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

Form 10-Q

(Mark One)

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

For the quarterly period ended June 30, 2019

OR

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

For the transition period from to

Commission File Number: 000-50744

NUVASIVE, INC.
(Exact name of registrant as specified in its charter)

Delaware	**33-0768598**
(State or other jurisdiction of incorporation or organization)	(I.R.S. Employer Identification No.)

7475 Lusk Boulevard
San Diego, CA 92121
(Address of principal executive offices)

(858) 909-1800
(Registrant's telephone number, including area code)

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

Title of each class	Trading Symbol(s)	Name of each exchange on which registered
Common Stock, par value $0.001 per share	NUVA	The NASDAQ Stock Market LLC (NASDAQ Global Select Market)

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 than the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes ☒ No ☐

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

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

Large accelerated filer	☒	Accelerated filer	☐
Non-accelerated filer	☐	Smaller reporting company	☐
		Emerging growth company	☐

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

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

As of July 26, 2019 there were 52,045,996 shares of the registrant's common stock (par value $0.001 per share) outstanding.

NuVasive, Inc.

Quarterly Report on Form 10-Q

June 30, 2019

PART I. FINANCIAL INFORMATION

Item 1. ***Financial Statements***

NUVASIVE, INC.

CONSOLIDATED BALANCE SHEETS
(in thousands, except par values and share amounts)

	June 30, 2019	December 31, 2018
ASSETS	(Unaudited)	
Current assets:		
Cash and cash equivalents	$ 128,377	$ 117,840
Accounts receivable, net of allowances of $16,400 and $16,171, respectively	207,992	196,487
Inventory, net	297,136	273,244
Prepaid income taxes	16,188	16,905
Prepaid expenses and other current assets	14,617	13,733
Total current assets	664,310	618,209
Property and equipment, net	257,438	238,841
Intangible assets, net	227,545	252,048
Goodwill	561,420	561,366
Operating lease right-of-use assets	62,424	—
Deferred tax assets	4,885	5,263
Restricted cash and investments	2,394	2,395
Other assets	24,894	29,737
Total assets	$ 1,805,310	$ 1,707,859
LIABILITIES AND EQUITY		
Current liabilities:		
Accounts payable and accrued liabilities	$ 105,710	$ 105,877
Contingent consideration liabilities	7,892	7,560
Accrued payroll and related expenses	58,492	59,960
Operating lease liabilities	6,471	—
Litigation liabilities	3,250	1,415
Income tax liabilities	2,823	4,648
Total current liabilities	184,638	179,460
Senior convertible notes	612,762	602,526
Deferred and income tax liabilities	10,269	4,964
Operating lease liabilities	67,753	—
Other long-term liabilities	67,164	86,384
Commitments and contingencies		
Stockholders' equity:		
Preferred stock, $0.001 par value; 5,000,000 shares authorized, none outstanding	—	—
Common stock, $0.001 par value; 120,000,000 shares authorized at June 30, 2019 and December 31, 2018, 57,357,083 and 56,648,077 issued and outstanding at June 30, 2019 and December 31, 2018, respectively	62	61
Additional paid-in capital	1,413,934	1,397,829
Accumulated other comprehensive loss	(8,552)	(8,628)
Retained earnings	41,589	17,241
Treasury stock at cost; 5,327,656 shares and 5,116,496 shares at June 30, 2019 and December 31, 2018, respectively	(584,309)	(571,978)
Total equity	862,724	834,525
Total liabilities and equity	$ 1,805,310	$ 1,707,859

See accompanying Notes to Unaudited Consolidated Financial Statements.

NUVASIVE, INC.

CONSOLIDATED STATEMENTS OF OPERATIONS
(in thousands, except per share amounts)

(unaudited)	Three Months Ended June 30, 2019	Three Months Ended June 30, 2018	Six Months Ended June 30, 2019	Six Months Ended June 30, 2018
Revenue				
Product revenue	$ 261,381	$ 252,687	$ 505,204	$ 486,202
Service revenue	30,724	28,877	61,677	55,884
Total revenue	292,105	281,564	566,881	542,086
Cost of revenue (excluding below amortization of intangible assets)				
Cost of products sold	57,613	58,202	112,099	113,393
Cost of services	19,966	18,854	39,974	37,477
Total cost of revenue	77,579	77,056	152,073	150,870
Gross profit	214,526	204,508	414,808	391,216
Operating expenses:				
Sales, marketing and administrative	152,853	145,658	297,929	292,424
Research and development	17,553	14,856	35,128	29,347
Amortization of intangible assets	12,277	12,628	25,902	25,053
Litigation liability (gain) loss	—	(1,195)	—	27,800
Business transition costs	1,646	3,998	5,479	6,251
Total operating expenses	184,329	175,945	364,438	380,875
Interest and other expense, net:				
Interest income	327	116	736	250
Interest expense	(9,650)	(9,956)	(19,163)	(19,423)
Other income (expense), net	9	(2,379)	(357)	(12,082)
Total interest and other expense, net	(9,314)	(12,219)	(18,784)	(31,255)
Income (loss) before income taxes	20,883	16,344	31,586	(20,914)
Income tax (expense) benefit	(5,921)	(4,813)	(7,238)	5,313
Consolidated net income (loss)	$ 14,962	$ 11,531	$ 24,348	$ (15,601)
Net income (loss) per share:				
Basic	$ 0.29	$ 0.22	$ 0.47	$ (0.30)
Diluted	$ 0.29	$ 0.22	$ 0.46	$ (0.30)
Weighted average shares outstanding:				
Basic	51,967	51,356	51,822	51,292
Diluted	52,460	51,956	52,471	51,292

See accompanying Notes to Unaudited Consolidated Financial Statements.

NUVASIVE, INC.

CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME (LOSS)
(in thousands)

(unaudited)	Three Months Ended June 30,		Six Months Ended June 30,	
	2019	2018	2019	2018
Consolidated net income (loss)	$ 14,962	$ 11,531	$ 24,348	$ (15,601)
Other comprehensive income (loss):				
Translation adjustments, net of tax	570	(4,522)	76	(1,943)
Other comprehensive income (loss)	570	(4,522)	76	(1,943)
Total consolidated comprehensive income (loss)	$ 15,532	$ 7,009	$ 24,424	$ (17,544)

See accompanying Notes to Unaudited Consolidated Financial Statements.

NUVASIVE, INC.
CONSOLIDATED STATEMENTS OF EQUITY
(in thousands)

(unaudited)	Common Stock Shares	Common Stock Amount	Additional Paid-in Capital	Accumulated Other Comprehensive Loss	Retained Earnings	Treasury Stock Shares	Treasury Stock Amount	Total Stockholders' Equity
Balance at December 31, 2018	56,648	$ 61	$1,397,829	$ (8,628)	$ 17,241	(5,116)	$ (571,978)	$ 834,525
Issuance of common stock under employee and director equity option and purchase plans	399	—	202	—	—	(146)	(8,379)	(8,177)
Stock-based compensation expense	—	—	4,766	—	—	—	—	4,766
Issuance of common stock in connection with royalty milestone achievement	72	—	—	—	—	—	—	—
Consolidated net income	—	—	—	—	9,386	—	—	9,386
Other comprehensive loss	—	—	—	(494)	—	—	—	(494)
Balance at March 31, 2019	57,119	$ 61	$1,402,797	$ (9,122)	$ 26,627	(5,262)	$ (580,357)	$ 840,006
Issuance of common stock under employee and director equity option and purchase plans	238	1	4,315	—	—	(66)	(3,952)	364
Stock-based compensation expense	—	—	6,822	—	—	—	—	6,822
Consolidated net income	—	—	—	—	14,962	—	—	14,962
Other comprehensive income	—	—	—	570	—	—	—	570
Balance at June 30, 2019	57,357	$ 62	$1,413,934	$ (8,552)	$ 41,589	(5,328)	$ (584,309)	$ 862,724

See accompanying Notes to Unaudited Consolidated Financial Statements.

NUVASIVE, INC.
CONSOLIDATED STATEMENTS OF EQUITY – (Continued)
(in thousands)

(unaudited)	Common Stock Shares	Common Stock Amount	Additional Paid-in Capital	Accumulated Other Comprehensive Loss	Retained Earnings (Accumulated Deficit)	Treasury Stock Shares	Treasury Stock Amount	Total NuVasive, Inc. Stockholders' Equity	Non-Controlling Interests	Total Equity
Balance at December 31, 2017	56,164	$ 60	$1,363,549	$ (6,933)	$ 4,762	(5,002)	$(565,867)	$ 795,571	$ 3,845	$799,416
Issuance of common stock under employee and director equity option and purchase plans	172	—	2,012	—	—	(76)	(3,833)	(1,821)	—	(1,821)
Stock-based compensation expense	—	—	5,419	—	—	—	—	5,419	—	5,419
Consolidated net loss	—	—	—	—	(27,132)	—	—	(27,132)	—	(27,132)
Consideration paid in excess of non-controlling interests	—	—	(12,221)	—	—	—	—	(12,221)	—	(12,221)
Non-controlling interests	—	—	—	—	—	—	—	—	(3,845)	(3,845)
Other comprehensive income	—	—	—	2,579	—	—	—	2,579	—	2,579
Balance at March 31, 2018	56,336	$ 60	$1,358,759	$ (4,354)	$ (22,370)	(5,078)	$(569,700)	$ 762,395	$ —	$762,395
Issuance of common stock under employee and director equity option and purchase plans	176	1	5,830	—	—	(17)	(920)	4,911	—	4,911
Stock-based compensation expense	—	—	6,847	—	—	—	—	6,847	—	6,847
Consolidated net income	—	—	—	—	11,531	—	—	11,531	—	11,531
Other comprehensive loss	—	—	—	(4,522)	—	—	—	(4,522)	—	(4,522)
Balance at June 30, 2018	56,512	$ 61	$1,371,436	$ (8,876)	$ (10,839)	(5,095)	$(570,620)	$ 781,162	$ —	$781,162

See accompanying Notes to Unaudited Consolidated Financial Statements.

NUVASIVE, INC.

CONSOLIDATED STATEMENTS OF CASH FLOWS
(in thousands)

(unaudited)	Six Months Ended June 30, 2019	2018
Operating activities:		
Consolidated net income (loss)	$ 24,348	$ (15,601)
Adjustments to reconcile net income (loss) to net cash provided by operating activities:		
Depreciation and amortization	67,614	64,151
Impairment of strategic investment	—	9,004
Amortization of non-cash interest	10,494	9,920
Stock-based compensation	12,618	10,994
Reserves on current assets	8,267	9,444
Other non-cash adjustments	4,329	12,133
Deferred income taxes	5,721	(6,593)
Changes in operating assets and liabilities, net of effects from acquisitions:		
Accounts receivable	(11,602)	852
Inventory	(31,856)	(19,615)
Prepaid expenses and other current assets	(2,811)	(2,141)
Accounts payable and accrued liabilities	9,301	8,931
Accrued payroll and related expenses	(3,699)	(6,358)
Litigation liability	1,835	2,150
Income taxes	(1,128)	(53)
Net cash provided by operating activities	93,431	77,218
Investing activities:		
Acquisitions and investments	(4,100)	(52,081)
Purchases of intangible assets	(6,827)	(7,682)
Purchases of property and equipment	(65,385)	(53,388)
Net cash used in investing activities	(76,312)	(113,151)
Financing activities:		
Proceeds from the issuance of common stock	3,888	5,312
Purchases of treasury stock	(11,702)	(2,222)
Payment of contingent consideration	(809)	(8,900)
Proceeds from revolving line of credit	—	100,000
Repayments on revolving line of credit	—	(63,000)
Other financing activities	1,769	(146)
Net cash (used in) provided by financing activities	(6,854)	31,044
Effect of exchange rate changes on cash	271	(837)
Increase (decrease) in cash, cash equivalents and restricted cash	10,536	(5,726)
Cash, cash equivalents and restricted cash at beginning of period	120,235	78,198
Cash, cash equivalents and restricted cash at end of period	$ 130,771	$ 72,472

The following table provides a reconciliation of cash, cash equivalents and restricted cash reported on our Unaudited Consolidated Statements of Cash Flows for the periods presented:

	Six Months Ended June 30, 2019	2018
Cash and cash equivalents	$ 128,377	$ 70,078
Restricted cash	2,394	2,394
Total cash, cash equivalents and restricted cash shown in the Unaudited Consolidated Statement of Cash Flows	$ 130,771	$ 72,472

See accompanying Notes to Unaudited Consolidated Financial Statements.

NUVASIVE, INC.

NOTES TO UNAUDITED CONSOLIDATED FINANCIAL STATEMENTS

1. Description of Business and Basis of Presentation

Description of Business

NuVasive, Inc. (the "Company" or "NuVasive") was incorporated in Delaware on July 21, 1997, and began commercializing its products in 2001. The Company's principal product offering includes a minimally disruptive surgical platform called Maximum Access Surgery, or MAS. The MAS platform combines three categories of solutions that collectively minimize soft tissue disruption during spine fusion surgery, provide maximum visualization and are designed to enable safe and reproducible outcomes for the surgeon and the patient. The platform includes the Company's proprietary software-driven nerve detection and avoidance systems and Intraoperative Monitoring ("IOM") services and support; MaXcess, an integrated split-blade retractor system; and a wide variety of specialized implants and biologics. To assist with surgical procedures, the Company offers a technology platform called Integrated Global Alignment ("iGA"); in which products and computer assisted technology under the MAS platform help achieve more precise spinal alignment. The individual components of the MAS platform, and many of the Company's products, can also be used in open or traditional spine surgery. The Company continues to focus research and development efforts to expand its MAS product platform and advance the applications of its unique technology into procedurally-integrated surgical solutions. The Company dedicates significant resources toward training spine surgeons on its unique technology and products.

The Company's procedurally integrated solutions use innovative, technological advancements and the MAS platform to provide surgical efficiency, operative reliability, and procedural versatility. The Company offers a range of implants for spinal surgery, which include its porous titanium and polyetheretherketone ("PEEK") implants under its Advanced Materials Science portfolio, fixation devices such as customizable rods, plates and screws, bone allograft in patented saline packaging, allogeneic and synthetic biologics, and disposables used in IOM. The Company makes available MAS instrument sets, MaXcess and neuromonitoring systems to hospitals to facilitate surgeon access to the spine to perform restorative and fusion procedures using the Company's implants and fixation devices. The Company sells MAS instrument sets, MaXcess and neuromonitoring systems to hospitals, however, such sales are immaterial to the Company's results of operations.

The Company also designs and sells expandable growing rod implant systems that can be non-invasively lengthened following implantation with precise, incremental adjustments via an external remote controller using magnetic technology called MAGnetic External Control, or MAGEC, which allows for the minimally invasive treatment of early-onset and adolescent scoliosis. This technology is also the basis for the Company's Precice limb lengthening system, which allows for the correction of long bone limb length discrepancy, as well as enhanced bone healing in patients that have experienced traumatic injury.

In July 2019, the Company commercially launched Pulse, a combined hardware and software technology platform designed to achieve surgical efficiencies via real-time feedback to aid in clinical decision-making and to optimize the procedural workflow in the operating room. Pulse integrates multiple enabling technologies within a single, expandable platform and is engineered to improve workflow, reduce variability, and increase the reproducibility of surgical outcomes. The Pulse platform's modular architecture incorporates applications for neuromonitoring, iGA surgical planning, patient-specific rod bending, smart imaging with LessRay radiation reduction, 2D and 3D imaging navigation, and integration with robotics and other smart tools. Some of the applications are still in development.

The Company intends to continue development on a wide variety of projects intended to broaden its MAS and other product platforms and advance the applications of its unique technology into procedurally integrated surgical solutions that improve clinical and economic outcomes. Additionally, the Company intends to continue the pursuit of business and technology acquisition targets and strategic relationships.

Basis of Presentation and Principles of Consolidation

The accompanying Unaudited Consolidated Financial Statements include the accounts of the Company and its majority-owned or controlled subsidiaries, collectively referred to as either NuVasive or the Company. The Company translates the financial statements of its foreign subsidiaries using end-of-period exchange rates for assets and liabilities and average exchange rates during each reporting period for results of operations. When there is a portion of equity in an acquired subsidiary not attributable, directly or indirectly, to the respective parent entity, the Company records the fair value of the non-controlling interest at the acquisition date and classifies the amounts attributable to non-controlling interest separately in equity in the Company's Consolidated Financial Statements. Any subsequent changes in a parent's ownership interest while the parent retains its controlling financial interest in its subsidiary are accounted for as equity transactions. All significant intercompany balances and transactions have been eliminated in consolidation.

The accompanying Unaudited Consolidated Financial Statements have been prepared pursuant to the rules and regulations of the Securities and Exchange Commission (the "SEC"). Pursuant to these rules and regulations, the Company has condensed or omitted certain information and footnote disclosures it normally includes in its annual Consolidated Financial Statements prepared in accordance with generally accepted accounting principles in the United States ("GAAP"). Operating results for the three and six months ended June 30, 2019 are not necessarily indicative of the results that may be expected for any other interim period or for the full year. These Unaudited Consolidated Financial Statements should be read in conjunction with the audited Consolidated Financial Statements and notes thereto for the year ended December 31, 2018 included in the Company's Annual Report on Form 10-K filed with the SEC. In the opinion of management, the Unaudited Consolidated Financial Statements and notes thereto include all adjustments that are of a normal and recurring nature that are necessary for the fair presentation of the Company's financial position and of the results of operations and cash flows for the periods presented.

Use of Estimates

To prepare financial statements in conformity with GAAP, management must make estimates and assumptions that affect the amounts reported in the financial statements and accompanying notes. Actual results could differ from those estimates.

Recent Accounting Pronouncements Not Yet Adopted

In June 2016, the Financial Accounting Standards Board ("FASB") issued Accounting Standards Update No. 2016-13, *Financial Instruments – Credit Losses*, which changes the accounting for recognizing impairments of financial assets. Under the new guidance, credit losses for certain types of financial instruments will be estimated based on expected losses. The new guidance also modifies the impairment models for available-for-sale debt securities and for purchased financial assets with credit deterioration since their origination. This update is effective for annual periods beginning after December 15, 2019, and interim periods within those periods, and early adoption is permitted. The Company believes the adoption will modify the way the Company analyzes financial instruments, but it does not anticipate a material impact to its results of operations. The Company is in the process of determining the effects the adoption will have on its Consolidated Financial Statements as well as whether to early adopt the new guidance.

In January 2017, the FASB issued Accounting Standards Update No. 2017-04, *Intangibles – Goodwill and Other*, which eliminates the requirement to calculate the implied fair value of goodwill to measure a goodwill impairment charge. Instead, entities will record an impairment charge based on the excess of a reporting unit's carrying amount over its fair value. This update is effective for annual periods beginning after December 15, 2019, and interim periods within those periods, and early adoption is permitted. The Company is in the process of determining the effects the adoption will have on its Consolidated Financial Statements as well as whether to early adopt the new guidance.

In August 2018, the FASB issued Accounting Standards Update No. 2018-13, *Fair Value Measurement: Disclosure Framework – Changes to the Disclosure Requirements for Fair Value Measurement*, which adds and modifies certain disclosure requirements for fair value measurements. Under the new guidance, entities will no longer be required to disclose the amount of and reasons for transfers between Level 1 and Level 2 of the fair value hierarchy, or valuation processes for Level 3 fair value measurements. However, public companies will be required to disclose the range and weighted average of significant unobservable inputs used to develop Level 3 fair value measurements, and related changes in unrealized gains and losses included in other comprehensive income. This update is effective for annual periods beginning after December 15, 2019, and interim periods within those periods, and early adoption is permitted. The Company is in the process of determining the impact the adoption will have on its Consolidated Financial Statements as well as whether to early adopt the new guidance.

In September 2018, the FASB issued Accounting Standards Update No. 2018-15, *Intangible – Goodwill and Other – Internal-Use Software*, which requires a customer in a cloud computing arrangement to determine which implementation costs to capitalize as assets or expense as incurred. Under the new guidance, capitalized implementation costs related to a hosting arrangement that is a service contract will be amortized over the term of the hosting arrangement, beginning when the module or component of the hosting arrangement is ready for its intended use. This update is effective for annual periods beginning after December 15, 2019, and interim periods within those periods, and early adoption is permitted. The Company is in the process of determining the impact the adoption will have on its Consolidated Financial Statements as well as whether to early adopt the new guidance.

Recently Adopted Accounting Standards

In February 2016, the FASB issued Accounting Standards Update No. 2016-02 – *Leases*, which introduced a new comprehensive lease accounting model. The standard effectively replaces Accounting Standards Codification 840 with Accounting Standards Codification 842 ("ASC 842"). In summary, the changes to the guidance for lease accounting under ASC 842 requires lessees to recognize right-of-use assets and corresponding lease liabilities for all leases with lease terms of greater than twelve months on the Consolidated Balance Sheet. It also changes the definition of a lease and expands the disclosure requirements of lease arrangements.

The Company adopted ASC 842 as of January 1, 2019, electing the optional transition method that allows for a cumulative-effect adjustment in the period of adoption and did not restate prior periods. The Company elected the package of practical expedients permitted under the transition guidance. As a result of the adoption, the Company recorded right-of-use assets and liabilities of $62.8 million and $75.1 million, respectively, and their corresponding deferred tax assets and liabilities on its Unaudited Consolidated Balance Sheet. The adoption had no cumulative impact to retained earnings. See Note 10 to the Unaudited Consolidated Financial Statements for further discussion on leases.

In July 2017, the FASB issued Accounting Standards Update No. 2017-11, *Earnings Per Share, Distinguishing Liabilities from Equity, Derivatives and Hedging* ("ASU 2017-11"), which changes the accounting treatment and the earnings per share calculation for certain instruments with down round features. The amendments in this update are to be applied using a cumulative-effect adjustment as of the beginning of the fiscal year of adoption or retrospective adjustment to each period presented. The Company adopted ASU 2017-11 as of January 1, 2019. The adoption did not have any significant impact on the Company's Unaudited Consolidated Financial Statements.

In August 2017, the FASB issued Accounting Standards Update No. 2017-12, *Derivatives and Hedging* ("ASU 2017-12"), which is intended to more closely align hedge accounting with companies' risk management strategies, simplify the application of hedge accounting and increase transparency as to the scope and results of hedging programs. The amendments in this update are to be applied using a cumulative-effect adjustment as of the beginning of the fiscal year of adoption. The Company adopted ASU 2017-12 as of January 1, 2019. The adoption did not have any significant impact on its Unaudited Consolidated Financial Statements.

Revenue Recognition

In accordance with Accounting Standards Codification 606 *Revenue from Contracts with Customers* ("ASC 606"), the Company recognizes revenue upon the transfer of goods or services to a customer at an amount that reflects the expected consideration to be received in exchange for those goods or services. The principles in ASC 606 are applied using the following five steps: (i) identify the contract with a customer; (ii) identify the performance obligation(s) in the contract; (iii) determine the transaction price; (iv) allocate the transaction price to the performance obligation(s) in the contract; and (v) recognize revenue when (or as) the Company satisfies its performance obligation(s). Specifically, revenue from the sale of implants and disposables is generally recognized at an amount that reflects the expected consideration upon notice that the Company's products have been used in a surgical procedure or upon shipment to a third-party customer assuming control of the products. Revenue from neuromonitoring services is recognized in the period the service is performed for the amount of consideration expected to be received. Revenue from the sale of surgical instrument sets is generally recognized upon receipt of a purchase order and the subsequent shipment to a customer who assumes control. In certain cases, the Company does offer the ability for customers to lease surgical instrumentation primarily on a non-sales type basis. Revenue from the sale or lease of combined hardware and software technology platforms is generally recognized following the execution of a contract and upon the installation of the platform and the acceptance by the customer. Revenue from sales and leases of surgical instrument sets and technology platforms represent an immaterial amount of the Company's total revenue in all periods presented. Revenue associated with products holding rights of return or trade-in are recognized when the Company concludes there is not a risk of significant revenue reversal in future periods for the expected consideration in the transaction. Costs incurred by the Company associated with sales contracts with customers are deferred over the performance obligation period and recognized in the same period as the related revenue, with the exception of contracts that complete within one year or less, in which case the associated costs are expensed as incurred.

Inventory

Net inventory as of June 30, 2019 consisted of $280.3 million of finished goods, $9.8 million of work in progress and $7.0 million of raw materials. Net inventory as of December 31, 2018 consisted of $259.4 million of finished goods, $5.0 million of work in progress and $8.8 million of raw materials.

Finished goods primarily consists of specialized implants and disposables and are stated at the lower of cost or market determined by utilizing a standard cost method, which includes capitalized variances, which approximates the weighted average cost. Work in progress and raw materials represent the underlying material, and labor for work in progress, that ultimately yield finished goods upon completion and are subject to lower of cost or market. The Company reviews the components of its inventory on a periodic basis for excess and obsolescence and adjusts inventory to its net realizable value as necessary.

Comprehensive Income

Comprehensive income is defined as the change in equity during a period from transactions and other events and circumstances from non-owner sources. Comprehensive income includes net of tax, unrealized gains or losses on the Company's marketable securities and foreign currency translation adjustments. The cumulative translation adjustment included in accumulated other comprehensive loss was $8.6 million at June 30, 2019 and December 31, 2018.

Product Shipment Costs

Product shipment costs, included in sales, marketing and administrative expense in the accompanying Unaudited Consolidated Statements of Operations, were $6.9 million and $13.3 million for the three and six months ended June 30, 2019, respectively, and $6.4 million and $12.3 million for the three and six months ended June 30, 2018, respectively. The majority of the Company's shipping costs are related to the distribution of surgical instrument sets, which are not typically sold as part of the Company's core sales offering. Amounts billed to customers for shipping and handling of products are reflected in revenues and are not material for any period presented.

Business Transition Costs

The Company incurs certain costs related to acquisition, integration and business transition activities, which include severance, relocation, consulting, leasehold exit costs, third-party merger and acquisition costs, contingent consideration fair value adjustments and other costs directly associated with such activities.

The Company incurred $1.6 million and $5.5 million of such costs during the three and six months ended June 30, 2019, respectively. For the three months ended June 30, 2019, such costs consisted primarily of fair value adjustments on contingent consideration liabilities associated with the Company's 2017 and 2016 acquisitions. For the six months ended June 30, 2019, such costs included acquisition, integration and business transition activities, as well as $2.0 million of fair value adjustments on contingent consideration liabilities associated with the Company's 2017 and 2016 acquisitions.

The Company incurred $4.0 million and $6.3 million of such costs during the three and six months ended June 30, 2018, respectively, which consisted primarily of acquisition, integration and business transition activities, as well as $0.6 million and $0.8 million, respectively, of fair value adjustments on contingent consideration liabilities associated with the Company's 2017 and 2016 acquisitions.

2. Net Income (Loss) Per Share

The following table sets forth the computation of basic and diluted consolidated net income (loss) per share:

	Three Months Ended June 30,		Six Months Ended June 30,	
(*in thousands, except per share data*)	2019	2018	2019	2018
Numerator:				
Net income (loss)	$ 14,962	$ 11,531	$ 24,348	$ (15,601)
Denominator for basic and diluted net income (loss) per share:				
Weighted average common shares outstanding for basic	51,967	51,356	51,822	51,292
Dilutive potential common stock outstanding:				—
Stock options and employee stock purchase plan	14	30	15	—
Restricted stock units	479	570	634	—
Weighted average common shares outstanding for diluted	52,460	51,956	52,471	51,292
Basic net income (loss) per share	$ 0.29	$ 0.22	$ 0.47	$ (0.30)
Diluted net income (loss) per share	$ 0.29	$ 0.22	$ 0.46	$ (0.30)

The following weighted-average outstanding common stock equivalents were not included in the calculation of net income (loss) per diluted share because their effects were anti-dilutive:

	Three Months Ended June 30,		Six Months Ended June 30,	
(*in thousands*)	2019	2018	2019	2018
Stock options, employee stock purchase plan, and restricted stock units	60	161	163	1,281
Warrants	10,865	10,865	10,865	10,865
Senior Convertible Notes	10,865	10,865	10,865	10,865
Total	21,790	21,891	21,893	23,011

3. Financial Instruments and Fair Value Measurements

Foreign Currency and Derivative Financial Instruments

The Company translates the financial statements of its foreign subsidiaries using end-of-period exchange rates for assets and liabilities and average exchange rates during each reporting period for results of operations.

Some of the Company's reporting entities conduct a portion of their business in currencies other than the entity's functional currency. These transactions give rise to receivables and payables that are denominated in currencies other than the entity's functional currency. The value of these receivables and payables is subject to changes in currency exchange rates from the point at which the transactions are originated until the settlement in cash. Both realized and unrealized gains and losses in the value of these receivables and payables are included in the determination of net income. Net currency exchange gains (losses), which include gains and losses from derivative instruments, were $0.1 million and $(0.2) million for the three and six months ended June 30, 2019, respectively, and $(2.2) million and $(2.5) million for the three and six months ended June 30, 2018, respectively, and are included in other income (expense), net in the Unaudited Consolidated Statements of Operations.

To manage foreign currency exposure risks, the Company uses derivatives for activities in entities that have short-term intercompany receivables and payables denominated in a currency other than the entity's functional currency. The fair value is based on a quoted market price (Level 1). As of June 30, 2019 and December 31, 2018 a notional principal amount of $33.1 million and $26.8 million, respectively, was outstanding to hedge currency risk relative to the Company's foreign receivables and payables. Derivative instrument net (losses) gains on the Company's forward exchange contracts were $(0.4) million and $(0.1) million for the three and six months ended June 30, 2019, respectively, and $0.7 million and $0.3 million for the three and six months ended June 30, 2018, respectively, and are included in other income (expense), net in the Unaudited Consolidated Statements of Operations. The fair value of the forward contract exchange derivative instrument asset (liability) was de minimis and $(0.3) million as of June 30, 2019 and December 31, 2018, respectively. The derivative instruments are recorded in other current assets or other current liabilities in the Unaudited Consolidated Balance Sheets commensurate with the nature of the instrument at period end.

Fair Value Measurements

The Company measures certain assets and liabilities in accordance with authoritative guidance which requires fair value measurements be classified and disclosed in one of the following three categories:

Level 1: Quoted prices (unadjusted) in active markets that are accessible at the measurement date for assets or liabilities.

Level 2: Observable prices that are based on inputs not quoted on active markets, but corroborated by market data.

Level 3: Unobservable inputs are used when little or no market data is available.

Assets and liabilities are classified based on the lowest level of input that is significant to the fair value measurements. The Company reviews the fair value hierarchy classification on a quarterly basis. Changes in the ability to observe valuation inputs may result in a reclassification of levels for certain assets or liabilities within the fair value hierarchy. The Company did not have any transfers of assets and liabilities between the levels of the fair value measurement hierarchy during the periods presented.

The fair values of the Company's assets and liabilities, including cash equivalents, marketable securities, restricted investments, derivatives, and contingent obligations are measured at fair value on a recurring basis. As of June 30, 2019 and December 31, 2018, the Company held investments in securities classified as cash equivalents. During the periods presented, the Company did not hold any investments that were in a significant unrealized loss position and no impairment charges were recorded. Realized gains and losses and interest income related to marketable securities were immaterial during all periods presented. Cash equivalents are determined under the fair value categories as follows:

(*in thousands*)	Total	Quoted Price in Active Market (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
June 30, 2019:				
Cash equivalents:				
Money market funds	$ 72,500	$ 72,500	$ —	$ —
Total cash equivalents	$ 72,500	$ 72,500	$ —	$ —
December 31, 2018:				
Cash equivalents:				
Money market funds	$ 56,000	$ 56,000	$ —	$ —
Total cash equivalents	$ 56,000	$ 56,000	$ —	$ —

The carrying amounts of certain financial instruments such as cash equivalents, accounts receivable, prepaid expenses, other current assets, accounts payable, accrued expenses, and other current liabilities as of June 30, 2019 and December 31, 2018 approximate their related fair values due to the short-term maturities of these instruments.

The fair value of certain financial instruments was measured and classified within Level 1 of the fair value hierarchy based on quoted prices. Certain financial instruments classified within Level 2 of the fair value hierarchy include the types of instruments that trade in markets that are not considered to be active, but are valued based on quoted market prices, broker or dealer quotations, or alternative pricing sources with reasonable levels of price transparency.

Fair Value of Senior Convertible Notes

The fair value, based on a quoted market price (Level 1), of the Company's outstanding Senior Convertible Notes due 2021 at June 30, 2019 and December 31, 2018, was $737.5 million and $684.8 million, respectively. See Note 6 to the Unaudited Consolidated Financial Statements for further discussion on the carrying value of the notes.

Contingent Consideration Liabilities

The fair value of contingent consideration liabilities assumed in business combinations is recorded as part of the purchase price consideration of the acquisition, and is determined using a discounted cash flow model or probability simulation model. The significant inputs of such models are not observable in the market, such as certain financial metric growth rates, volatility rates, projections associated with the applicable milestone, the interest rate, and the related probabilities and payment structure in the contingent consideration arrangement. Fair value adjustments to contingent consideration liabilities are recorded through operating expenses in the Unaudited Consolidated Statement of Operations. Contingent consideration arrangements assumed by an asset purchase will be measured and accrued when such contingency is resolved.

Contingent consideration liabilities were $50.9 million and $50.4 million as of June 30, 2019 and December 31, 2018, respectively, and were recorded in the Unaudited Consolidated Balance Sheet commensurate with the respective payment terms. The following table sets forth the changes in the estimated fair value of the Company's liabilities measured on a recurring basis using significant unobservable inputs (Level 3):

	Six Months Ended June 30,	
(*in thousands*)	**2019**	**2018**
Fair value measurement at beginning of period	$ 50,410	$ 67,941
Contingent consideration liability recorded upon acquisition	—	6,663
Change in fair value measurement	1,970	794
Changes resulting from foreign currency fluctuations	(59)	25
Contingent consideration paid or settled	(1,435)	(9,000)
Fair value measurement at end of period	$ 50,886	$ 66,423

Non-financial assets and liabilities measured on a nonrecurring basis

Certain non-financial assets and liabilities are measured at fair value, usually with Level 3 inputs including the discounted cash flow method or cost method, on a nonrecurring basis in accordance with authoritative guidance. These include items such as non-financial assets and liabilities initially measured at fair value in a business combination and non-financial long-lived assets measured at fair value for an impairment assessment. In general, non-financial assets, including goodwill, intangible assets and property and equipment, are measured at fair value when there is an indication of impairment and are recorded at fair value only when any impairment is recognized. The carrying values of the Company's financing lease obligations approximated their estimated fair value as of June 30, 2019 and December 31, 2018.

During the six months ended June 30, 2018, the Company recorded an impairment charge of $9.0 million on a strategic investment. The impairment was recorded in other income (expense), net in the Unaudited Consolidated Statement of Operations.

4. Goodwill and Intangible Assets

Goodwill and intangible assets consisted of the following:

(*in thousands, except years*) **June 30, 2019:**	Weighted-Average Amortization Period (in years)	Gross Amount	Accumulated Amortization	Intangible Assets, net
Intangible assets subject to amortization:				
Developed technology	8	$ 271,748	$ (147,594)	$ 124,154
Manufacturing know-how and trade secrets	13	30,809	(19,137)	11,672
Trade name and trademarks	9	25,500	(15,448)	10,052
Customer relationships	9	150,272	(68,605)	81,667
Total intangible assets subject to amortization	9	$ 478,329	$ (250,784)	$ 227,545
Intangible assets not subject to amortization:				
Goodwill				$ 561,420
Total goodwill and intangible assets, net				$ 788,965

December 31, 2018:	Weighted-Average Amortization Period (in years)	Gross Amount	Accumulated Amortization	Intangible Assets, net
Intangible assets subject to amortization:				
Developed technology	8	$ 271,748	$ (131,730)	$ 140,018
Manufacturing know-how and trade secrets	13	30,814	(17,926)	12,888
Trade name and trademarks	9	25,500	(13,901)	11,599
Customer relationships	9	147,021	(59,478)	87,543
Total intangible assets subject to amortization	9	$ 475,083	$ (223,035)	$ 252,048
Intangible assets not subject to amortization:				
Goodwill				$ 561,366
Total goodwill and intangible assets, net				$ 813,414

The following table summarizes the changes in the carrying value of the Company's goodwill:

(*in thousands*)	
December 31, 2018	
Gross goodwill	$ 569,666
Accumulated impairment loss	(8,300)
	561,366
Changes to gross goodwill	
Changes resulting from foreign currency fluctuations	54
	54
June 30, 2019	
Gross goodwill	569,720
Accumulated impairment loss	(8,300)
	$ 561,420

Total expense related to the amortization of intangible assets, which is recorded in both cost of revenue and operating expenses in the Unaudited Consolidated Statements of Operations depending on the functional nature of the intangible asset, was $13.2 million and $27.7 million for the three and six months ended June 30, 2019, respectively, and $13.5 million and $26.9 million for the three and six months ended June 30, 2018, respectively.

Total future amortization expense related to intangible assets subject to amortization at June 30, 2019 is set forth in the table below:

(*in thousands*)		
Remaining 2019	$	26,378
2020		52,190
2021		50,302
2022		41,353
2023		17,727
Thereafter through 2031		39,595
Total future amortization expense	$	227,545

5. Business Combinations

The Company recognizes the assets acquired, liabilities assumed, and any non-controlling interest at fair value at the date of acquisition. Certain acquisitions contained contingent consideration arrangements that required the Company to assess the acquisition date fair value of the contingent consideration liabilities, which was recorded as part of the purchase price allocation of the acquisition, with subsequent fair value adjustments to the contingent consideration recorded in the Unaudited Consolidated Statements of Operations. See Note 3 to the Unaudited Consolidated Financial Statements for further discussion on contingent consideration liabilities.

Acquisitions

The Company has completed acquisitions that were not considered material, individually or collectively, to the overall Unaudited Consolidated Financial Statements during the periods presented. These acquisitions have been included in the Unaudited Consolidated Financial Statements from the respective dates of acquisition. The Company does not believe that collectively the acquisitions made during the periods presented are material to the overall financial statements.

The Company finalizes the purchase price allocation of the assets and liabilities subject to valuation obtained in business combinations within one year from the acquisition date. While the Company does not expect material changes from the initial outcome of the valuation, certain assumptions and findings made at the date of acquisition could result in changes in the purchase price allocation.

Variable Interest Entities

The Company provides IOM services through various subsidiaries, which conduct business as NuVasive Clinical Services. In providing IOM services to surgeons and healthcare facilities across the United States, the Company maintains contractual relationships with several physician practices (“PCs”). In accordance with authoritative guidance, the Company has determined that the PCs are variable interest entities and therefore, the accompanying Unaudited Consolidated Financial Statements include the accounts of the PCs from the date of acquisition. During the periods presented, the results of the PCs were immaterial to the Company’s financial statements. The creditors of the PCs have claims only to the assets of the PCs, which are not material, and the assets of the PCs are not available to the Company.

6. Indebtedness

The carrying values of the Company's Senior Convertible Notes due 2021 are as follows:

(*in thousands*)	June 30, 2019	December 31, 2018
2.25% Senior Convertible Notes due 2021:		
Principal amount	$ 650,000	$ 650,000
Unamortized debt discount	(31,424)	(40,117)
Unamortized debt issuance costs	(5,814)	(7,357)
Total Senior Convertible Notes	$ 612,762	$ 602,526

2.25% Senior Convertible Notes due 2021

In March 2016, the Company issued $650.0 million principal amount of unsecured Senior Convertible Notes with a stated interest rate of 2.25% and a maturity date of March 15, 2021 (the "2021 Notes"). The net proceeds from the offering, after deducting initial purchasers' discounts and costs directly related to the offering, were approximately $634.1 million. The 2021 Notes may be settled in cash, stock, or a combination thereof, solely at the Company's discretion. It is the Company's current intent and policy to settle all conversions through combination settlement, which involves satisfying the principal amount outstanding with cash and any note conversion value over the principal amount in shares of the Company's common stock. The initial conversion rate of the 2021 Notes is 16.7158 shares per $1,000 principal amount, which is equivalent to a conversion price of approximately $59.82 per share, subject to adjustments. The Company uses the treasury share method for assumed conversion of the 2021 Notes to compute the weighted average shares of common stock outstanding for diluted earnings per share. The Company also entered into transactions for a convertible notes hedge (the "2021 Hedge") and warrants (the "2021 Warrants") concurrently with the issuance of the 2021 Notes.

The cash conversion feature of the 2021 Notes required bifurcation from the notes and was initially accounted for as an equity instrument classified to stockholders' equity, which resulted in recognizing $84.8 million in additional paid-in-capital during 2016.

The interest expense recognized on the 2021 Notes during the three months ended June 30, 2019 includes $3.7 million, $4.4 million and $0.8 million for the contractual coupon interest, the accretion of the debt discount and the amortization of the debt issuance costs, respectively. The interest expense recognized on the 2021 Notes during the six months ended June 30, 2019 includes $7.3 million, $8.7 million and $1.5 million for the contractual coupon interest, the accretion of the debt discount and the amortization of the debt issuance costs, respectively. The interest expense recognized on the 2021 Notes during the three months ended June 30, 2018 includes $3.7 million, $4.2 million and $0.7 million for the contractual coupon interest, the accretion of the debt discount and the amortization of the debt issuance costs, respectively. The interest expense recognized on the 2021 Notes during the six months ended June 30, 2018 includes $7.3 million, $8.3 million and $1.4 million for the contractual coupon interest, the accretion of the debt discount and the amortization of the debt issuance costs, respectively. The effective interest rate on the 2021 Notes is 5.8%, which includes the interest on the notes, amortization of the debt discount and debt issuance costs. Interest on the 2021 Notes began accruing upon issuance and is payable semi-annually.

Prior to September 15, 2020, holders may convert their 2021 Notes only under the following conditions: (a) during any calendar quarter beginning June 30, 2016, if the reported sale price of the Company's common stock for at least 20 days out of 30 consecutive trading days ending on the last trading day of the immediately preceding calendar quarter is greater than 130% of the conversion price on each applicable trading day; (b) during the five business day period in which the trading price of the 2021 Notes falls below 98% of the product of (i) the last reported sale price of the Company's common stock and (ii) the conversion rate on that date; and (c) upon the occurrence of specified corporate events, as defined in the 2021 Notes. From September 15, 2020 and until the close of business on the second scheduled trading day immediately preceding March 15, 2021, holders may convert their 2021 Notes at any time (regardless of the foregoing circumstances). The Company may not redeem the 2021 Notes prior to March 20, 2019. The Company may redeem the 2021 Notes, at its option, in whole or in part on or after March 20, 2019 until the close of business on the business day immediately preceding September 15, 2020 if the last reported sale price of the Company's common stock has been at least 130% of the conversion price then in effect for at least 20 trading days during any 30 consecutive trading day period ending on, and including, the trading day immediately preceding the date on which the Company delivers written notice of a redemption. The redemption price will be equal to 100% of the principal amount of such 2021 Notes to be redeemed plus accrued and unpaid interest to, but excluding, the redemption date. No principal payments are due on the 2021 Notes prior to maturity. Other than restrictions relating to certain fundamental changes and consolidations, mergers or asset sales and customary anti-dilution adjustments, the 2021 Notes do not contain any financial covenants and do not restrict the Company from paying dividends or issuing or repurchasing any of its other securities. The Company is unaware of any current events or market conditions that would allow holders to convert the 2021 Notes.

2021 Hedge

In connection with the offering of the 2021 Notes, the Company entered into the hedge transaction with the initial purchasers of the 2021 Notes and/or their affiliates (the "2021 Counterparties") entitling the Company to purchase up to 10,865,270 shares of the Company's common stock at an initial stock price of $59.82 per share, each of which is subject to adjustment. The cost of the 2021 Hedge was $111.2 million and accounted for as an equity instrument by recognizing $111.2 million in additional paid-in-capital during 2016. The 2021 Hedge will expire on March 15, 2021. The 2021 Hedge is expected to reduce the potential equity dilution upon conversion of the 2021 Notes if the daily volume-weighted average price per share of the Company's common stock exceeds the strike price of the 2021 Hedge. An assumed exercise of the 2021 Hedge by the Company is considered anti-dilutive since the effect of the inclusion would always be anti-dilutive with respect to the calculation of diluted earnings per share.

2021 Warrants

The Company sold warrants to the 2021 Counterparties to acquire up to 10,865,270 shares of the Company's common stock. The 2021 Warrants will expire on various dates from June 2021 through December 2021 and may be settled in cash or net shares. It is the Company's current intent and policy to settle all conversions in shares of the Company's common stock. The Company received $44.9 million in cash proceeds from the sale of the 2021 Warrants, which was recorded in additional paid-in-capital. The 2021 Warrants could have a dilutive effect on the Company's earnings per share to the extent that the price of the Company's common stock during a given measurement period exceeds the strike price of the 2021 Warrants, which is $80.00 per share. The Company uses the treasury share method for assumed conversion of its 2021 Warrants to compute the weighted average common shares outstanding for diluted earnings per share.

Revolving Senior Credit Facility

In April 2017, the Company entered into an Amended and Restated Credit Agreement (the "2017 Credit Agreement") for a revolving senior credit facility (the "2017 Facility"), which replaced the previous Credit Agreement the Company had entered into in February 2016. The 2017 Credit Agreement provides for secured revolving loans, multicurrency loan options and letters of credit in an aggregate amount of up to $500.0 million. The 2017 Credit Agreement also contains an expansion feature, which allows the Company to increase the aggregate principal amount of the 2017 Facility provided the Company remains in compliance with the underlying financial covenants, including but not limited to, compliance with the consolidated interest coverage ratio and certain consolidated leverage ratios. The 2017 Facility matures in April 2022 (subject to an earlier springing maturity date), and includes a sublimit of $100.0 million for multicurrency borrowings, a sublimit of $50.0 million for the issuance of standby letters of credit, and a sublimit of $5.0 million for swingline loans. All assets of the Company and its material domestic subsidiaries are pledged as collateral under the 2017 Facility (subject to customary exceptions) pursuant to the term set forth in the Amended and Restated Security and Pledge Agreement (the "2017 Security Agreement") executed in favor of the administrative agent by the Company. Each of the Company's material domestic subsidiaries guarantees the 2017 Facility. In connection with the 2017 Facility, the Company incurred issuance costs which will be amortized over the term of the 2017 Facility. The Company did not carry any outstanding revolving loans under the 2017 Facility as of June 30, 2019 and December 31, 2018.

Borrowings under the 2017 Facility are used by the Company to provide financing for working capital and other general corporate purposes, including potential mergers and acquisitions. Borrowings under the 2017 Facility bear interest, at the Company's option, at a rate equal to an applicable margin plus: (a) the applicable Eurocurrency Rate (as defined in the 2017 Credit Agreement), or (b) a base rate determined by reference to the highest of (1) the federal funds effective rate plus 0.50%, (2) the Bank of America prime rate, and (3) LIBOR for an interest period of one month plus 1.00%. The margin for the 2017 Facility ranges, based on the Company's consolidated leverage ratio, from 0.00% to 1.00% in the case of base rate loans and from 1.00% to 2.00% in the case of Eurocurrency Rate loans. The 2017 Facility includes an unused line fee ranging, based on the Company's consolidated leverage ratio, from 0.20% to 0.35% per annum on the revolving commitment.

The 2017 Credit Agreement contains affirmative, negative, permitted acquisition and financial covenants, and events of default customary for financings of this type. The financial covenants require the Company to maintain ratios of consolidated earnings before interest, taxes, depreciation and amortization (EBITDA) in relation to consolidated interest expense and consolidated debt, respectively, as defined in the 2017 Credit Agreement. The 2017 Facility grants the lenders preferred first priority liens and security interests in capital stock, intercompany debt and all of the present and future property and assets of the Company and each guarantor. The Company is currently in compliance with the 2017 Credit Agreement covenants.

7. Stock-Based Compensation

The compensation cost that has been included in the Unaudited Consolidated Statements of Operations for all stock-based compensation arrangements was as follows:

	Three Months Ended June 30,		Six Months Ended June 30,	
(*in thousands*)	2019	2018	2019	2018
Sales, marketing and administrative expense	$ 5,911	$ 5,929	$ 10,690	$ 9,444
Research and development expense	752	838	1,652	1,338
Cost of revenue	238	93	276	212
Stock-based compensation expense before taxes	6,901	6,860	12,618	10,994
Related income tax benefits	(1,725)	(1,715)	(3,155)	(2,749)
Stock-based compensation expense, net of taxes	$ 5,176	$ 5,145	$ 9,463	$ 8,245

At June 30, 2019, there was $52.2 million of unamortized compensation expense for restricted stock units ("RSUs") and performance-based restricted stock units ("PRSUs") to be recognized over a weighted average period of 2.4 years.

Restricted Stock Units and Performance-Based Restricted Stock Units

The Company issued approximately 146,000 and 611,000 shares of common stock, before net share settlement, upon vesting of RSUs and PRSUs during the three and six months ended June 30, 2019, respectively, and issued approximately 190,000 shares of common stock, before net share settlement, upon vesting of RSUs and PRSUs during the year ended December 31, 2018.

Stock Options and Purchase Rights

The weighted average assumptions used to estimate the fair value of stock purchase rights under the employee stock purchase plan ("ESPP") are as follows:

	Three Months Ended June 30,		Six Months Ended June 30,	
	2019	2018	2019	2018
ESPP				
Volatility	37%	30%	37%	34%
Expected term (years)	0.5	0.5	0.5	0.5
Risk free interest rate	2.4%	1.8%	2.5%	1.4%
Expected dividend yield	—%	—%	—%	—%

Under the terms of the ESPP, the Company's employees (referred to as "shareowners") can elect to have up to 15% of their annual compensation, up to a maximum of $21,250 per year, withheld to purchase shares of the Company's common stock for a purchase price equal to 85% of the lower of the fair market value per share (at closing) of the Company's common stock on (i) the commencement date of the six-month offering period, or (ii) the respective purchase date.

The Company has not granted any options since 2011. The Company issued approximately 12,000 and 18,000 shares of common stock, before net share settlement, upon the exercise of outstanding stock options during the three and six months ended June 30, 2019, respectively, and issued approximately 128,000 shares of common stock, before net share settlement, upon the exercise of outstanding stock options during the year ended December 31, 2018.

8. Income Taxes

Income taxes are determined using an estimated annual effective tax rate applied against income, and then adjusted for the tax impacts of certain significant and discrete items. For the six months ended June 30, 2019, the Company treated the tax impact of the following as discrete events for which the tax effect was recognized separately from the application of the annual effective tax rate: net windfalls on share-based payments, return to provision adjustments and the revaluation of deferred taxes based on changes in tax rates. The Company's effective tax rate recorded for the six months ended June 30, 2019 was 23%.

In accordance with the disclosure requirements as described in ASC Topic 740, Income Taxes, the Company has classified unrecognized tax benefits as non-current income tax liabilities, or a reduction in deferred tax assets, unless expected to be paid within one year. The Company's continuing practice is to recognize interest and/or penalties related to income tax matters in income tax expense. The Company had an increase in gross unrecognized tax benefits of approximately $0.6 million during the six months ended June 30, 2019, primarily related to research and development credits. The Company believes it is reasonably possible that approximately $0.6 million of its remaining unrecognized tax positions may be recognized within the next twelve months due to potential tax settlements and as certain statute of limitations expire, the amount of which is primarily attributable to tax positions involving the valuation of intercompany transactions.

The Company is subject to routine compliance reviews on various tax matters around the world in the ordinary course of business. Currently, the only income tax audits being conducted are in the United States and Germany. The United States and most foreign jurisdictions remain subject to examination for tax years 2015 and forward with the exception of California due to research and development credit carryforwards.

9. Business Segment, Product and Geographic Information

The Company operates in one segment based upon the Company's organizational structure, the way in which the operations and investments are managed and evaluated by the chief operating decision maker ("CODM") as well as the lack of availability of discrete financial information at a lower level. The Company's CODM reviews revenue at the product line offering level, and manufacturing, operating income and expenses, and net income at the Company wide level to allocate resources and assess the Company's overall performance. The Company shares common, centralized support functions, including finance, human resources, legal, information technology, and corporate marketing, all of which report directly to the CODM. Accordingly, decision-making regarding the Company's overall operating performance and allocation of Company resources is assessed on a consolidated basis. As such, the Company operates as one reporting segment. The Company has disclosed the revenues for each of its product line offerings to provide the reader of the financial statements transparency into the operations of the Company.

The Company reports under two distinct product lines; spinal hardware and surgical support. The Company's spinal hardware product line offerings include implants and fixation products. The Company's surgical support product offerings include IOM services, disposables and biologics, all of which are used to aid spinal surgery.

Revenue by product line was as follows:

	Three Months Ended June 30,		Six Months Ended June 30,	
(*in thousands*)	2019	2018	2019	2018
Spinal hardware	$ 212,634	$ 202,060	$ 409,772	$ 387,961
Surgical support	79,471	79,504	157,109	154,125
Total revenue	$ 292,105	$ 281,564	$ 566,881	$ 542,086

Revenue and property and equipment, net, by geographic area were as follows:

	Revenue				Property and Equipment, Net	
	Three Months Ended June 30,		Six Months Ended June 30,		June 30,	December 31,
(*in thousands*)	2019	2018	2019	2018	2019	2018
United States	$ 236,128	$ 226,949	$ 458,941	$ 440,252	$ 213,223	$ 200,404
International (excludes Puerto Rico)	55,977	54,615	107,940	101,834	44,215	38,437
Total	$ 292,105	$ 281,564	$ 566,881	$ 542,086	$ 257,438	$ 238,841

10. Commitments

Leases

At the inception of a contractual arrangement, the Company determines whether the contract contains a lease by assessing whether there is an identified asset and whether the contract conveys the right to control the use of the identified asset in exchange for consideration over a period of time. If both criteria are met, the Company records the associated lease liability and corresponding right-of-use asset upon commencement of the lease using a discount rate based on a credit-adjusted secured borrowing rate commensurate with the term of the lease.

The Company records lease liabilities within current liabilities or long-term liabilities based upon the length of time associated with the lease payments. The Company records its operating lease right-of-use assets as long-term assets. Right-of-use assets for financing leases are recorded within property and equipment, net in the Unaudited Consolidated Balance Sheet. Leases with an initial term of 12 months or less are not recorded on the Unaudited Consolidated Balance Sheet. Instead, the Company recognizes lease expense for these leases on a straight-line basis over the lease term. In connection with certain operating leases, the Company has security deposits recorded and maintained as restricted cash totaling $2.4 million as of June 30, 2019.

The Company leases office and storage facilities and equipment under various operating and financing lease agreements. The initial terms of these leases range from 1 to 17 years and generally provide for periodic rent increases, and renewal and termination options. The Company's lease agreements do not contain any material variable lease payments, residual value guarantees or material restrictive covenants.

Certain leases require the Company to pay taxes, insurance, and maintenance. Payments for the transfer of goods or services such as common area maintenance and utilities represent non-lease components. The Company elected the package of practical expedients and therefore does not separate non-lease components from lease components.

The Company has future lease payment obligations of approximately $55.1 million related to corporate office facilities that are in the process of being built-out prior to being leased. The lease liabilities and the corresponding right-of-use assets associated with these lease obligations will be recorded upon the commencement date of the lease.

The table below summarizes the Company's lease liabilities and corresponding right-of-use assets as of June 30, 2019:

(in thousands)	June 30, 2019
Assets	
Operating	$ 62,424
Financing	792
Total leased assets	$ 63,216
Liabilities	
Current:	
Operating	$ 6,471
Financing	384
Long-term:	
Operating	67,753
Financing	525
Total lease liabilities	$ 75,133
Supplemental non-cash information:	
Weighted-average remaining lease term (years) - operating leases	13.2
Weighted-average remaining lease term (years) - finance leases	2.1
Weighted-average discount rate - operating leases	7.3%
Weighted-average discount rate - finance leases	4.9%

The table below summarizes the Company's lease costs, cash payments, and operating lease liabilities arising from obtaining right-of-use assets under its operating and financing lease obligations during the three and six months ended June 30, 2019:

(in thousands, except years and rates)	Three Months Ended June 30, 2019	Six Months Ended June 30, 2019
Lease expense:		
Operating lease expense	$ 2,964	$ 5,786
Finance lease expense:		
Depreciation of right-of-use assets	99	197
Interest expense on lease liabilities	12	26
Total lease expense	$ 3,075	$ 6,009
Consolidated Statements of Cash Flows information:		
Operating cash flows used for operating leases	$ 3,153	$ 6,172
Operating cash flows used for financing leases	12	26
Financing cash flows used for financing leases	93	185
Total cash paid for amounts included in the measurement of lease liabilities	$ 3,258	$ 6,383
Supplemental non-cash information:		
Operating lease liabilities arising from obtaining right-of-use assets	$ 2,496	$ 77,605

The Company's future minimum annual lease payments under operating and financing leases at June 30, 2019 are as follows:

(in thousands)	Financing Leases	Operating Leases
Remaining 2019	$ 211	$ 5,972
2020	423	10,763
2021	324	8,477
2022	13	7,850
2023	—	7,558
Thereafter	—	80,995
Total minimum lease payments	$ 971	$ 121,615
Less: amount representing interest	(62)	(47,391)
Present value of obligations under leases	909	74,224
Less: current portion	(384)	(6,471)
Long-term lease obligations	$ 525	$ 67,753

Executive Severance Plans

The Company has employment contracts with key executives and maintains severance plans that provide for the payment of severance and other benefits if such executives are terminated for reasons other than cause, as defined in those agreements and plans. Certain agreements call for payments that are based on historical compensation, and accordingly, the amount of the contractual commitment will change over time commensurate with the executive's applicable earnings. At June 30, 2019, future commitments for such key executives were approximately $15.2 million. In certain circumstances, the agreements call for the acceleration of equity vesting. Those figures are not reflected in the above information.

11. Contingencies

The Company is subject to potential liabilities under government regulations and various claims and legal actions that are pending or may be asserted from time-to-time. These matters arise in the ordinary course and conduct of the Company's business and include, for example, commercial, intellectual property, environmental, securities and employment matters. The Company intends to continue to defend itself vigorously in such matters and when warranted, take legal action against others. Furthermore, the Company regularly assesses contingencies to determine the degree of probability and range of possible loss for potential accrual in its financial statements.

An estimated loss contingency is accrued in the Company's financial statements if it is probable that a liability has been incurred and the amount of the loss can be reasonably estimated. Based on the Company's assessment, it has adequately accrued an amount for contingent liabilities currently in existence. The Company does not accrue amounts for liabilities that it does not believe are probable or that it considers immaterial to its overall financial position. Litigation is inherently unpredictable, and unfavorable resolutions could occur. As a result, assessing contingencies is highly subjective and requires judgment about future events. The amount of ultimate loss may exceed the Company's current accruals, and it is possible that its cash flows or results of operations could be materially affected in any particular period by the unfavorable resolution of one or more of these contingencies.

Legal Proceedings

Securities Litigation

On August 28, 2013, a purported securities class action lawsuit was filed in the U.S. District Court for the Southern District of California naming the Company and certain of its current and former executive officers for allegedly making false and materially misleading statements regarding the Company's business and financial results, specifically relating to the purported improper submission of false claims to Medicare and Medicaid. The operative complaint asserts a putative class period stemming from October 22, 2008 to July 30, 2013. The complaint alleges violations of Sections 10(b) and 20(a) of the Securities Exchange Act of 1934, as amended, and Rule 10b-5 promulgated thereunder and seeks unspecified monetary relief, interest, and attorneys' fees. On February 13, 2014, Brad Mauss, the lead plaintiff in the case, filed an Amended Class Action Complaint for Violations of the Federal Securities Laws. The Company answered the complaint on August 25, 2016, and discovery commenced. The plaintiffs filed motions for class certification on October 28, 2016 and the Company's opposition papers were filed on January 9, 2017. On March 22, 2017, the court issued an order granting class certification. The Company filed a petition to appeal the order granting class certification with the U.S. Court of Appeals for the Ninth Circuit (the "Ninth Circuit") on April 5, 2017 and the plaintiffs filed an opposition to the petition. On August 15, 2017, the Ninth Circuit denied the Company's petition. The Company filed a motion for summary judgment on September 8, 2017. On February 1, 2018, the court entered an order denying the Company's motion for summary judgment. On February 13, 2018, the Company entered into a memorandum of understanding with the plaintiffs to settle the case for $7.9 million. On March 23, 2018, the parties executed a stipulation of settlement, which was preliminarily approved by the court on June 11, 2018. On December 6, 2018, the court issued an order and judgment granting final approval of the settlement. The settlement of $7.9 million was fully funded by insurance proceeds and included the dismissal of all claims against the Company and the named individuals in the lawsuit without any liability or wrongdoing attributed to them. The Company no longer has any remaining liability related to this matter.

Madsen Medical, Inc. Litigation

On February 19, 2016, an unfavorable jury verdict was delivered against the Company in its litigation in the U.S. District Court for the Southern District of California against Madsen Medical, Inc. ("MMI"), a former sales agent. Specifically, the jury awarded MMI $7.5 million in lost profits for tortious interference, $14.0 million for unjust enrichment, $20.0 million in punitive damages, and approximately $0.3 million in damages for breach of contract. On March 18, 2016, the trial court entered judgment in favor of MMI in the amount of $27.8 million, which amount excluded the $14.0 million disgorgement awarded by the jury. On July 5, 2016, the trial court also awarded MMI attorney's fees and costs of approximately $1.1 million. The Company's post-trial motions for judgment as a matter of law and/or for a new trial were denied, and the Company appealed both the verdict and the court's subsequent award of attorney's fees and costs. The U.S. Court of Appeals for the Ninth Circuit held oral argument on April 12, 2018. During pendency of the appeal, the Company secured a bond to cover the amount of the judgment and attorneys' fees and costs.

As of December 31, 2017, the Company believed that the outcome of the case did not constitute a probable nor an estimable loss associated with the litigation, but rather a reasonably possible loss. The Company, based on its own assessment as well as that of outside counsel, believed that it was probable upon appeal the judgment would be vacated. Accordingly, the Company did not record a loss contingency at December 31, 2017, but assessed a reasonable range of potential loss, which would be from zero to the current amount entered as a judgment, as well as attorney's fees and interest.

Following the April 12, 2018 oral argument, the Company believed that the prior judgments against it, in part or as a whole, may be upheld. Accordingly, at March 31, 2018, the Company believed that the outcome of the case constituted a probable loss. While the actual amount of the probable loss was not known, the Company assessed a range of potential loss in accordance with Accounting Standards Codification 450, Contingencies, which would be from zero to $29.0 million, and recorded an additional estimated loss contingency in the amount of $29.0 million as a current litigation liability in the Unaudited Consolidated Balance Sheet as of March 31, 2018, resulting in an aggregate litigation liability of $29.0 million accrued for this matter. In May 2018, the Company entered into an agreement to settle all outstanding matters with MMI for $27.8 million, and the Company paid the settlement amount. The Company no longer has any remaining liability related to this matter.

12. Regulatory Matters

On August 31, 2015, the Company received a civil investigative demand ("CID") issued by the Department of Justice ("DOJ") pursuant to the federal False Claims Act. The CID requires the delivery of a wide range of documents and information related to an investigation by the DOJ concerning allegations that the Company assisted a physician group customer in submitting improper claims for reimbursement and made improper payments to the physician group in violation of the Anti-Kickback Statute. The Company is cooperating with the DOJ in regards to this matter. No assurance can be given as to the timing or outcome of this investigation. As of June 30, 2019, the probable outcome of this matter cannot be determined, nor can the Company estimate a range of potential loss. In accordance with authoritative guidance on the evaluation of loss contingencies, the Company has not recorded an accrual related to this matter.

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

Forward-Looking Statements May Prove Inaccurate

This quarterly report on Form 10-Q ("Quarterly Report"), including the following discussion and analysis, may contain forward-looking statements that involve risks, uncertainties, assumptions and other factors which, if they do not materialize or prove correct, could cause our results to differ from historical results or those expressed or implied by such forward-looking statements. In some cases, you can identify these forward-looking statements by words like "may", "will", "should", "could", "expect", "plan", "anticipate", "believes", "estimates", "predicts", "potential", "intends", or "continues" (or the negative of those words and other comparable words). Forward-looking statements include, but are not limited to, statements about:

- the value proposition of our products and procedural solutions;
- our intentions, beliefs and expectations regarding our expenses, sales, operations and future financial performance;
- our operating results;
- our plans for obsoleting our products and our ability to develop future products and enhancements of existing products;
- anticipated growth and trends in our business;
- third party reimbursement policies and practices;
- the timing of and our ability to maintain and obtain regulatory clearances or approvals;
- our belief that our cash and cash equivalents and investments will be sufficient to satisfy our anticipated cash requirements;
- our expectations regarding our revenues, customers and distributors;
- our beliefs and expectations regarding our market penetration and expansion efforts;
- our expectations regarding the benefits and integration of recently-acquired businesses and our ability to make future acquisitions and successfully integrate any such future-acquired businesses;
- our anticipated trends, product pricing pressure, competitive tactics and other challenges in the markets in which we operate; and
- our expectations and beliefs regarding and the impact of policy changes, investigations, claims and litigation.

These statements are not guarantees of future performance or events. Our actual results may differ materially from those discussed here. The potential risks and uncertainties that could cause actual results to differ materially include, but are 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 this Quarterly Report on Form 10-Q, and similar discussions in our other Securities and Exchange Commission filings. We assume no obligation to update any forward looking statements to reflect new information, future events or circumstances or otherwise.

This information should be read in conjunction with the Unaudited Consolidated Financial Statements and the notes thereto included in Part I, Item 1 of this Quarterly Report and with Management's Discussion and Analysis of Financial Condition and Results of Operations for the year ended December 31, 2018 contained in our 2018 Annual Report on Form 10-K.

Overview

We are a leading medical device company in the global spine surgery market, focused on developing minimally disruptive surgical products and procedurally integrated solutions for spine surgery. Our currently marketed product portfolio is focused on applications for spine fusion surgery, including ancillary products and services used to aid in the surgical procedure. Our procedurally integrated solutions use innovative, technological advancements and a minimally disruptive surgical platform called Maximum Access Surgery, or MAS, to provide surgical efficiency, operative reliability, and procedural versatility.

Our principal product offering includes the MAS platform which combines three categories of solutions that collectively minimize soft tissue disruption during spine fusion surgery, provide maximum visualization and are designed to enable safe and reproducible outcomes for the surgeon and the patient. The platform includes our proprietary software-driven nerve detection and avoidance systems, and Intraoperative Monitoring, or IOM, services and support offered by NuVasive Clinical Services; MaXcess, an integrated split-blade retractor system; and a wide variety of specialized implants and biologics. Many of our products, including the individual components of our MAS platform can also be used in open or traditional spine surgery. Our spine surgery product line offerings, which include products for the thoracolumbar and the cervical spine, are primarily used to enable surgeon access to the spine to perform restorative and fusion procedures in a minimally disruptive fashion. To assist with surgical procedures, we offer a platform called Integrated Global Alignment, or iGA, in which products and computer assisted technology under our MAS platform help achieve more precise spinal alignment.

Our MAS platform and its related offerings are designed to provide a unique and comprehensive solution for the safe and reproducible minimally disruptive surgical treatment of spine disorders by enabling surgeons to access the spine in a manner that affords both direct visualization and detection and avoidance of critical nerves along with intraoperative reconciliation. The fundamental difference between our MAS platform, which is sometimes referred to in the industry as “minimally invasive surgery” or “MIS”, is the ability to customize safe and reproducible access to the spine while allowing surgeons to continue to use instruments that are familiar to them and effective during surgery. Accordingly, the MAS platform does not force surgeons to reinvent or learn new approaches that add complexity and undermine safety, ease of use and/or efficacy. We have dedicated and continue to dedicate significant resources toward training spine surgeons around the world; both those who are new to our MAS and other product platforms, as well as ongoing education for MAS-trained surgeons attending advanced courses. An important ongoing objective of ours has been to maintain a leading position in access and nerve avoidance, as well as to pioneer and remain the ongoing leader in minimally invasive spine surgery. Our MAS platform, with the unique advantages provided by our neuromonitoring systems, enables innovative lateral procedures, including a procedure known as eXtreme Lateral Interbody Fusion, or XLIF, in which surgeons access the spine for a fusion procedure from the side of the patient’s body, rather than from the front or back. It has been demonstrated clinically that XLIF and other procedures facilitated by our MAS platform decrease trauma and blood loss, and lead to faster overall patient recovery times compared to open spine surgery.

We offer a range of implants for spinal surgery, which include our porous titanium and polyetheretherketone, or PEEK, implants under our Advanced Materials Science portfolio, fixation devices such as customizable rods, plates and screws, bone allograft in patented saline packaging, allogeneic and synthetic biologics, and disposables used in IOM. We also design and sell expandable growing rod implant systems that can be non-invasively lengthened following implantation with precise, incremental adjustments via an external remote controller using magnetic technology called MAGnetic External Control, or MAGEC, which allows for the minimally invasive treatment of early-onset and adolescent scoliosis. This technology is also the basis for our Precice limb lengthening system, which allows for the correction of long bone limb length discrepancy, as well as enhanced bone healing in patients who have experienced traumatic injury. The Precice limb lengthening system is sold by NuVasive Specialized Orthopedics.

In July 2019, we commercially launched Pulse, a combined hardware and software technology platform designed to achieve surgical efficiencies via real-time feedback to aid in clinical decision-making and to optimize the procedural workflow in the operating room. Pulse integrates multiple enabling technologies within a single, expandable platform and is engineered to improve workflow, reduce variability, and increase the reproducibility of surgical outcomes. The Pulse platform’s modular architecture incorporates applications for neuromonitoring, iGA surgical planning, patient-specific rod bending, smart imaging with LessRay radiation reduction, 2D and 3D imaging navigation, and integration with robotics and other smart tools. Some of the applications are still in development.

We intend to continue development on a wide variety of projects intended to broaden our MAS and other product platforms and advance the applications of our unique technology into procedurally integrated surgical solutions that improve clinical and economic outcomes. Additionally, we intend to continue the pursuit of business and technology acquisition targets and strategic relationships.

Revenues and Operations

The majority of our revenues are derived from the sale of implants, biologics, disposables and IOM services and we expect this trend to continue for the foreseeable future. Our implants, biologics, and disposables are currently sold and shipped from our distribution and warehousing operations. We generally recognize revenue for implants, biologics and disposables upon notice that our products have been used in a surgical procedure or upon shipment to a third-party customer assuming control of the products. Revenue from IOM services is recognized in the period the service is performed for the amount of payment we expect to receive. We make available MAS surgical instrument sets, MaXcess and neuromonitoring systems to hospitals to facilitate surgeon access to the spine to perform restorative and fusion procedures using our implants and fixation devices. We sell MAS surgical instrument sets, MaXcess devices, and our proprietary software-driven neuromonitoring systems, however this does not make up a material part of our business. Currently, sales and leases of capital equipment, including our LessRay software technology platform, represent a small portion of our consolidated revenues.

The majority of our operations are located and the majority of our sales have been generated in the United States. We sell our products in the United States through a sales force comprised primarily of independent sales agents and directly-employed sales representatives. Our sales force provides a delivery and consultative service to our surgeon and hospital customers and is compensated based on sales and product placements in their territories. Sales force commissions are reflected in the sales, marketing and administrative operating expense line item within our Unaudited Consolidated Statements of Operations. We continue to invest in international expansion with a focus on European, Asia-Pacific and Latin American markets. Our international sales force is comprised of directly-employed sales personnel, independent sales agents, as well as exclusive and non-exclusive independent third-party distributors.

Results of Operations

Revenue

	June 30,			
(*in thousands, except %*)	**2019**	**2018**	**$ Change**	**% Change**
Three Months Ended				
Revenue				
Spinal hardware	$ 212,634	$ 202,060	$ 10,574	5%
Surgical support	79,471	79,504	(33)	(0)%
Total revenue	$ 292,105	$ 281,564	$ 10,541	4%
Six Months Ended				
Revenue				
Spinal hardware	$ 409,772	$ 387,961	$ 21,811	6%
Surgical support	157,109	154,125	2,984	2%
Total revenue	$ 566,881	$ 542,086	$ 24,795	5%

Our spinal hardware product line offerings include our implants and fixation products. Our surgical support product line offerings include IOM services, disposables and biologics, all of which are used to aid spinal surgery.

The continued adoption of minimally invasive procedures for spine surgery has led to the expansion of our procedure volume. In addition, increased market acceptance in our international markets contributed to the increase in revenues for the periods presented. We expect continued adoption of our innovative minimally invasive procedures and deeper penetration into existing accounts and international markets as our sales force executes on our strategy of selling the full mix of our products and services. However, the continued consolidation and increased purchasing power of our hospital customers and group purchasing organizations, the continued existence of physician-owned distributorships, continued changes in the public and private insurance markets regarding reimbursement, and ongoing policy and legislative changes in the United States have created less predictability in the lumbar portion of the spine market. Although the market for procedurally-integrated spine surgery solutions should continue to grow over the long term, economic, political and regulatory influences are subjecting our industry to significant changes that may slow the growth rate of the spine surgery market. Our growth in revenue in 2019 is expected to come primarily from market share gains in the shift toward minimally invasive spinal surgery, revenue from new products and services, and international growth.

Revenue from our spinal hardware product line offerings increased $10.6 million and $21.8 million, or 5% and 6%, during the three and six months ended June 30, 2019, respectively, compared to the same periods in 2018. Product volume in spinal hardware increased our revenue by approximately 8% and 9% for the three and six months ended June 30, 2019, respectively, offset by unfavorable pricing impacts of approximately 2% for both the three and six months ended June 30, 2019, compared to the same periods in 2018. Foreign currency fluctuation decreased our spinal hardware revenue by approximately 1% for both the three and six months ended June 30, 2019, compared to the same periods in 2018.

Revenue from our surgical support product line offerings remained constant during the three months ended June 30, 2019 and increased $3.0 million, or 2%, during the six months ended June 30, 2019, compared to the same periods in 2018. Product and service volume in surgical support increased our revenue by approximately 1% and 3% for the three and six months ended June 30, 2019, respectively, offset by unfavorable pricing impacts of approximately 1% for both the three and six months ended June 30, 2019, as compared to the same periods in 2018. Foreign currency fluctuation had an insignificant impact on revenue from surgical support for the periods presented.

Cost of Revenue, Excluding Below Amortization of Intangible Assets

	June 30,			
(*in thousands, except %*)	**2019**	**2018**	**$ Change**	**% Change**
Three Months Ended				
Cost of revenue	$ 77,579	$ 77,056	$ 523	1%
% of total revenue	27%	27%		
Six Months Ended				
Cost of revenue	$ 152,073	$ 150,870	$ 1,203	1%
% of total revenue	27%	28%		

Cost of revenue consists primarily of purchased goods, raw materials, labor and overhead associated with product manufacturing, inventory-related costs and royalty expenses, as well as the cost of providing IOM services, which includes personnel and physician oversight costs. We primarily procure and manufacture our goods in the United States, and accordingly, foreign currency fluctuations have not materially impacted our cost of revenue.

Cost of revenue increased $0.5 million and $1.2 million, or 1%, during the three and six months ended June 30, 2019, respectively, compared to the same periods in 2018. Cost of revenue for our business increased primarily due to growth in volume, changes in product mix, and shifts in production costs, offset by favorable manufacturing absorption from in-sourced products and improved throughput and plant efficiencies during the three and six months ended June 30, 2019, respectively, compared to the same periods in 2018.

Cost of revenue as a percentage of revenue remained constant during the three months ended June 30, 2019 and decreased during the six months ended June 30, 2019, compared to the same periods in 2018. On a long-term basis, we expect cost of revenue, as a percentage of revenue, to decrease moderately due to our manufacturing insourcing efforts.

Operating Expenses

	Three Months Ended June 30,			
(*in thousands, except %*)	**2019**	**2018**	**$ Change**	**% Change**
Sales, marketing and administrative	$ 152,853	$ 145,658	$ 7,195	5%
% of total revenue	52%	52%		
Research and development	17,553	14,856	2,697	18%
% of total revenue	6%	5%		
Amortization of intangible assets	12,277	12,628	(351)	(3)%
Litigation liability gain	—	(1,195)	1,195	(100)%
Business transition costs	1,646	3,998	(2,352)	(59)%

	Six Months Ended June 30,			
(*in thousands, except %*)	**2019**	**2018**	**$ Change**	**% Change**
Sales, marketing and administrative	$ 297,929	$ 292,424	$ 5,505	2%
% of total revenue	53%	54%		
Research and development	35,128	29,347	5,781	20%
% of total revenue	6%	5%		
Amortization of intangible assets	25,902	25,053	849	3%
Litigation liability loss	—	27,800	(27,800)	(100)%
Business transition costs	5,479	6,251	(772)	(12)%

Sales, Marketing and Administrative

Sales, marketing and administrative expenses consist primarily of compensation costs, commissions and training costs for our employees (who we refer to as "shareowners") engaged in sales, marketing and customer support functions. The expense also includes commissions to sales representatives, freight expenses, surgeon training costs, depreciation expense for property and equipment such as surgical instrument sets, and administrative expenses for both shareowners and third party service providers.

Sales, marketing and administrative expenses increased by $7.2 million and $5.5 million, or 5% and 2%, during the three and six months ended June 30, 2019, respectively, compared to the same periods in 2018. The increase during the three and six months ended June 30, 2019 is primarily due to increased shareowner compensation and expenses associated with increased headcount, as well as expenses that increase as a function of the increase in revenue and international expansion, such as equipment, freight, and facility related expenses, as compared to the same periods in 2018. Additionally, during the three and six months ended June 30, 2019, there was an increase in expenses associated with our compliance efforts with the European medical device regulation, and legal expenses, primarily due to the ongoing litigation with a former Board member and his current employer related to various matters, including infringement of our intellectual property. These costs were partially offset by decreases in non-recurring consulting fees associated with the implementation of our state tax-planning strategy, which occurred during the six months ended June 30, 2018.

Sales, marketing and administrative expenses as a percentage of revenue remained constant during the three months ended June 30, 2019, and decreased during the six months ended June 30, 2019, compared to the same periods in 2018. On a long-term basis, we expect total sales, marketing and administrative costs, as a percentage of revenue, to decrease moderately. To date, foreign currency fluctuations have not materially impacted our sales, marketing, and administrative expense.

Research and Development

Research and development expense consists primarily of product research and development, clinical trial and study costs, regulatory and clinical functions, and compensation and other shareowner related expenses. In the last several years, we have introduced numerous new products and product enhancements that have significantly expanded our MAS platform and our comprehensive product portfolio, and in July 2019, we commercially launched Pulse. We have also acquired complementary and strategic assets and technology, particularly in the area of spinal hardware products. We continue to invest in research and development programs.

Research and development expense increased by $2.7 million and $5.8 million, or 18% and 20%, during the three and six months ended June 30, 2019, respectively, compared to the same periods in 2018. The increase in spending is primarily due to increased headcount and increased spending for further enhancement and functionality of our current and future product offerings, including Pulse.

Research and development costs as a percentage of revenue increased during the three and six months ended June 30, 2019 compared to the same periods in 2018. On a long-term basis, we expect total research and development costs as a percentage of revenue to increase moderately in support of our ongoing development and regulatory approval efforts.

Litigation Liability (Gain) Loss

In May 2018, we settled our ongoing litigation with Madsen Medical, Inc. for $27.8 million. As a result of the settlement, we adjusted our litigation liability accrual of $29.0 million, which resulted in a $1.2 million gain and was recorded in the Consolidated Statement of Operations during the three months ended June 30, 2018. We paid the settlement amount and no longer have any remaining liability related to this matter. See Note 11 to the Unaudited Consolidated Financial Statements for further discussion.

Business Transition Costs

We incur certain costs related to acquisition, integration and business transition activities, which include severance, relocation, consulting, leasehold exit costs, third-party merger and acquisition costs, contingent consideration fair value adjustments and other costs directly associated with such activities.

We incurred $1.6 million and $5.5 million of such costs during the three and six months ended June 30, 2019, respectively. For the three months ended June 30, 2019, such costs consisted primarily of fair value adjustments on contingent consideration liabilities associated with our 2017 and 2016 acquisitions. For the six months ended June 30, 2019, such costs included acquisition, integration and business transition activities, as well as $2.0 million of fair value adjustments on contingent consideration liabilities associated with our 2017 and 2016 acquisitions.

We incurred $4.0 million and $6.3 million of such costs during the three and six months ended June 30, 2018, respectively, which consisted primarily of acquisition, integration and business transition activities, as well as $0.6 million and $0.8 million, respectively, of fair value adjustments on contingent consideration liabilities associated with our 2017 and 2016 acquisitions.

Interest and Other Expense, Net

(*in thousands, except %*)	June 30, 2019	June 30, 2018	$ Change	% Change
Three Months Ended				
Interest income	$ 327	$ 116	$ 211	182%
Interest expense	(9,650)	(9,956)	306	(3)%
Other income (expense), net	9	(2,379)	2,388	(100)%
Total interest and other expense, net	$ (9,314)	$ (12,219)	$ 2,905	(24)%
Six Months Ended				
Interest income	$ 736	$ 250	$ 486	194%
Interest expense	(19,163)	(19,423)	260	(1)%
Other expense, net	(357)	(12,082)	11,725	(97)%
Total interest and other expense, net	$ (18,784)	$ (31,255)	$ 12,471	(40)%

Other income (expense), net for the six months ended June 30, 2019 decreased $11.7 million compared to the same period in 2018 primarily due to an impairment charge of $9.0 million on a strategic investment during the six months ended June 30, 2018 and a decrease in the net loss pro rata allocation from our equity method investments.

Total interest and other expense, net for the periods presented also included gains and losses from derivative instruments and foreign currency impacts on settled receivables and payables.

Income Tax Expense (Benefit)

(*in thousands, except %*)	June 30, 2019	June 30, 2018
Three Months Ended		
Income tax expense	$ 5,921	$ 4,813
Effective income tax rate	28%	29%
Six Months Ended		
Income tax expense (benefit)	$ 7,238	$ (5,313)
Effective income tax rate	23%	25%

The provision for income tax expense as a percentage of pre-tax income from continuing operations was 28% for the three months ended June 30, 2019 compared with 29% for the same period in 2018. The decreased rate for the three months ended June 30, 2019 was primarily due to increased benefits associated with the release of valuation allowances, higher research and development credits and favorable return to provision adjustments, offset by the United States inclusion of global intangible low-taxed income and a reduction in windfall tax benefits on share-based payments.

The provision for income tax expense as a percentage of pre-tax income from continuing operations was 23% for the six months ended June 30, 2019 compared with a tax benefit of 25% for the same period in 2018. The taxable rate in 2019 was lower than the benefit rate in 2018 primarily due to an increase in global pre-tax earnings, the United States inclusion of global intangible low-taxed income, a reduction in windfall tax benefits on share-based payments, and an increase in revaluation of deferred taxes based on changes in tax rates, all of which was offset by an increase in benefits associated with the release of valuation allowances, higher research and development credits and favorable return to provision adjustments.

Liquidity, Cash Flows and Capital Resources

Liquidity and Capital Resources

Our principal sources of liquidity are our existing cash, cash equivalents and marketable securities, cash generated from operations, proceeds from our convertible notes issuances, and access to our revolving line of credit. We expect that cash provided by operating activities may fluctuate in future periods as a result of a number of factors, including fluctuations in our operating results, working capital requirements and capital deployment decisions. We have historically invested our cash primarily in the U.S. treasuries and government agencies, corporate debt, and money market funds. Certain of these investments are subject to general credit, liquidity and other market risks. The general condition of the financial markets and the economy may increase those risks and may affect the value and liquidity of investments and restrict our ability to access the capital markets.

Our future capital requirements will depend on many factors including our rate of revenue growth, the timing and extent of spending to support development efforts, the expansion of sales, marketing and administrative activities, the timing of introductions of new products and enhancements to existing products, successful insourcing of our manufacturing process, the continuing market acceptance of our products, the expenditures associated with possible future acquisitions or other business combination transactions, the outcome of current and future litigation, the evolution of our globalization initiative, and continuous international expansions of our business. We expect our cash flows from operations to continue to fund the ongoing core business. As current borrowing sources become due, we may be required to access the capital markets for additional funding. As we assess inorganic growth strategies, we may need to supplement our internally generated cash flow with outside sources. In the event that we are required to access the debt market, we should be able to secure reasonable borrowing rates. As part of our liquidity strategy, we will continue to monitor our current level of earnings and cash flow generation as well as our ability to access the market in light of those earning levels.

A substantial portion of our operations are located in the United States, and the majority of our sales and cash generation since inception have been made in the United States. Accordingly, we do not have material net cash flow exposures to foreign currency rate fluctuations. However, as our business in markets outside of the United States continues to increase, we will be exposed to foreign currency exchange risk related to our foreign operations. Fluctuations in the rate of exchange between the United States dollar and foreign currencies, primarily in the pound sterling, the euro, the Australian dollar, the Brazilian real, the Singapore dollar, and the yen, could adversely affect our financial results, including our revenues, revenue growth rates, gross margins, income and losses as well as assets and liabilities. We enter into forward currency contracts to partially offset the impact from fluctuations of the foreign currency rates on our third party and short-term intercompany receivables and payables between our domestic and international operations. We currently do not hedge future forecasted transactions but will continue to assess whether that strategy is appropriate. As of June 30, 2019, the cash balance held by our foreign subsidiaries with currencies other than the United States dollar was approximately $41.3 million and it is our intention to indefinitely reinvest all of current foreign earnings in order to partially support foreign working capital and to expand our existing operations outside the United States. As of June 30, 2019, our account receivable balance held by our foreign subsidiaries with currencies other than the United States dollar was approximately $46.8 million. We have operations in markets in which there is governmental financial instability which could impact funds that flow into the medical reimbursement system. In addition, loss of financial stability within these markets could lead to delays in reimbursement or inability to remit payment due to currency controls. Specifically, we have operations and/or sales in Puerto Rico, Brazil and Argentina. We do not have any material financial exposure to one customer or one country that would significantly hinder our liquidity.

We are involved in a number of legal actions and investigations arising out of the normal course of our business as discussed in Note 11 of the Unaudited Consolidated Financial Statements. Due to the inherent uncertainties associated with pending legal actions and investigations, we cannot predict the outcome, and, with respect to certain pending litigation or claims where no liability has been accrued, to make a meaningful estimate of the reasonably possible loss or range of loss that could result from an unfavorable outcome, other than those matters disclosed in this Quarterly Report. We have no material accruals for pending litigation or claims for which accrual amounts are not disclosed in our Unaudited Consolidated Financial Statements. It is reasonably possible, however, that an unfavorable outcome that exceeds our current accrual estimate, if any, for one or more of the matters described in our Unaudited Consolidated Financial Statements could have a material adverse effect on our liquidity and access to capital resources. Additionally, it is possible that in connection with a legal proceeding we are required to pay fees and expenses of the other party or set aside funds in an escrow or purchase a performance bond, regardless of our assessment of the probability of a loss. These requirements to pay fees and expenses or escrow funding in connection with a legal proceeding could have an adverse impact on our liquidity or impact our access to additional capital resources.

On August 31, 2015, we received a civil investigative demand, or CID, issued by the Department of Justice, or DOJ, pursuant to the federal False Claims Act. The CID requires the delivery of a wide range of documents and information related to an investigation by the DOJ concerning allegations that we assisted a physician group customer in submitting improper claims for reimbursement and made improper payments to the physician group in violation of the Anti-Kickback Statute. We are cooperating with the DOJ in regards to this matter. No assurance can be given as to the timing or outcome of this investigation, and the probable outcome of this matter cannot be determined.

On September 7, 2017, we completed an acquisition of a medical device company that developed interbody implants for spinal fusion using patented porous PEEK technology. In connection with the acquisition, we recorded a purchase accounting fair value estimate of $31.4 million for contingent consideration liabilities related to the achievement of certain manufacturing and commercial milestones. We anticipate these milestones will become payable at varying times between 2019 and 2022, but are subject to change based on the achievement of those manufacturing and commercial milestones.

On August 28, 2017, we entered into a 17 year operating lease agreement for the purpose of expanding and restructuring our corporate headquarters in San Diego, California, from approximately 145,000 square feet to approximately 252,000 square feet. The lease and its terms supersede the existing lease agreement with respect to the currently occupied office buildings comprising our corporate headquarters. The renovation and expansion of the corporate headquarters is expected to be completed in three phases over a period of two years. The rental payments associated with the lease will total approximately $169.6 million over the 17 year term of the lease. Rental payments escalate annually at 3% for the term of the lease upon the anniversary of completion of each phase of expansion.

On September 12, 2016, we completed an acquisition of an imaging software and technology platform known as LessRay. In connection with the acquisition, we recorded a purchase accounting fair value estimate of $34.1 million for contingent consideration liabilities related to the achievement of certain regulatory and commercial milestones. In January 2018, we paid $9.0 million of the outstanding contingent consideration liabilities for the achievement of a commercial milestone. In July 2018, we paid $10.0 million of the outstanding contingent consideration liabilities for the achievement of a regulatory approval milestone. We anticipate the remaining sales-based milestones will become payable at varying times between 2022 and 2023.

Cash and cash equivalents were $128.4 million and $117.8 million at June 30, 2019 and December 31, 2018, respectively. We believe that our existing cash, cash equivalents, marketable securities and available liquidity will be sufficient to meet our anticipated cash needs for the next twelve months. We could have varying needs for cash as a result of the achievement of certain acquisition related milestones. We anticipate funding these milestones from cash on hand and operations, however, we also have the ability to fund these from our existing line of credit if necessary. The increase in liquidity during the six months ended June 30, 2019 of $10.6 million was mainly driven by $93.4 million cash inflow from operations, offset by $65.4 million in cash used for purchases of property and equipment, $11.7 million in cash used on treasury stock purchases, and $10.9 million in cash used for strategic investments and intangible assets. At June 30, 2019, we have cash totaling $2.4 million in restricted accounts which is not available to us to meet any ongoing capital requirements if and when needed. Future litigation or requirements to escrow funds could materially impact our liquidity and our ability to invest in and run our business on an ongoing basis.

Cash Flows from Operating Activities

Cash provided by operating activities was $93.4 million for the six months ended June 30, 2019, compared to $77.2 million for the same period in 2018. The $16.2 million increase in cash provided by operating activities was primarily due to increased operational cash flows in 2019 related to timing of spending and cash receipts.

Cash Flows from Investing Activities

Cash used in investing activities was $76.3 million for the six months ended June 30, 2019, compared to $113.2 million used for the same period in 2018. The $36.9 million decrease in cash used in investing activities was primarily due to a decrease of $48.8 million in cash used for business combinations, strategic investments and intangible assets, offset by a $12.0 million increase in cash used for purchases of property and equipment and during the six months ended June 30, 2019, as compared to the same period in 2018.

Cash Flows from Financing Activities

Cash used in financing activities was $6.9 million for the six months ended June 30, 2019, compared to $31.0 million cash provided by for the same period in 2018. The $37.9 million decrease in cash flows from financing activities was primarily due to a net draw on the line of credit for $37.0 million during the six months ended June 30, 2018.

Treasury stock purchases related to equity award vesting and stock option exercises totaled $11.7 million during the six months ended June 30, 2019. We use net share settlement on stock issuances, which results in cash tax payments we make on behalf of shareowners and a decrease in the cash receipt from the issuance of common stock upon the exercising of stock options. Net share settlement is generally used in lieu of cash payments by shareowners for minimum tax withholding or exercise costs for equity awards. The net share settlement is accounted for as a treasury share repurchase transaction, with the cost of any deemed repurchased shares included in treasury stock and reported as a reduction in total equity at the time of settlement. Additionally, net share settlement for tax withholding requires us to fund a significant amount of cash for certain tax payment obligations from time-to-time with respect to the shareowner tax obligations for vested equity awards. We anticipate using cash generated from operating activities to fund such payments.

Senior Convertible Notes

2.25% Senior Convertible Notes due 2021

In March 2016, we issued $650.0 million principal amount of unsecured senior convertible notes with a stated interest rate of 2.25% and a maturity date of March 15, 2021, which we refer to as the 2021 Notes. The net proceeds from the offering, after deducting initial purchasers' discounts and costs directly related to the offering, were approximately $634.1 million. Interest on the 2021 Notes began accruing upon issuance and is payable semi-annually. The 2021 Notes may be settled in cash, stock, or a combination thereof, solely at our discretion. It is our current intent and policy to settle all conversions through combination settlement, which involves satisfying the principal amount outstanding with cash and any note conversion value over the principal amount in shares of our common stock. The initial conversion rate of the 2021 Notes is 16.7158 shares per $1,000 principal amount, which is equivalent to a conversion price of approximately $59.82 per share, subject to adjustments. Prior to September 15, 2020, holders may convert their 2021 Notes only under the following conditions: (a) during any calendar quarter beginning June 30, 2016, if the reported sale price of our common stock for at least 20 days out of 30 consecutive trading days ending on the last trading day of the immediately preceding calendar quarter is greater than 130% of the conversion price on each applicable trading day; (b) during the five business day period in which the trading price of the 2021 Notes falls below 98% of the product of (i) the last reported sale price of our common stock and (ii) the conversion rate on that date; and (c) upon the occurrence of specified corporate events, as defined in the 2021 Notes. From September 15, 2020 and until the close of business on the second scheduled trading day immediately preceding March 15, 2021, holders may convert their 2021 Notes at any time (regardless of the foregoing circumstances). We may not redeem the 2021 Notes prior to March 20, 2019. We may redeem the 2021 Notes, at our option, in whole or in part on or after March 20, 2019 until the close of business on the business day immediately preceding September 15, 2020 if the last reported sale price of our common stock has been at least 130% of the conversion price then in effect for at least 20 trading days during any 30 consecutive trading day period ending on, and including, the trading day immediately preceding the date on which we deliver written notice of a redemption. The redemption price will be equal to 100% of the principal amount of such 2021 Notes to be redeemed plus accrued and unpaid interest to, but excluding, the redemption date. No principal payments are due on the 2021 Notes prior to maturity. Other than restrictions relating to certain fundamental changes and consolidations, mergers or asset sales and customary anti-dilution adjustments, the 2021 Notes do not contain any financial covenants and do not restrict us from paying dividends or issuing or repurchasing any of our other securities. We are unaware of any current events or market conditions that would allow holders to convert the 2021 Notes. The impact of the convertible feature will be dilutive to our earnings per share when our average stock price for the period is greater than the conversion price.

In connection with the offering of the 2021 Notes, we entered into transactions for convertible notes hedge, which we refer to as the 2021 Hedge, and warrants, which we refer to as the 2021 Warrants. The 2021 Hedge was entered into with the initial purchasers of the 2021 Notes and/or their affiliates, which we refer to as the 2021 Counterparties, entitling us to purchase up to 10,865,270 shares of our own common stock at an initial stock price of $59.82 per share, each of which is subject to adjustment. The cost of the 2021 Hedge was $111.2 million. The 2021 Hedge will expire on March 15, 2021. The 2021 Hedge is expected to reduce the potential equity dilution upon conversion of the 2021 Notes if the daily volume-weighted average price per share of our common stock exceeds the strike price of the 2021 Hedge. Our assumed exercise of the 2021 Hedge is considered anti-dilutive since the effect of the inclusion would always be anti-dilutive with respect to the calculation of diluted earnings per share.

In addition, we sold the 2021 Warrants to the 2021 Counterparties to acquire up to 10,865,270 common shares of our stock. The 2021 Warrants will expire on various dates from June 2021 through December 2021 and may be settled in cash or net shares. It is our current intent and policy to settle all conversions in shares of our common stock. We received $44.9 million in cash proceeds from the sale of the 2021 Warrants. The 2021 Warrants could have a dilutive effect on our earnings per share to the extent that the price of our common stock during a given measurement period exceeds the strike price of the 2021 Warrants, which is $80.00 per share.

Revolving Senior Credit Facility

In April 2017, we entered into an Amended and Restated Credit Agreement (the “2017 Credit Agreement”) for a revolving senior credit facility (the “2017 Facility”), which replaced the previous credit agreement we had entered into in February 2016. The 2017 Credit Agreement provides for secured revolving loans, multicurrency loan options and letters of credit in an aggregate amount of up to $500.0 million. The 2017 Credit Agreement also contains an accordion feature, which allows us to increase the aggregate principal amount of the 2017 Facility provided we remain in compliance with the underlying financial covenants, including but not limited to, compliance with the consolidated interest coverage ratio and certain consolidated leverage ratios. The 2017 Facility matures in April 2022 (subject to an earlier springing maturity date), and includes a sublimit of $100.0 million for multicurrency borrowings, a sublimit of $50.0 million for the issuance of standby letters of credit, and a sublimit of $5.0 million for swingline loans. All of our assets including the assets of our material domestic subsidiaries are pledged as collateral under the 2017 Facility (subject to customary exceptions) pursuant to the term set forth in the Amended and Restated Security and Pledge Agreement (the “2017 Security Agreement”) executed in favor of the administrative agent. Each of our material domestic subsidiaries guarantees the 2017 Facility. In connection with the 2017 Facility, we incurred issuance costs which will be amortized over the term of the 2017 Facility.

We did not carry any outstanding revolving loans under the 2017 Facility as of June 30, 2019 and December 31, 2018.

Borrowings under the 2017 Facility bear interest, at our option, at a rate equal to an applicable margin plus: (a) the applicable Eurocurrency Rate (as defined in the 2017 Credit Agreement), or (b) a base rate determined by reference to the highest of (1) the federal funds effective rate plus 0.50%, (2) the Bank of America prime rate, and (3) LIBOR for an interest period of one month plus 1.00%. The margin for the 2017 Facility ranges, based on our consolidated leverage ratio, from 0.00% to 1.00% in the case of base rate loans and from 1.00% to 2.00% in the case of Eurocurrency Rate loans. The 2017 Facility includes an unused line fee ranging, based on our consolidated leverage ratio, from 0.20% to 0.35% per annum on the revolving commitment.

The 2017 Credit Agreement contains affirmative, negative, permitted acquisition and financial covenants, and events of default customary for financings of this type. The financial covenants require us to maintain ratios of consolidated earnings before interest, taxes, depreciation and amortization (EBITDA) in relation to consolidated interest expense and consolidated debt, respectively, as defined in the 2017 Credit Agreement. The 2017 Facility grants the lenders preferred first priority liens and security interests in capital stock, intercompany debt and all of our present and future property and assets including each guarantor. We are currently in compliance with the Credit Agreement covenants.

Critical Accounting Policies

Our discussion and analysis of our financial condition and results of operations is based upon our Unaudited Consolidated Financial Statements, which have been prepared in accordance with generally accepted accounting principles in the United States, or GAAP. The preparation of these financial statements requires us to make estimates and judgments that affect the reported amounts of assets, liabilities, revenues and expenses. On an ongoing basis, we evaluate our estimates including those related to bad debts, inventories, valuation of goodwill, intangibles, other long-term assets, stock-based compensation, income taxes, and legal proceedings. We base our estimates on historical experience and on various other assumptions we believe to be reasonable under the circumstances, the results of which form the basis for making judgments about the carrying values of assets and liabilities not readily apparent from other sources. Actual results may differ from these estimates. Our critical accounting policies and estimates are discussed in our Annual Report on Form 10-K for the fiscal year ended December 31, 2018 and there have been no material changes during the six months ended June 30, 2019.

Off-Balance Sheet Arrangements

As of June 30, 2019, we did not have any off-balance sheet arrangements.

Contractual Obligations and Commitments

As of June 30, 2019, there were no material changes outside of the ordinary course of business, in our outstanding contractual obligations from those disclosed within "Management's Discussion and Analysis of Financial Condition and Results of Operations" in our Annual Report on Form 10-K for the fiscal year ended December 31, 2018.

Item 3. *Quantitative and Qualitative Disclosures About Market Risk*

As of June 30, 2019, there has been no material change in our assessment of our sensitivity to market risk since our presentation set forth in Item 7A, "Quantitative and Qualitative Disclosures About Market Risk", in our Annual Report on Form 10-K for the fiscal year ended December 31, 2018.

Item 4. *Controls and Procedures*

Disclosure Controls and Procedures

We maintain disclosure controls and procedures that are designed to ensure that information required to be disclosed in our reports under the Securities Exchange Act of 1934, as amended, or the Exchange Act, is recorded, processed, summarized and reported within the time lines specified in the SEC's rules and forms, and that such information is accumulated and communicated to our management, including our Chief Executive Officer and Chief Financial Officer, as appropriate, to allow timely decisions regarding required disclosure. In designing and evaluating the disclosure controls and procedures, management recognized that any controls and procedures, no matter how well designed and operated, can only provide reasonable assurance of achieving the desired control objectives, and in reaching a reasonable level of assurance, management necessarily was required to apply its judgment in evaluating the cost-benefit relationship of possible controls and procedures.

Under the supervision and with the participation of our management, including our Chief Executive Officer and our Chief Financial Officer, we carried out an evaluation of the effectiveness of the Company's disclosure controls and procedures (as defined in SEC Rules 13a - 15(e) and 15d - 15(e)) as of June 30, 2019. Based on such evaluation, our management has concluded that as of June 30, 2019, the Company's disclosure controls and procedures are effective.

Changes in Internal Control Over Financial Reporting

Under the supervision and with the participation of our management, including our Chief Executive Officer and our Chief Financial Officer, we carried out an evaluation of any potential changes in our internal control over financial reporting during the fiscal quarter covered by this Quarterly Report.

There has been no change to our internal control over financial reporting during our most recent fiscal quarter that our certifying officers concluded materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

PART II. OTHER INFORMATION

Item 1. ***Legal Proceedings***

For a description of our material pending legal proceedings, refer to Note 11 "Contingencies" of the Notes to Unaudited Consolidated Financial Statements included in Part I, Item 1 of this Quarterly Report, which is incorporated herein by reference.

Item 1A. ***Risk Factors***

There were no material changes to the risk factors previously disclosed and included in our Annual Report on Form 10-K for the fiscal year ended December 31, 2018. An investment in our common stock involves a high degree of risk. You should consider carefully the risks and uncertainties described under Item 1A of Part I of our Annual Report on Form 10-K, together with all other information contained or incorporated by reference in this report before you decide to invest in our common stock. If any of the Risk Factors were to actually occur, our business, financial condition, results of operations and our future growth prospects could be materially and adversely affected. Under the circumstances, the trading price of our common stock could decline, and you may lose all or part of your investment.

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

None.

Item 3. ***Defaults Upon Senior Securities***

None.

Item 4. ***Mine Safety Disclosures***

None.

Item 5. ***Other Information***

None.

Item 6. ***Exhibits***

Exhibit Number	Description
3.1	Restated Certificate of Incorporation (incorporated by reference to our Quarterly Report on Form 10-Q filed with the SEC on August 13, 2004)
3.2	Certificate of Amendment to the Restated Certificate of Incorporation (incorporated by reference to our Current Report on Form 8-K filed with the SEC on September 28, 2011)
3.3	Restated Bylaws (incorporated by reference to our Current Report on Form 8-K filed with the SEC on January 6, 2012)
3.4	Amendment No. 1 to the Restated Bylaws (incorporated by reference to our Current Report on Form 8-K filed with the SEC on May 19, 2014)
3.5	Amendment No. 2 to the Restated Bylaws (incorporated by reference to our Current Report on Form 8-K filed with the SEC on August 1, 2016)
31.1*	Certification of the Chief Executive Officer pursuant to Rule 13a-14(b) of the Securities Exchange Act of 1934, as amended, and 18 U.S.C. section 1350
31.2*	Certification of the Chief Financial Officer pursuant to Rule 13a-14(b) of the Securities Exchange Act of 1934, as amended, and 18 U.S.C. section 1350
32.1*	Certifications of Chief Executive Officer and Chief Financial Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002
101.INS	XBRL Instance Document – 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
101.CAL	XBRL Taxonomy Extension Calculation Linkbase
101.DEF	XBRL Taxonomy Extension Definition Linkbase
101.LAB	XBRL Taxonomy Extension Label Linkbase
101.PRE	XBRL Taxonomy Extension Presentation Linkbase
*	These certifications are being furnished solely to accompany this annual report pursuant to 18 U.S.C. Section 1350, and are not being filed for purposes of Section 18 of the Securities Exchange Act of 1934 and are not to be incorporated by reference into any filing of NuVasive, Inc., whether made before or after the date hereof, regardless of any general incorporation language in such filing.

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.

NUVASIVE, INC.

Date: July 30, 2019

By: /s/ J. Christopher Barry

J. Christopher Barry
Chief Executive Officer

Date: July 30, 2019

By: /s/ Rajesh J. Asarpota

Rajesh J. Asarpota
Executive Vice President and Chief Financial Officer

Exhibit 31.1

CERTIFICATION

I, J. Christopher Barry, certify that:

1. I have reviewed this Form 10-Q of NuVasive, Inc.;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

   a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

   b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

   c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

   d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (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: July 30, 2019

By: /s/ J. Christopher Barry

J. Christopher Barry

Chief Executive Officer

Exhibit 31.2

CERTIFICATION

I, Rajesh J. Asarpota, certify that:

1. I have reviewed this 10-Q of NuVasive, Inc.;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

   a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

   b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

   c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

   d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (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: July 30, 2019

By: /s/ Rajesh J. Asarpota

Rajesh J. Asarpota

Executive Vice President and Chief Financial Officer

Exhibit 32.1

CERTIFICATIONS OF CHIEF EXECUTIVE OFFICER AND CHIEF FINANCIAL OFFICER PURSUANT TO 18 U.S.C. SECTION 1350, AS ADOPTED PURSUANT TO SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with the Quarterly Report of NuVasive, Inc. (the "Company") on Form 10-Q for the three months ended June 30, 2019, as filed with the Securities and Exchange Commission on the date hereof (the "Quarterly Report"), I, J. Christopher Barry, Chief Executive Officer of the Company, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that to my knowledge:

1. The Quarterly Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and

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

Date: July 30, 2019

By: /s/ J. Christopher Barry
J. Christopher Barry
Chief Executive Officer

In connection with the Quarterly Report, I, Rajesh J. Asarpota, Executive Vice President and Chief Financial Officer of the Company, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that to my knowledge:

1. The Quarterly Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and

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

Date: July 30, 2019

By: /s/ Rajesh J. Asarpota
Rajesh J. Asarpota
Executive Vice President and Chief Financial Officer