II. OTHER INFORMATION

ITEM 1. LEGAL PROCEEDINGS

The Company is subject to various claims, lawsuits and proceedings in the ordinary course of the Company's business, including claims by current or former employees, distributors and competitors and with respect to its products and product liability claims, lawsuits and proceedings, some of which have been settled by the Company. In the opinion of management, such claims are either adequately covered by insurance or otherwise indemnified, or are not expected, individually or in the aggregate, to result in a material adverse effect on our financial condition. However, it is possible that the Company's results of operations, financial position and cash flows in a particular period could be materially affected by these contingencies.

BioD

On April 7, 2017, the Company's indirect wholly-owned subsidiary, BioD filed an action in the Superior Court of New Jersey, Chancery Division, Middlesex County seeking a declaration that the resignation of Russell Olsen, the former CEO of BioD, was “for Good Reason” (as defined in Olsen’s employment agreement); a finding that Olsen breached the implied covenant of good faith and fair dealing, committed legal fraud, equitable fraud and negligent misrepresentation; and an award of damages for such actions, including a return of severance fees paid to Olsen. BioD was acquired in August 2016 by Derma Sciences, which Integra subsequently acquired in February 2017. After receiving a job offer from Integra that Olsen believed materially diminished his title and authority, on February 24, 2017 Olsen indicated his intention to terminate his position with BioD for Good Reason, as otherwise permitted by his employment agreement with BioD. Shortly thereafter, Cynthia Weatherly (as representative of the former equity owners of BioD) claimed in a letter to Derma Sciences that Olsen’s resignation was a “termination Without Cause” (as also defined in Olsen’s employment agreement), which would arguably trigger an acceleration of the earn out under a merger agreement between Derma Sciences, BioD and other parties (the "BioD Merger Agreement"), which was entered into in July 2016, and require, as a result, the acceleration of the payment of $26.5 million by BioD. Integra assumed this contingent liability in connection with its acquisition of Derma Sciences. The action for a declaratory judgment was filed to clarify that Olsen’s termination was for Good Reason and not Without Cause. If the employment agreement was terminated for Good Reason, then the Company believes that the earn out provision under the BioD Merger Agreement should not be accelerated.

The Company accrues for loss contingencies when it is deemed probable that a loss has been incurred and that loss is estimable. The amounts accrued are based on the full amount of the estimated loss before considering insurance proceeds, and do not include an estimate for legal fees expected to be incurred in connection with the loss contingency. The Company consistently accrues legal fees expected to be incurred in connection with loss contingencies as those fees are incurred by outside counsel as a period cost.

ITEM 1A. RISK FACTORS

There have been no material changes in the Company's risk factors included in our Annual Report on Form 10-K for the fiscal year ended December 31, 2018.

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

There were no repurchases of our common stock under the repurchase program during the nine months ended September 30, 2019.

ITEM 4. MINE SAFETY DISCLOSURES

Not applicable.

ITEM 5. OTHER INFORMATION

None.

ITEM 6. EXHIBITS

Reference is hereby made to the Exhibit Index on page 45.

SIGNATURES

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

INTEGRA LIFESCIENCES HOLDINGS CORPORATION

Date:	October 25, 2019	/s/ Peter J. Arduini Peter J. Arduini President and Chief Executive Officer (Principal Executive Officer)
Date:	October 25, 2019	/s/ Carrie L. Anderson Carrie L. Anderson Corporate Vice President and Chief Financial Officer (Principal Financial Officer)
Date:	October 25, 2019	/s/ Jeffrey A. Mosebrook Jeffrey A. Mosebrook Vice President, Corporate Controller (Principal Accounting Officer)

Exhibits

*31.1	Certification of Principal Executive Officer Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
*31.2	Certification of Principal Financial Officer Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
*32.1	Certification of Principal Executive Officer Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002
*32.2	Certification of Principal Financial Officer Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002
*†101.INS	XBRL Instance Document - the instance document does not appear in the Interactive Data File because its XBRL tags are embedded within the Inline XBRL document.
*†101.SCH	XBRL Taxonomy Extension Schema Document
*†101.CAL	XBRL Taxonomy Extension Calculation Linkbase Document
*†101.DEF	XBRL Definition Linkbase Document
*†101.LAB	XBRL Taxonomy Extension Labels Linkbase Document
*†101.PRE	XBRL Taxonomy Extension Presentation Linkbase Document

* Filed herewith

† The financial information of Integra LifeSciences Holdings Corporation Quarterly Report on Form 10-Q for the quarter ended September 30, 2019 filed on October 25, 2019 formatted in XBRL (Extensible Business Reporting Language): (i) the Condensed Consolidated Statements of Operations and Comprehensive Income, (ii) the Condensed Consolidated Balance Sheets, (iii) Parenthetical Data to the Condensed Consolidated Balance Sheets, (iv) the Condensed Consolidated Statements of Cash Flows, and (v) Notes to Condensed Consolidated Financial Statements, is furnished electronically herewith.

Exhibit 31.1

Certification of Principal Executive Officer
Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002

I, Peter J. Arduini, certify that:

1. I have reviewed this quarterly report on Form 10-Q of Integra LifeSciences Holdings Corporation;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and we 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 and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
    (a) all significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
    (b) any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: October 25, 2019

/s/ Peter J. Arduini

Peter J. Arduini

President and Chief Executive Officer

Exhibit 31.2

Certification of Principal Financial Officer
Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002

I, Carrie L. Anderson, certify that:

1. I have reviewed this quarterly report on Form 10-Q of Integra LifeSciences Holdings Corporation;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and we 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 and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
    (a) all significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
    (b) any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: October 25, 2019

/s/ Carrie L. Anderson

Carrie L. Anderson

Corporate Vice President and Chief Financial Officer

Exhibit 32.1

Certification of Principal Executive Officer
Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002

I, Peter J. Arduini, President and Chief Executive Officer of Integra LifeSciences Holdings Corporation (the "Company"), hereby certify that, to my knowledge:

1. The Quarterly Report on Form 10-Q of the Company for the quarter endedSeptember 30, 2019 (the "Report") fully complies with the requirement of Section 13(a) or Section 15(d), as applicable, 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.

Date: October 25, 2019

/s/ Peter J. Arduini

Peter J. Arduini

President and Chief Executive Officer

Exhibit 32.2

Certification of Principal Financial Officer
Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002

I, Carrie L. Anderson, Corporate Vice President and Chief Financial Officer of Integra LifeSciences Holdings Corporation (the "Company"), hereby certify that, to my knowledge:

1. The Quarterly Report on Form 10-Q of the Company for the quarter endedSeptember 30, 2019 (the "Report") fully complies with the requirement of Section 13(a) or Section 15(d), as applicable, 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.

Date: October 25, 2019

/s/ Carrie L. Anderson

Carrie L. Anderson

Corporate Vice President and Chief Financial Officer