UNITED STATES
SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

Form 10-Q

(Mark One)

x **QUARTERLY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 19**
For the quarterly period ended March 31, 2023

OR

o **TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 19**
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.)

12101 Airport Way

Broomfield, CO 80021

(Address of principal executive offices)

(800) 455-1476

(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 x No o

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 x No o

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

Large accelerated filer	x	Accelerated filer	o
Non-accelerated filer	o	Smaller reporting company	o
		Emerging growth company	o

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. o

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

As of May 8, 2023, there were 52,449,167 shares of the registrant’s common stock (par value $0.001 per share) outstanding.

NuVasive, Inc.

Quarterly Report on Form 10-Q

March 31, 2023

PART I. FINANCIAL INFORMATION

PART II. OTHER INFORMATION

PART I. FINANCIAL INFORMATION

Item 1. *Financial Statements*

NUVASIVE, INC.

CONSOLIDATED BALANCE SHEETS

(in thousands, except par value data)

	March 31, 2023	December 31, 2022
ASSETS	**(unaudited)**	
Current assets:		
Cash and cash equivalents	$ 181,199	$ 248,663
Accounts receivable, net of allowances of $20,317 and $19,601, respectively	250,023	249,373
Inventory, net	345,945	338,601
Prepaid income taxes	8,782	7,118
Prepaid expenses and other current assets	20,409	21,457
Total current assets	806,358	865,212
Property and equipment, net	355,473	346,510
Intangible assets, net	174,341	184,289
Goodwill	638,686	639,663
Operating lease right-of-use assets	93,273	95,112
Deferred tax assets	74,575	68,273
Restricted cash and investments	1,494	1,494
Other assets	22,954	23,952
Total assets	$ 2,167,154	$ 2,224,505
LIABILITIES AND EQUITY		
Current liabilities:		
Accounts payable and accrued liabilities	$ 122,277	$ 120,333
Contingent consideration liabilities	27,218	66,975
Accrued payroll and related expenses	50,102	58,448
Operating lease liabilities	10,193	10,019
Income tax liabilities	15,786	12,217
Senior convertible notes	449,220	448,056
Total current liabilities	674,796	716,048
Long-term senior convertible notes	444,871	444,202
Deferred and other tax liabilities	14,219	13,088
Operating lease liabilities	101,606	103,806
Contingent consideration liabilities	41,461	63,640
Other long-term liabilities	16,521	14,831
Commitments and contingencies		
Stockholders' equity:		
Preferred stock, $0.001 par value; 5,000 shares authorized, none outstanding	—	—
Common stock, $0.001 par value; 150,000 shares authorized at March 31, 2023 and December 31, 2022; 59,223 shares issued and 52,349 outstanding at March 31, 2023; 58,939 shares issued and 52,134 outstanding at December 31, 2022	63	63
Additional paid-in capital	1,476,318	1,469,411
Accumulated other comprehensive loss	(1,392)	(3,249)
Retained earnings	85,102	86,115
Treasury stock at cost; 6,874 shares and 6,805 shares at March 31, 2023 and December 31, 2022, respectively	(686,411)	(683,450)
Total equity	873,680	868,890
Total liabilities and equity	$ 2,167,154	$ 2,224,505

See accompanying Notes to unaudited Consolidated Financial Statements.

NUVASIVE, INC.

CONSOLIDATED STATEMENTS OF OPERATIONS

(in thousands, except per share amounts)

(unaudited)	Three Months Ended March 31, 2023	2022
Net sales:		
Products	$ 279,370	$ 265,973
Services	28,341	24,789
Total net sales	307,711	290,762
Cost of sales (excluding below amortization of intangible assets):		
Products	64,877	57,183
Services	21,493	21,914
Total cost of sales	86,370	79,097
Gross profit	221,341	211,665
Operating expenses:		
Selling, general and administrative	176,192	160,281
Research and development	24,573	23,358
Amortization of intangible assets	8,796	13,032
Business transition costs	4,614	3,060
Total operating expenses	214,175	199,731
Interest and other (expense) income, net:		
Interest income	1,828	43
Interest expense	(4,378)	(4,379)
Other (expense) income, net	(4,436)	16,244
Total interest and other (expense) income, net	(6,986)	11,908
Income before income taxes	180	23,842
Income tax expense	(1,193)	(4,641)
Consolidated net (loss) income	$ (1,013)	$ 19,201
Net (loss) income per share:		
Basic	$ (0.02)	$ 0.37
Diluted	$ (0.02)	$ 0.35
Weighted average shares outstanding:		
Basic	52,242	51,829
Diluted	52,242	62,579

See accompanying Notes to unaudited Consolidated Financial Statements.

NUVASIVE, INC.

CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME

(in thousands)

(unaudited)	Three Months Ended March 31, 2023	2022
Consolidated net (loss) income	$ (1,013)	$ 19,201
Other comprehensive income (loss):		
Translation adjustments, net of tax	1,857	(3,949)
Other comprehensive income (loss)	1,857	(3,949)
Total consolidated comprehensive income	$ 844	$ 15,252

See accompanying Notes to unaudited Consolidated Financial Statements.

NUVASIVE, INC.

CONSOLIDATED STATEMENTS OF EQUITY

(in thousands)

(unaudited)	Common Stock		Additional Paid-in Capital	Accumulated Other Comprehensive Loss	Retained Earnings	Treasury Stock		Total Stockholders' Equity
	Shares	Amount				Shares	Amount	
Balance at December 31, 2021	58,469	$ 63	$ 1,434,976	$ (7,792)	$ 45,708	(6,700)	$ (677,748)	$ 795,207
Issuance of common stock under employee and director equity option and purchase plans	278	—	—	—	—	(98)	(5,345)	(5,345)
Stock-based compensation expense	—	—	6,807	—	—	—	—	6,807
Consolidated net income	—	—	—	—	19,201	—	—	19,201
Other comprehensive loss	—	—	—	(3,949)	—	—	—	(3,949)
Balance at March 31, 2022	58,747	$ 63	$ 1,441,783	$ (11,741)	$ 64,909	(6,798)	$ (683,093)	$ 811,921

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	Treasury Stock Shares	Treasury Stock Amount	Total Stockholders' Equity
Balance at December 31, 2022	58,939	$ 63	$ 1,469,411	$ (3,249)	$ 86,115	(6,805)	$ (683,450)	$ 868,890
Issuance of common stock under employee and director equity option and purchase plans	284	—	—	—	—	(69)	(2,961)	(2,961)
Stock-based compensation expense	—	—	6,907	—	—	—	—	6,907
Consolidated net loss	—	—	—	—	(1,013)	—	—	(1,013)
Other comprehensive income	—	—	—	1,857	—	—	—	1,857
Balance at March 31, 2023	59,223	$ 63	$ 1,476,318	$ (1,392)	$ 85,102	(6,874)	$ (686,411)	$ 873,680

See accompanying Notes to unaudited Consolidated Financial Statements.

NUVASIVE, INC.

CONSOLIDATED STATEMENTS OF CASH FLOWS

(in thousands)

(unaudited)	Three Months Ended March 31, 2023	2022
Operating activities:		
Consolidated net (loss) income	$ (1,013)	$ 19,201
Adjustments to reconcile net (loss) income to net cash provided by operating activities:		
Depreciation and amortization	33,467	36,801
Deferred income taxes	(5,209)	(3,891)
Amortization of non-cash interest	1,986	1,963
Stock-based compensation	6,907	6,807
Changes in fair value of contingent consideration	(4,799)	39
Net gain on strategic investments	(310)	—
Net loss (gain) from foreign currency adjustments	4,787	(15,988)
Reserves on current assets	1,959	(1,864)
Other non-cash adjustments	968	1,326
Changes in operating assets and liabilities, net of effects from acquisitions:		
Accounts receivable	(729)	(17,216)
Inventory	(7,657)	(3,215)
Prepaid expenses and other current assets	1,192	805
Payment of contingent consideration	(25,462)	(1,198)
Accounts payable and accrued liabilities	2,438	(6,758)
Accrued payroll and related expenses	(8,420)	(10,491)
Income taxes	1,865	218
Net cash provided by operating activities	1,970	6,539
Investing activities:		
Purchases of property and equipment	(35,148)	(33,223)
Other investing activities	—	(947)
Net cash used in investing activities	(35,148)	(34,170)
Financing activities:		
Payment of contingent consideration	(31,671)	(6,839)
Purchases of treasury stock	(2,961)	(5,345)
Other financing activities	(270)	(521)
Net cash used in financing activities	(34,902)	(12,705)
Effect of exchange rate changes on cash	616	(443)
Decrease in cash, cash equivalents and restricted cash	(67,464)	(40,779)
Cash, cash equivalents and restricted cash at beginning of period	250,157	247,585
Cash, cash equivalents and restricted cash at end of period	$ 182,693	$ 206,806

See accompanying Notes to unaudited Consolidated Financial Statements.

The following table provides a reconciliation of cash, cash equivalents and restricted cash reported on the Company's unaudited Consolidated Statements of Cash Flows for the periods presented:

	Three Months Ended March 31,	
	2023	2022
Cash and cash equivalents	$ 181,199	$ 205,312
Restricted cash	1,494	1,494
Total cash, cash equivalents and restricted cash shown in the unaudited Consolidated Statements of Cash Flows	$ 182,693	$ 206,806

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., or the Company, or NuVasive, was incorporated in Delaware on July 21, 1997, and began commercializing its products in 2001. Since its incorporation in 1997, the Company has grown from a small developer of specialty spinal implants into a global medical technology company delivering procedurally integrated solutions for spine surgery. Underlying the Company's procedurally integrated solutions for spine surgery are technologies designed to enable better clinical, financial, and operational outcomes, including:

- its surgical access instruments, including its integrated split-blade retractor system, designed to enable less-invasive surgical techniques by minimizing soft tissue disruption during spine surgery;
- its Advanced Materials Science portfolio of specialized spinal implants, designed to advance spinal fusion by enhancing the osseointegration and biomechanical properties of implant materials, including porous titanium and porous polyetheretherketone;
- its fixation systems, designed to facilitate the preservation and restoration of patient alignment, while addressing a vast array of spinal pathologies from an open or less-invasive approach across all spinal procedures;
- its cervical total disc replacement, or cTDR, technology, which complements the Company's portfolio of products and services for cervical spinal fusion surgery and is designed to offer surgeons capabilities across key performance functions—anatomic, physiologic motion, and radiologic design;
- its neuromonitoring systems, which use proprietary software-driven nerve detection and avoidance technology, and the Company's intraoperative neuromonitoring, or IONM, services and support; and
- its Pulse platform, a software ecosystem that integrates multiple hardware technologies into a single, condensed footprint in the operating room, including: radiation reduction, imaging enhancement, rod bending, navigation, IONM, and spinal alignment tools.

In addition, the Company also designs and sells expandable growing rod implant systems for the treatment of early-onset scoliosis 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. This technology is also the basis for the Company's Precice line of products which is designed to support complex orthopedic reconstruction, such as trauma and limb length discrepancy. Precice is an intramedullary device that, once implanted, utilizes the MAGEC technology to non-invasively lengthen the femur and tibia.

Proposed Merger with Globus Medical

On February 8, 2023, the Company entered into an Agreement and Plan of Merger, or the Merger Agreement, with Globus Medical, Inc., or Globus Medical, and Zebra Merger Sub, Inc., a wholly owned subsidiary of Globus Medical, or Merger Sub. The Merger Agreement provides, among other things, that subject to the satisfaction or waiver of the conditions set forth therein, Merger Sub will merge with and into NuVasive, referred to as the Merger, with NuVasive surviving the merger as a wholly owned subsidiary of Globus Medical.

Under the Merger Agreement, at the effective time of the Merger, or the Effective Time, each share of common stock of the Company issued and outstanding immediately prior to the Effective Time (other than certain excluded shares as described in the Merger Agreement) will be cancelled and converted into the right to receive 0.75 fully paid and non-assessable shares of Class A common stock of Globus Medical, and cash in lieu of fractional shares.

On April 27, 2023, the Company and Globus Medical announced that the stockholders of each company had approved all proposals related to the Merger at each company's respective special meeting of stockholders. Completion of the Merger is subject to the satisfaction of the remaining customary closing conditions, including the expiration or termination of the waiting period under the Hart-Scott-Rodino Antitrust Improvements Act of 1976, as amended.

The foregoing description of the Merger Agreement is qualified in its entirety by reference to the full text of the Merger Agreement attached as Exhibit 2.1 to the Company's Current Report on Form 8-K filed with the Securities and Exchange Commission, or SEC, on February 9, 2023.

Impact of COVID-19 and Global Macroeconomic Conditions on the Company's Business

The COVID-19 pandemic significantly impacted the Company's business and results of operations during the years 2020 through 2022 and may continue to negatively impact the Company's business, results of operations, financial condition and cash flows. Additionally, the COVID-19 pandemic and general macroeconomic conditions have led to disruptions in the global supply chain. The Company has experienced challenges associated with material and component availability for certain product lines, longer shipping and delivery times for raw materials and components, constrained logistics capacity related to the movement of products, availability of skilled labor and increased costs of raw materials, components, labor, and freight and courier services. Net sales and profitability from our foreign operations have also been negatively affected by the unfavorable foreign currency exchange impact of the strengthened U.S. dollar against a number of currencies.

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 the 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 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, or U.S. GAAP. Operating results for the three months ended March 31, 2023 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, 2022 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 U.S. GAAP, management must make estimates and assumptions that affect the amounts reported in the financial statements and accompanying notes. These estimates and assumptions involve judgments with respect to numerous factors that are difficult to predict. As a result, actual amounts could be materially different from these estimates.

Recent Accounting Pronouncements Not Yet Adopted

In June 2022, the Financial Accounting Standards Board, or FASB, issued Accounting Standards Update, or ASU, No. 2022-03, Fair Value Measurement (Topic 820), Fair Value Measurement of Equity Securities Subject to Contractual Sale Restrictions, which clarifies that a contractual restriction on the sale of an equity security is not considered part of the unit of account of the equity security and, therefore, is not considered in measuring fair value. The ASU introduces new disclosure requirements to provide investors with information about contractual restrictions, including the nature and remaining duration of such restrictions. This update is effective for fiscal years beginning after December 15, 2023, and interim periods within those fiscal years, with early adoption permitted. The amendments should be applied prospectively with any adjustments from the adoption of the amendments recognized in earnings and disclosed on the date of adoption. The Company is currently evaluating the impact the standard will have on its Consolidated Financial Statements.

Recently Adopted Accounting Standards

In October 2021, the FASB issued ASU No. 2021-08, Business Combinations (Topic 805), Accounting for Contract Assets and Contract Liabilities from Contracts with Customers, which requires an entity (acquirer) to recognize and measure contract assets and liabilities acquired in a business combination in accordance with Accounting Standards Codification Topic 606, Revenue from Contracts with Customers, or ASC 606. This update is effective for fiscal years beginning after December 15, 2022, and interim periods within those fiscal years, with early adoption permitted. The amendments should be applied prospectively to business combinations occurring on or after the effective date of the amendments. The Company adopted ASU 2021-08 as of January 1, 2023. The adoption did not have a material impact on the Company's Consolidated Financial Statements.

Revenue Recognition

In accordance with 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, fixation products 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 IONM 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 capital equipment is recognized when the Company transfers control to the customer, which is generally at the point when acceptance occurs that indicates customer acknowledgment of delivery or installation, depending on the terms of the arrangement. Selling and leasing of surgical instrument sets and capital equipment represents an immaterial amount of the Company's total net sales 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.

Accounts Receivable and Related Valuation Accounts

Accounts receivable in the accompanying unaudited Consolidated Balance Sheets are presented net of allowances for credit losses. The Company maintains an allowance for credit losses resulting from the inability of its customers, including hospitals, ambulatory surgery centers, and distributors, to make required payments. The allowance for credit losses is calculated quarterly, and is estimated on a region-by-region basis considering a number of factors including age of account balances, collection history, historical account write-offs, third party credit reports, identified trends, current economic conditions, and supportable forecasted economic expectations. The allowance is adjusted on a specific identification basis for certain accounts as well as pooling of accounts with similar characteristics. An increase in the provision for credit losses may be required when the financial condition of the Company's customers or its collection experience deteriorates. An increase to the allowance for credit losses results in a corresponding charge to selling, general and administrative expenses. The Company has a diverse customer base and no single customer represented greater than ten percent of net sales or accounts receivable. Historically, the Company's reserves have been adequate to cover credit losses.

The Company's exposure to credit losses may increase if its customers are adversely affected by changes in healthcare laws, coverage and reimbursement, macroeconomic pressures or uncertainty associated with local or global economic recessions, disruption associated with the current COVID-19 pandemic, or other customer-specific factors. It is possible that there could be a significant adverse impact from potential adjustments to the carrying amount of trade receivables as customers' cash flows are impacted by their response to the COVID-19 pandemic and the deferral of elective surgical procedures and other macroeconomic challenges.

The following table summarizes the changes in the allowance for credit losses:

(in thousands)	**March 31, 2023**	**December 31, 2022**
Allowance for credit losses at January 1	$ 11,404	$ 10,928
Current-period provision for expected losses	950	748
Write-offs charged against the allowance	(56)	(196)
Recoveries of amounts previously written off	12	31
Changes resulting from foreign currency fluctuations	40	(107)
Allowance for credit losses at end of period	$ 12,350	$ 11,404

Inventory, net

Net inventory as of March 31, 2023 consisted of $330.6 million of finished goods, $6.7 million of work in progress and $8.6 million of raw materials. Net inventory as of December 31, 2022 consisted of $326.1 million of finished goods, $5.8 million of work in progress and $6.7 million of raw materials.

Finished goods primarily consists of specialized implants, fixation products and disposables and are stated at the lower of cost or net realizable value 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 recorded at the lower of cost or net realizable value. 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.

The Company records an inventory reserve for estimated excess and obsolete inventory based upon historical turnover and assumptions about future demand for its products and market conditions, such as product life cycles and timing of the introduction and development of new or enhanced products. The Company's allograft products have shelf lives ranging from two years to five years and are subject to demand fluctuations based on the availability and demand for alternative products. The Company's inventory, which consists primarily of disposables, specialized implants and fixation products, is at risk of obsolescence following the introduction and development of new or enhanced products. One of the Company's strategic objectives is to continue to rapidly develop and commercialize new products and product enhancements which increases the risk that products will become obsolete prior to the end of their anticipated useful life. The Company's estimates and assumptions for excess and obsolete inventory are reviewed and updated on a quarterly basis. The estimates the Company uses for demand are also used for near-term capacity planning and inventory purchasing and are consistent with its net sales forecasts. Increases in the reserve for excess and obsolete inventory result in a corresponding charge to cost of sales.

Derivative Financial Instruments

The Company recognizes all derivative instruments as assets or liabilities in its unaudited Consolidated Balance Sheets and measures these instruments at fair value by revaluing these assets and liabilities at the end of each reporting period. Gains and losses are recorded as a component of other expense, net in the unaudited Consolidated Statements of Operations.

Other Comprehensive Income (Loss)

Other comprehensive income (loss) is defined as the change in equity during a period from transactions and other events and circumstances from non-owner sources. Other comprehensive income (loss) includes net of tax, unrealized gains or losses on the Company's marketable debt securities and foreign currency translation adjustments. The accumulated other comprehensive income (loss) was $(1.4) million and $(3.2) million as of March 31, 2023 and December 31, 2022, respectively.

Product Shipment Costs

Product shipment costs, included in selling, general and administrative expense in the accompanying unaudited Consolidated Statements of Operations, were $8.7 million and $8.1 million for the three months ended March 31, 2023 and March 31, 2022, respectively. The majority of the Company's shipping costs are associated with providing instrument sets to hospitals for use in individual surgical procedures. Amounts billed to customers for shipping and handling of products are reflected in net sales 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, costs related to the proposed merger with Globus Medical, third-party acquisition costs and contingent consideration fair value adjustments and other costs directly associated with such activities. Contingent consideration is accrued based on the fair value of the expected payment, and such accruals are subject to increase or decrease based on the assessment of the likelihood that the contingent milestones will be achieved resulting in payment. If an accrual for contingent consideration decreases based upon the assessment during a particular period, it results in a reduction of costs during such period, which the Company records as a benefit.

During the three months ended March 31, 2023, the Company recorded $4.6 million of costs related to acquisition, integration and business transition activities, which includes $7.4 million related to costs for the proposed merger with Globus Medical, offset by a $(4.8) million benefit related to fair value adjustments on contingent consideration liabilities associated with the Company's 2022, 2021, 2018 and 2016 acquisitions.

During the three months ended March 31, 2022, the Company recorded $3.1 million of costs related to acquisition, integration and business transition activities, which included de minimis fair value adjustments on contingent consideration liabilities associated with the Company’s 2021, 2017 and 2016 acquisitions.

2. Net (Loss) Income Per Share

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

(in thousands, except per share data)	Three Months Ended March 31, 2023	Three Months Ended March 31, 2022
Numerator:		
Net (loss) income for basic	$ (1,013)	$ 19,201
Dilutive potential net (loss) income:		
Interest and debt issuance costs on the 1.00% Senior Convertible Notes due 2023, net of tax	$ —	$ 1,705
Interest and debt issuance costs on the 0.375% Senior Convertible Notes due 2025, net of tax	—	821
Net (loss) income for diluted	$ (1,013)	$ 21,727
Denominator for basic and diluted net (loss) income per share:		
Weighted average common shares outstanding for basic	52,242	51,829
Dilutive potential common stock outstanding:		
Employee stock purchase plan (ESPP)	—	3
Restricted stock units (RSUs) and performance restricted stock units (PRSUs)	—	578
1.00% Senior Convertible Notes due 2023	—	5,345
0.375% Senior Convertible Notes due 2025	—	4,824
Weighted average common shares outstanding for diluted	52,242	62,579
Basic net (loss) income per share	$ (0.02)	$ 0.37
Diluted net (loss) income per share	$ (0.02)	$ 0.35

In accordance with ASU No. 2020-06, Debt with Conversion and Other Options (Subtopic 470-20), or ASU 2020-06, the Company applies the if-converted method in computing the effect of the Company's senior convertible notes on diluted net income per share. For periods in which the Company reports net income, the numerator of the diluted per share computation is adjusted for interest expense and amortization of debt issuance costs, net of tax, and the denominator is adjusted for the weighted average number of shares into which each of the Company’s senior convertible notes could be converted. The effect is only included in the calculation of diluted net income per share for those senior convertible notes which reduce net income per share.

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

(in thousands)	Three Months Ended March 31, 2023	Three Months Ended March 31, 2022
ESPP, RSUs and PRSUs	1,795	239
Warrants	10,169	10,169
Senior convertible notes	10,169	—
Total	22,133	10,408

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 or loss. Net currency exchange (losses) gains, which include gains and losses from derivative instruments, were $(4.8) million and $16.0 million for the three months ended March 31, 2023 and March 31, 2022, respectively, and are included in other (expense) income, 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 March 31, 2023 and December 31, 2022, a notional principal amount of $18.0 million and $15.0 million, respectively, was outstanding to hedge currency risk relative to the Company's foreign currency-denominated receivables and payables. Derivative instrument net gains on the Company's forward exchange contracts were $0.2 million and $0.8 million for the three months ended March 31, 2023 and March 31, 2022, respectively, and are included in other (expense) income, net in the unaudited Consolidated Statements of Operations. The fair value of the forward contract exchange derivative instrument asset (liability) was $0.1 million and $(0.2) million as of March 31, 2023 and December 31, 2022, 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 debt and equity securities, restricted investments, derivatives, and contingent consideration are measured at fair value on a recurring basis. The fair value of the securities classified as cash equivalents and marketable equity securities are based on quoted market prices in active markets (Level 1). As of March 31, 2023, the Company held investments in securities classified as cash equivalents and marketable equity securities. Unrealized gains for marketable equity securities was $0.3 million for the three months ended March 31, 2023 and included in other (expense) income, net in the unaudited Consolidated Statement of Operations. As of December 31, 2022, the Company held investments in securities classified as cash equivalents and marketable equity securities. During the periods presented, the Company did not hold any such investments that were in a significant unrealized loss position and no impairment charges were recorded on such investments. Realized and unrealized gains and losses and interest income related to marketable debt securities were immaterial during all periods presented. The Company’s assets that are measured at fair value were based on the following fair value categories:

(in thousands)	Total	Quoted Price in Active Market (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
March 31, 2023:				
Cash equivalents:				
Money market funds	$ 105,354	$ 105,354	$ —	$ —
Other assets:				
Marketable equity securities	3,793	3,793	—	—
Total cash equivalents and other assets	$ 109,147	$ 109,147	$ —	$ —
December 31, 2022:				
Cash equivalents:				
Money market funds	$ 176,344	$ 176,344	$ —	$ —
Other assets:				
Marketable equity securities	3,483	3,483	—	—
Total cash equivalents and other assets	$ 179,827	$ 179,827	$ —	$ —

The carrying amounts of certain financial instruments such as cash and cash equivalents, accounts receivable, prepaid expenses, other current assets, accounts payable, accrued expenses, and other current liabilities as of March 31, 2023 and December 31, 2022 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.

Fair Value of Senior Convertible Notes

The fair value, based on a quoted market price (Level 1), of the Company’s outstanding $450.0 million principal amount of Senior Convertible Notes due 2023 at March 31, 2023 and December 31, 2022 was approximately $445.5 million and $441.6 million, respectively. The fair value, based on a quoted market price (Level 1), of the Company’s outstanding $450.0 million principal amount of Senior Convertible Notes due 2025 at March 31, 2023 and December 31, 2022 was approximately $393.8 million and $394.9 million, respectively. See Note 5, Indebtedness, in the Notes to unaudited Consolidated Financial Statements included in this Quarterly Report for further discussion on the carrying value of the Company’s outstanding senior convertible 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, probability model or Monte Carlo 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 Statements of Operations. Contingent consideration arrangements assumed by an asset purchase will be measured and accrued when such contingency is resolved.

The recurring Level 3 fair value measurements of contingent consideration liabilities associated with commercial sales milestones include the following significant unobservable inputs as of March 31, 2023:

	2023
Valuation Techniques	Discounted cash flow, probability, Monte Carlo
Discount Rate Range	6.2% - 8.0%
Weighted Average Discount Rate	6.9%
Expected Years	2023 - 2028

Contingent consideration liabilities at March 31, 2023 and December 31, 2022 were $68.7 million and $130.6 million, respectively, and were recorded in the unaudited Consolidated Balance Sheets commensurate with the respective payment terms. The following table sets forth the changes in the estimated fair value of the Company's contingent consideration liabilities measured on a recurring basis using significant unobservable inputs (Level 3):

	Three Months Ended March 31,	
(*in thousands*)	2023	2022
Beginning balance at January 1	$ 130,615	$ 147,810
Change in fair value measurement	(4,799)	39
Contingent consideration paid or settled	(57,133)	(8,037)
Changes resulting from foreign currency fluctuations	(4)	4
Balance at end of period	$ 68,679	$ 139,816

During the first quarter of 2021, the Company recorded $103.4 million in contingent consideration liabilities as part of the Simplify Medical acquisition, of which $42.8 million and $60.6 million relate to the regulatory approval and net sales milestones, respectively. In the second quarter of 2021, the Simplify Cervical Disc received approval from the Food and Drug Administration, or FDA, for two-level cervical total disc replacement which resulted in the payment of $45.8 million for the achievement of the regulatory milestone. As a result of the milestone achievement, the Company recorded a $3.0 million increase in the fair value of the contingent consideration liability, which has been recorded within business transition costs in the Company's Consolidated Statements of Operations in the year ended December 31, 2021. Additional milestone payments, which are uncapped and contingent upon net sales from products incorporating the Simplify Medical cervical disc technology, are payable in the calendar years 2023, 2024 and 2025. The first net sales milestone payment in the amount of $56.5 million was paid in March 2023. For the three months ended March 31, 2023 and year ended December 31, 2022, the Company decreased the contingent consideration liability by $5.6 million, and $12.2 million, respectively, as a result of updates to the Company's forecasted net sales assumptions and significant unobservable inputs. The remaining contingent consideration liabilities for the Simplify Medical acquisition totaled $34.2 million and $96.3 million as of March 31, 2023 and December 31, 2022, respectively. Changes in fair value measurement of the contingent consideration liabilities are recorded in the unaudited Consolidated Statements of Operations within the business transition costs line item.

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 March 31, 2023 and December 31, 2022.

4. Goodwill and Intangible Assets

Goodwill and intangible assets consisted of the following:

(in thousands, except years) **March 31, 2023:**	Weighted-Average Amortization Period (in years)	Gross Amount	Accumulated Amortization	Intangible Assets, net
Intangible assets subject to amortization:				
Developed technology	11	$ 364,354	$ (245,647)	$ 118,707
Patents	10	56,428	(37,943)	18,485
Manufacturing know-how and trade secrets	12	21,378	(21,378)	—
Trade name and trademarks	9	24,914	(22,360)	2,554
Customer relationships	9	157,666	(125,571)	32,095
Total intangible assets subject to amortization	10	$ 624,740	$ (452,899)	$ 171,841
In-process research and development		$ 2,500	$ —	$ 2,500
Total intangible assets, net		$ 627,240	$ (452,899)	$ 174,341

(in thousands, except years) **December 31, 2022:**	Weighted-Average Amortization Period (in years)	Gross Amount	Accumulated Amortization	Intangible Assets, net
Intangible assets subject to amortization:				
Developed technology	11	$ 366,521	$ (241,119)	$ 125,402
Patents	10	56,719	(37,420)	19,299
Manufacturing know-how and trade secrets	12	21,364	(21,364)	—
Trade name and trademarks	9	24,967	(22,124)	2,843
Customer relationships	9	156,681	(122,436)	34,245
Total intangible assets subject to amortization	10	$ 626,252	$ (444,463)	$ 181,789
In-process research and development		$ 2,500	$ —	$ 2,500
Total intangible assets, net		$ 628,752	$ (444,463)	$ 184,289

The changes to goodwill are comprised of the following:

(in thousands)	
December 31, 2022	
Gross goodwill	$ 647,963
Accumulated impairment loss	(8,300)
	639,663
Changes to gross goodwill	
Changes resulting from foreign currency fluctuations	(977)
March 31, 2023	
Gross goodwill	646,986
Accumulated impairment loss	(8,300)
	$ 638,686

Total expense related to the amortization of intangible assets, which is recorded in both cost of sales and operating expenses in the unaudited Consolidated Statements of Operations depending on the functional nature of the intangible asset, was $8.8 million and $13.9 million for the three months ended March 31, 2023 and March 31, 2022, respectively.

Total future amortization expense related to intangible assets subject to amortization at March 31, 2023 is set forth in the table below:

(in thousands)		
Remaining 2023	$	18,734
2024		21,023
2025		20,100
2026		14,973
2027		12,215
Thereafter through 2038		84,796
Total future amortization expense	$	171,841

5. Indebtedness

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

(in thousands)		March 31, 2023		December 31, 2022
1.00% Senior Convertible Notes due 2023:				
Principal amount	$	450,000	$	450,000
Unamortized debt issuance costs		(780)		(1,944)
		449,220		448,056
0.375% Senior Convertible Notes due 2025:				
Principal amount		450,000		450,000
Unamortized debt issuance costs		(5,129)		(5,798)
		444,871		444,202
Total Senior Convertible Notes	$	894,091	$	892,258
Less: Current portion of Senior Convertible Notes	$	(449,220)	$	(448,056)
Long-term Senior Convertible Notes	$	444,871	$	444,202

	Three Months Ended March 31,			
(in thousands)		2023		2022
Interest expense:				
Contractual coupon interest	$	1,547	$	1,547
Amortization of debt issuance costs		1,833		1,810
Total interest expense recognized on Senior Convertible Notes	$	3,380	$	3,357
Effective interest rates:				
Senior Convertible Notes due 2023[1]		2.0 %		2.0 %
Senior Convertible Notes due 2025[1]		1.0 %		1.0 %

[1] Interest on Senior Convertible Notes due 2023 and 2025 began accruing upon issuance and is payable semi-annually.

1.00% Senior Convertible Notes due 2023

In June 2020, the Company issued $450.0 million principal amount of unsecured Senior Convertible Notes with a stated interest rate of 1.00% and a maturity date of June 1, 2023, or the 2023 Notes. The net proceeds from the offering of the 2023 Notes, after deducting initial purchasers' discounts and costs directly related to the offering, were approximately $436.7 million. The 2023 Notes were initially required to be settled in cash as the Company did not have sufficient reserved shares. On September 10, 2020, the Company held a Special Meeting of Stockholders and received stockholder approval to amend the Company's Restated Certificate of Incorporation to increase the number of shares of its common stock authorized for issuance from 120,000,000 shares to 150,000,000 shares. As a result of the increase in the number of shares of the Company's common stock authorized for issuance, as of September 10, 2020 and as of December 31, 2020, 2021 and 2022, respectively, the Company had sufficient reserved shares. The 2023 Notes permit the Company to settle conversions of the 2023 Notes in cash, stock, or a combination thereof, solely at the Company's discretion, and the Company has elected to settle all conversions in cash. Accordingly, the Company will satisfy the principal amount outstanding and any note conversion value over the principal amount with cash. The initial conversion rate of the 2023 Notes is 11.8778 shares per $1,000 principal amount, which is equivalent to a conversion price of approximately $84.19 per share, subject to adjustments. In addition, following certain corporate events that occur prior to the maturity date, the Company will increase the conversion rate for a holder who elects to convert its 2023 Notes in connection with such a corporate event in certain circumstances. The Company also entered into transactions for a convertible notes hedge and warrants concurrently with the issuance of the 2023 Notes.

At the time of issuance, the cash conversion feature of the 2023 Notes required bifurcation from the 2023 Notes and was initially accounted for as a derivative liability (the "Embedded Conversion Derivative"), which was included in long-term liabilities in the Company's unaudited Consolidated Balance Sheets. The fair value of the 2023 Notes Embedded Conversion Derivative was $57.2 million, and was recorded as the original debt discount for purposes of accounting for the debt component of the 2023 Notes. On September 10, 2020, as a result of the increase in the number of shares of the Company's common stock authorized for issuance, the Company had sufficient reserved shares to settle conversions of the 2023 Notes in cash, stock, or a combination thereof, and in accordance with authoritative literature, the Embedded Conversion Derivative was marked to fair value and reclassified to stockholders' equity, which resulted in recognizing $37.3 million in additional paid-in-capital during 2020. The original issue discount was recognized as interest expense using the effective interest method.

As of January 1, 2021, the Company early adopted ASU 2020-06, which removed the requirement of separating the embedded conversion feature classified within stockholders' equity from the 2023 Notes. Accordingly, the Company reclassified the unamortized debt discount from its additional paid-in capital to its senior convertible notes within long-term liabilities in the unaudited Consolidated Balance Sheets. The impact of the adoption of ASU 2020-06 as of January 1, 2021 resulted in an increase in senior convertible notes and retained earnings of $46.8 million and $7.9 million, respectively, and a decrease in deferred tax liabilities and additional paid-in capital by $11.2 million and $43.5 million, respectively.

Prior to February 1, 2023, holders could have converted their 2023 Notes only under the following conditions: (a) during any calendar quarter commencing after the calendar quarter ending on September 30, 2020 (and only during such calendar quarter), if the last reported sale price of the Company's common stock for at least 20 trading days (whether or not consecutive) during a period of 30 consecutive trading days ending on, and including, the last trading day of the immediately preceding calendar quarter is greater than or equal to 130% of the conversion price on each applicable trading day; (b) during the five business day period after any five consecutive trading day period, or the measurement period, in which the trading price of the 2023 Notes per $1,000 principal amount of notes for each trading day of the measurement period was less than 98% of the product of the last reported sale price of the Company's common stock and the conversion rate on such trading day; or (c) upon the occurrence of specified corporate events, as defined in the 2023 Notes. On or after February 1, 2023, until the close of business on the second scheduled trading day immediately preceding June 1, 2023, holders may convert their 2023 Notes at any time, regardless of the foregoing conditions.

The Company may not redeem the 2023 Notes prior to the maturity date and no principal payments are due on the 2023 Notes prior to maturity. Other than restrictions relating to certain fundamental changes and consolidations, mergers or asset sales and customary anti-dilution adjustments, the 2023 Notes do not contain any financial covenants and do not restrict the Company from conducting significant restructurings, paying dividends or issuing or repurchasing any of its other securities. As of March 31, 2023, the 2023 Notes are included within current liabilities in the Company's unaudited Consolidated Balance Sheets.

2023 Hedge

In connection with the sale of the 2023 Notes, the Company entered into privately negotiated call option transactions with certain dealers, which included affiliates of certain of the initial purchasers of the 2023 Notes and other financial institutions, or the 2023 Counterparties, entitling the Company to purchase up to 5,345,010 shares of the Company's common stock at an initial stock price of $84.19 per share, each of which is subject to adjustment. The 2023 Hedge was initially required to be settled in cash as the Company did not have sufficient reserved shares with respect to the 2023 Notes. As a result, the 2023 Hedge was accounted for as a derivative asset, which was included in long-term assets in the Company's unaudited Consolidated Balance Sheets. The cost of the 2023 Hedge was $69.5 million. On September 10, 2020, as a result of the increase in the number of shares of the Company's common stock authorized for issuance, the Company had sufficient reserved shares to settle the 2023 Notes, which therefore allows for the 2023 Hedge to be settled in cash, stock, or a combination thereof. In accordance with authoritative literature, the Convertible Note Hedge Derivative was marked to fair value and reclassified to stockholders' equity, which resulted in recognizing a reduction of $37.3 million in additional paid-in-capital during 2020. The 2023 Hedge will expire on the second scheduled trading day immediately preceding June 1, 2023. The 2023 Hedge is expected to reduce the potential equity dilution upon conversion of the 2023 Notes if the daily volume-weighted average price per share of the Company's common stock exceeds the strike price of the 2023 Hedge. An assumed exercise of the 2023 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.

2023 Warrants

In connection with the sale of the 2023 Notes, the Company sold warrants to the 2023 Counterparties, or the 2023 Warrants, to acquire up to 5,345,010 shares of the Company's common stock. The 2023 Warrants initially limited the amount of shares the Company was required to reserve for issuance under the 2023 Warrants to an aggregate of 3,093,500 shares of the Company's common stock, subject to adjustment upon the Company having a sufficient amount of authorized and unissued shares which are not reserved for other transactions. As a result of the Company receiving stockholder approval to increase the number of shares of the Company's common stock authorized for issuance on September 10, 2020, the Company subsequently entered into amendment agreements with each of the 2023 Counterparties to increase the number of authorized shares of the Company's common stock required to be reserved under the 2023 Warrants to the aggregate amount of 6,948,512 shares. The 2023 Warrants will expire on various dates from September 2023 through November 2023 and may be settled in net shares or cash, subject to certain conditions. It is the Company's current intent and policy to settle all conversions in shares of the Company's common stock. The Company received $46.8 million in cash proceeds from the sale of the 2023 Warrants, which was recorded in additional paid-in-capital. The 2023 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 2023 Warrants, which is $104.84 per share. The Company uses the treasury share method for assumed conversion of its 2023 Warrants to compute the weighted average common shares outstanding for diluted earnings per share.

0.375% Senior Convertible Notes due 2025

In March 2020, the Company issued $450.0 million principal amount of unsecured Senior Convertible Notes with a stated interest rate of 0.375% and a maturity date of March 15, 2025, or the 2025 Notes. The net proceeds from the offering of the 2025 Notes, after deducting initial purchasers' discounts and costs directly related to the offering, were approximately $437.0 million. The 2025 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 2025 Notes is 10.7198 shares per $1,000 principal amount, which is equivalent to a conversion price of approximately $93.29 per share, subject to adjustments. In addition, following certain corporate events that occur prior to the maturity date or if the Company issues a notice of redemption, the Company will increase the conversion rate for a holder who elects to convert its 2025 Notes in connection with such a corporate event or in connection with such redemption in certain circumstances. The Company also entered into transactions for a convertible notes hedge, or the 2025 Hedge, and warrants, or the 2025 Warrants, concurrently with the issuance of the 2025 Notes.

At the time of issuance and in accordance with Accounting Standards Codification Topic 470, the embedded conversion feature of the 2025 Notes required bifurcation from the notes and was initially accounted for as an equity instrument classified to stockholders' equity, which resulted in recognizing $78.3 million in additional paid-in-capital during 2020. As of January 1, 2021, the Company early adopted ASU 2020-06, which removed the requirement of separating the embedded conversion feature classified within stockholders' equity from the 2025 Notes. Accordingly, the Company reclassified the unamortized debt discount and corresponding debt issuance costs from its additional paid-in capital to its senior convertible notes within long-term liabilities in the unaudited Consolidated Balance Sheets. The impact of the adoption of ASU 2020-06 as of January 1, 2021 resulted in an increase in senior convertible notes and retained earnings of $64.7 million and $8.8 million, respectively, and a decrease in deferred tax liabilities and additional paid-in capital by $15.9 million and $57.6 million, respectively.

Prior to September 15, 2024, holders may convert their 2025 Notes only under the following conditions: (a) during any calendar quarter commencing after the calendar quarter ending on June 30, 2020 (and only during such calendar quarter), if the last reported sale price of the Company's common stock for at least 20 trading days (whether or not consecutive) during a period of 30 consecutive trading days ending on, and including, the last trading day of the immediately preceding calendar quarter is greater than or equal to 130% of the conversion price on each applicable trading day; (b) during the five business day period after any five consecutive trading day period, or the measurement period, in which the trading price of the 2025 Notes per $1,000 principal amount of notes for each trading day of the measurement period was less than 98% of the product of the last reported sale price of the Company's common stock and the conversion rate on such trading day; (c) if the Company calls any or all of the 2025 Notes for redemption, at any time prior to the close of business on the second scheduled trading day preceding the redemption date; or (d) upon the occurrence of specified corporate events, as defined in the 2025 Notes. On or after September 15, 2024, until the close of business on the second scheduled trading day immediately preceding March 15, 2025, holders may convert their 2025 Notes at any time, regardless of the foregoing conditions.

The Company may not redeem the 2025 Notes prior to March 20, 2023. The Company may redeem the 2025 Notes, at its option, in whole or in part, on or after March 20, 2023 until the close of business on the business day immediately preceding September 15, 2024, 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 2025 Notes to be redeemed plus accrued and unpaid interest to, but excluding, the redemption date. No principal payments are due on the 2025 Notes prior to maturity. Other than restrictions relating to certain fundamental changes and consolidations, mergers or asset sales and customary anti-dilution adjustments, the 2025 Notes do not contain any financial covenants and do not restrict the Company from conducting significant restructurings, paying dividends or issuing or repurchasing any of its other securities.

2025 Hedge

In connection with the sale of the 2025 Notes, the Company entered into privately negotiated call option transactions with certain dealers, which included affiliates of certain of the initial purchasers of the 2025 Notes and other financial institutions, or the 2025 Counterparties, entitling the Company to purchase up to 4,823,910 shares of the Company's common stock at an initial stock price of $93.29 per share, each of which is subject to adjustment. The cost of the 2025 Hedge was $78.3 million and accounted for as an equity instrument by recognizing $78.3 million in additional paid-in-capital during 2020. The 2025 Hedge will expire on the second scheduled trading day immediately preceding March 15, 2025. The 2025 Hedge is expected to reduce the potential equity dilution upon conversion of the 2025 Notes if the daily volume-weighted average price per share of the Company's common stock exceeds the strike price of the 2025 Hedge. An assumed exercise of the 2025 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.

2025 Warrants

The Company sold warrants to the 2025 Counterparties to acquire up to 4,823,910 shares of the Company's common stock. The 2025 Warrants will expire on various dates from June 2025 through October 2025 and may be settled in net shares or cash, subject to certain conditions. It is the Company's current intent and policy to settle all conversions in shares of the Company's common stock. The Company received $47.1 million in cash proceeds from the sale of the 2025 Warrants, which was recorded in additional paid-in-capital. The 2025 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 2025 Warrants, which is $127.84 per share. The Company uses the treasury share method for assumed conversion of its 2025 Warrants to compute the weighted average common shares outstanding for diluted earnings per share.

Revolving Senior Credit Facility

In February 2020, the Company entered into a Second Amended and Restated Credit Agreement, or the 2020 Credit Agreement, for a revolving senior credit facility, or the 2020 Facility, which replaced the previous Amended and Restated Credit Agreement the Company had entered into in April 2017. The 2020 Credit Agreement was amended in May 2020 to, among other things, provide additional flexibility in determining the financial covenant leverage ratios for the second and third fiscal quarters of 2020 and to adjust certain margin and benchmark rates used to determine interest under the 2020 Facility. The 2020 Credit Agreement was further amended in May 2023 to replace the LIBOR-based rates with a SOFR-based rate (including a customary spread adjustment) and other rates for "Alternate Currencies" including, Australian dollars (BBSY), British pound sterling (SONIA), Euros (EURIBOR) and Japanese yen (TIBOR) and adjusts certain other provisions to reflect current documentation standards and other agreed modifications. The 2020 Credit Agreement provides for secured revolving loans, multicurrency loan options and letters of credit in an aggregate amount of up to $550.0 million. The 2020 Credit Agreement also contains an expansion feature, which allows the Company to increase the aggregate principal amount of the 2020 Facility provided the Company remains in compliance with the underlying financial covenants on a pro forma basis, including but not limited to, compliance with the consolidated interest coverage ratio and certain consolidated leverage ratios.

The 2020 Facility matures in February 2025 (subject to an earlier springing maturity date), and includes a sublimit of $50.0 million for standby letters of credit, a sublimit of $250.0 million for multicurrency borrowings, and a sublimit of $5.0 million for swingline loans. All assets of the Company and its material domestic subsidiaries continue to be pledged as collateral under the 2020 Facility (subject to customary exceptions) pursuant to the terms set forth in the Second Amended and Restated Security and Pledge Agreement executed in favor of the administrative agent by the Company. Each of the Company's material domestic subsidiaries guarantee the 2020 Facility. In connection with the 2020 Facility, the Company incurred issuance costs which will be amortized over the term of the 2020 Facility. The Company did not carry any outstanding revolving loans under the 2020 Facility as of March 31, 2023 and December 31, 2022.

Any borrowings under the 2020 Facility are intended to be used by the Company to provide financing for working capital and other general corporate purposes, including potential mergers and acquisitions and to refinance indebtedness. Borrowings under the 2020 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 2020 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) the Eurocurrency Rate plus 1.00%. The margin for the 2020 Facility ranges, based on the Company's consolidated total net leverage ratio, from 0.50% to 1.25% in the case of base rate loans and from 1.50% to 2.25% in the case of Eurocurrency Rate loans. The 2020 Facility includes an unused line fee ranging, based on the Company's consolidated total net leverage ratio, from 0.35% to 0.50% per annum on the revolving commitment.

The 2020 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 a consolidated interest coverage ratio and certain consolidated leverage ratios, which are measured on a quarterly basis. The 2020 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 2020 Credit Agreement covenants.

6. 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 contain contingent consideration arrangements that require the Company to assess the acquisition date fair value of the contingent consideration liabilities. Such liabilities are 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, Financial Instruments and Fair Value Measurements, in the Notes to unaudited Consolidated Financial Statements included in this Quarterly Report for further discussion on contingent consideration liabilities.

Variable Interest Entities

The Company provides IONM services through various subsidiaries, which conduct business as NuVasive Clinical Services. In providing IONM services to surgeons and healthcare facilities across the U.S., the Company maintains contractual relationships with several physician practices, or 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.

7. Stockholders' Equity

The Company is authorized to repurchase up to $100 million of its common stock through December 31, 2023. Under this program, the Company is authorized to repurchase its shares in open market purchases, privately negotiated purchases or other transactions. The Company did not repurchase any common stock during the three months ended March 31, 2023.

8. Stock-Based Compensation

The compensation cost that has been included in the unaudited Consolidated Statements of Operations for the Company's stock-based compensation plans was as follows:

	Three Months Ended March 31,	
(in thousands)	2023	2022
Selling, general and administrative expense	$ 6,362	$ 6,442
Research and development expense	509	329
Cost of sales	36	36
Stock-based compensation expense before taxes	6,907	6,807
Related income tax benefit	(1,002)	(988)
Stock-based compensation expense, net of taxes	$ 5,905	$ 5,819

As of March 31, 2023, there was $67.5 million of unrecognized compensation expense for restricted stock units, or RSUs, and performance-based restricted stock units, or PRSUs, to be recognized over a weighted average period of 2.5 years.

Restricted Stock Units and Performance-Based Restricted Stock Units

The Company issued approximately 284,000 shares of common stock, before net share settlement, upon vesting of RSUs and PRSUs during the three months ended March 31, 2023, and issued approximately 329,000 shares of common stock, before net share settlement, upon vesting of RSUs and PRSUs during the year ended December 31, 2022.

Employee Stock Purchase Plan

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

	Three Months Ended March 31,	
	2023	2022
ESPP		
Volatility	42 %	27 %
Expected term (years)	0.5	0.5
Risk free interest rate	4.6 %	0.1 %
Expected dividend yield	— %	— %

Under the terms of the ESPP, employees 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 Company common stock for a purchase price equal to 85% of the lower of the fair market value per share (at closing) of Company common stock on (i) the commencement date of the six-month offering period, or (ii) the respective purchase date.

9. 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 three months ended March 31, 2023, 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: tax expense related to shortfalls on stock-based compensation. The Company's effective tax rate recorded for the three months ended March 31, 2023 was 663%, primarily due to the size of discrete items of tax expense related to shortfalls on stock-based compensation relative to year-to-date pretax income.

In accordance with the disclosure requirements as described in Accounting Standards Codification 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. During the three months ended March 31, 2023, there was an increase in gross unrecognized tax benefits of approximately $2.2 million primarily related to research and development credits. The Company believes it is reasonably possible that approximately $0.1 million of its remaining unrecognized tax positions may be recognized within the next twelve months 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 active audits are with the U.S. Internal Revenue Service for the 2014 – 2016 tax years, Illinois State for the 2019 and 2020 tax years, the Netherlands for the 2019 tax year, and Italy for the 2017 tax year. California income tax returns are subject to examination in all years due to prior year net operating losses and research and development credits. Income tax returns of other major state and foreign jurisdictions remain subject to examination from 2018 and 2017 forward, respectively.

10. 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, or the CODM, as well as the lack of availability of discrete financial information at a lower level. The Company's CODM reviews net sales 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. The Company has disclosed the net sales 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 IONM services and disposables, biologics, and capital equipment, all of which are used to aid spinal surgery.

Net sales by product line was as follows:

	Three Months Ended March 31,	
(in thousands)	**2023**	**2022**
Spinal hardware	$ 234,300	$ 220,796
Surgical support	73,411	69,966
Total net sales	$ 307,711	$ 290,762

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

	Net Sales		**Property and Equipment, Net**	
	Three Months Ended March 31,			
(in thousands)	**2023**	**2022**	**March 31, 2023**	**December 31, 2022**
United States	$ 237,414	$ 220,829	$ 303,651	$ 295,914
International (excludes Puerto Rico)	70,297	69,933	51,822	50,596
Total	$ 307,711	$ 290,762	$ 355,473	$ 346,510

11. 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 Sheets. Leases with an initial term of 12 months or less are not recorded in the unaudited Consolidated Balance Sheets. The Company recognizes lease expense 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 $1.5 million as of March 31, 2023 and December 31, 2022.

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 table below summarizes the Company's right-of-use assets and lease liabilities as of March 31, 2023 and December 31, 2022:

(in thousands, except years and rates)	March 31, 2023	December 31, 2022
Assets		
Operating	$ 93,273	$ 95,112
Financing	1,903	1,893
Total leased assets	$ 95,176	$ 97,005
Liabilities		
Current:		
Operating	$ 10,193	$ 10,019
Financing	971	1,084
Long-term:		
Operating	101,606	103,806
Financing	968	872
Total lease liabilities	$ 113,738	$ 115,781
Supplemental non-cash information:		
Weighted-average remaining lease term (years) - operating leases	10.7	10.9
Weighted-average remaining lease term (years) - finance leases	2.7	2.6
Weighted-average discount rate - operating leases	5.3 %	5.3 %
Weighted-average discount rate - finance leases	4.0 %	3.7 %

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:

	Three Months Ended March 31,	
(in thousands)	2023	2022
Lease expense:		
Operating lease expense	$ 4,190	$ 4,107
Finance lease expense:		
Depreciation of right-of-use assets	258	397
Interest expense on lease liabilities	21	30
Total lease expense	$ 4,469	$ 4,534
Consolidated Statements of Cash Flows information:		
Operating cash flows used for operating leases	$ 4,294	$ 4,153
Operating cash flows used for financing leases	21	30
Financing cash flows used for financing leases	270	521
Total cash paid for amounts included in the measurement of lease liabilities	$ 4,585	$ 4,704
Supplemental non-cash information:		
Operating lease liabilities arising from obtaining right-of-use assets	$ 797	$ 498

The Company's future minimum annual lease payments under operating and financing leases at March 31, 2023 are as follows:

(in thousands)	Financing Leases	Operating Leases
Remaining 2023	$ 841	$ 12,000
2024	680	14,777
2025	365	13,029
2026	156	12,676
2027	4	11,920
Thereafter	—	85,153
Total minimum lease payments	$ 2,046	$ 149,555
Less: amount representing interest	(107)	(37,756)
Present value of obligations under leases	1,939	111,799
Less: current portion	(971)	(10,193)
Long-term lease obligations	$ 968	$ 101,606

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 March 31, 2023, future commitments for such key executives were approximately $11.9 million. In certain circumstances, the agreements call for the acceleration of equity vesting. Those figures are not reflected in the above information.

12. 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. 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.

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, or 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 proposed merger with Globus Medical, Inc., or Globus Medical;
- the value proposition of our products and procedural solutions;
- our intentions, beliefs and expectations regarding our net sales, expenses, operations and future financial performance;
- our operating results;
- our plans for future product developments and enhancements of existing products and solutions;
- 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, cash equivalents and investments will be sufficient to satisfy our anticipated obligations;
- the impact of global economic conditions and public health crises and epidemics, such as inflation and the COVID-19 pandemic, on our business and industry;
- our expectations regarding our customers and the adoption of our products and procedures;
- 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, 2022 and this Quarterly Report on Form 10-Q, and similar discussions in our other Securities and Exchange Commission, or the SEC, filings. We assume no obligation to update any forward-looking statements to reflect new information, future events or circumstances or otherwise, except as required by law.

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, 2022 contained in our 2022 Annual Report on Form 10-K.

Overview

We are a global medical technology company focused on developing, manufacturing, selling and providing procedural solutions for spine surgery, with a guiding purpose to transform surgery, advance care and change lives. We offer a comprehensive portfolio of procedurally integrated spine surgery solutions, including surgical access instruments, spinal implants, fixation systems, biologics, and enabling technologies, as well as systems and services for intraoperative neuromonitoring. In addition, we develop and sell magnetically adjustable implant systems for spine and specialized orthopedic procedures.

Since our incorporation in 1997, we have grown from a small developer of specialty spinal implants into a leading medical technology company delivering procedurally integrated solutions for spine surgery. A key driver of our growth has been our focus on innovative products and technologies that drive reproducible outcomes for patients, surgeons and providers. In 2003, we introduced the eXtreme Lateral Interbody Fusion procedure, or XLIF, a lateral access spine surgery technique that is less invasive than traditional, open surgical procedures and clinically proven to enable better patient outcomes. Building off the success of XLIF, we have continued to develop innovative less-invasive techniques and technologies for spine surgery, and we have broadened our portfolio of solutions for traditional, open surgical procedures. Our comprehensive portfolio of solutions can be utilized in procedures for the cervical, thoracic and lumbar spine, supporting surgical approaches from the anterior, including lateral, and posterior. Our solutions are used to treat degenerative conditions and for complex spinal surgery, including adult and pediatric deformities, as well as trauma and tumors.

Underlying our procedurally integrated solutions for spine surgery are innovative technologies designed to enable better clinical, financial, and operational outcomes, including:

- our differentiated surgical access instruments, including our integrated split-blade retractor system, designed to enable less-invasive surgical techniques by minimizing soft tissue disruption during spine surgery;
- our Advanced Materials Science portfolio of specialized spinal implants, designed to advance spinal fusion by enhancing the osseointegration and biomechanical properties of implant materials, including porous titanium and porous polyetheretherketone, or PEEK;
- our comprehensive fixation systems, designed to facilitate the preservation and restoration of patient alignment, while addressing a vast array of spinal pathologies from an open or less-invasive approach across all spinal procedures;
- our cervical total disc replacement, or cTDR, technology, which complements our portfolio of products and services for cervical spinal fusion surgery and is designed to offer surgeons best-in-class capabilities across key performance functions—anatomic, physiologic motion, and radiologic design;
- our neuromonitoring systems, which use proprietary software-driven nerve detection and avoidance technology, and our intraoperative neuromonitoring, or IONM, services and support; and
- our Pulse platform, a software ecosystem that integrates multiple hardware technologies into a single, condensed footprint in the operating room, including: radiation reduction, imaging enhancement, rod bending, navigation, IONM, and spinal alignment tools.

In addition, we also design and sell expandable growing rod implant systems for the treatment of early-onset scoliosis 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. This technology is also the basis for our Precice line of products, which are designed to support complex orthopedic reconstruction, such as trauma and limb length discrepancy. Precice is an intramedullary device that, once implanted, utilizes the MAGEC technology to non-invasively lengthen the femur and tibia.

We intend to continue development on a wide variety of innovation projects to advance our leadership position in less-invasive spine surgery, increase our product offerings and solutions for traditional spine surgery procedures, and further our enabling technologies portfolio. We expect to continue to invest in the Pulse platform to support our global commercialization plan for the technology and to build-out the platform to enable further improvement of the spine care pathway. Our goal is to use technology and data to make spine surgery more intelligent, and we are investing to develop and expand the Pulse platform to include applications and technologies designed to improve pre-operative treatment selection and planning and post-operative workflow and analytics, as well as intra-operative surgical automation and robotics. In addition, we expect to continue to pursue business and technology acquisition targets and strategic relationships to identify opportunities to broaden our participation along the spine care continuum, as well as opportunities outside of traditional spine. Top priorities include opportunities that complement our technology leadership position in spine, targeted geographic expansion, technology that makes procedures even safer, as well as opportunities which advance our strategy to make spine surgery more intelligent.

Proposed Merger with Globus Medical

On February 8, 2023, we entered into an Agreement and Plan of Merger, or the Merger Agreement, with Globus Medical and Zebra Merger Sub, Inc., a wholly owned subsidiary of Globus Medical, or Merger Sub. The Merger Agreement provides, among other things, that subject to the satisfaction or waiver of the conditions set forth therein, Merger Sub will merge with and into NuVasive, referred to as the Merger, with NuVasive surviving the Merger as a wholly owned subsidiary of Globus Medical.

On April 27, 2023, NuVasive and Globus Medical announced that the stockholders of each company had approved all proposals related to the Merger at each company’s respective special meeting of stockholders. Completion of the Merger is subject to the satisfaction of the remaining customary closing conditions, including the expiration or termination of the waiting period under the Hart-Scott-Rodino Antitrust Improvements Act of 1976, as amended.

For more information, see Note 1, Description of Business and Basis of Presentation, in the Notes to unaudited Consolidated Financial Statements included in this Quarterly Report.

Impact of COVID-19 and Global Macroeconomic Conditions on Our Business

The COVID-19 pandemic significantly impacted our business and results of operations during the years 2020 through 2022 and may continue to negatively impact our business, results of operations, financial condition and cash flows. Additionally, the COVID-19 pandemic and general macroeconomic conditions have led to disruptions in the global supply chain. We have experienced challenges associated with material and component availability for certain product lines, longer shipping and delivery times for raw materials and components, constrained logistics capacity related to the movement of our products, availability of skilled labor and increased costs of raw materials, components, labor, and freight and courier services. Our net sales and profitability from our foreign operations have also been negatively affected by the unfavorable foreign currency exchange impact of the strengthened U.S. dollar against a number of currencies.

During the three months ended March 31, 2023, procedural volume rates for elective surgeries increased in the U.S. and certain international regions compared to the same period in 2022 as hospital systems continue to mitigate healthcare worker shortages and other supply chain disruptions. While many countries have removed or reduced the restrictions initially implemented in response to COVID-19, the pandemic continues to evolve, and its impact on our business will depend on several factors that are highly uncertain and unpredictable, including, the efficacy and adoption of vaccines and treatments, future resurgences of the virus and its variants, the imposition of government lockdowns, quarantine and physical distancing requirements, patient capacity at hospitals and healthcare systems, the duration and severity of healthcare worker shortages, and the willingness and ability of patients to seek care and treatment due to safety concerns or financial hardship. Additionally, due to the significant uncertainty that exists relative to the duration and overall impact of the macroeconomic factors discussed above, our future operating results may be negatively impacted. Further discussion of the potential impacts on our business from the COVID-19 pandemic and global macroeconomic conditions provided under Item 1A – Risk Factors of Part I of our Annual Report on Form 10-K for the year ended December 31, 2022.

Net Sales and Operations

The majority of our net sales are derived from the sale of implants and fixation products, biologics, disposables and IONM services and we expect this trend to continue for the foreseeable future. Our implants and fixation products, biologics, and disposables are currently sold and shipped from our distribution and warehousing operations. We generally recognize net sales from implants and fixation products, biologics and disposables upon notice that our products have been used in a surgical procedure or upon shipment to a third-party customer who has assumed control of the products. Net sales from IONM services are recognized in the period the service is performed for the amount of payment we expect to receive. We make available surgical instrument sets and neuromonitoring systems to hospitals to facilitate surgeon access to the spine to perform restorative and fusion procedures using our implants and fixation products. We sell surgical instrument sets and our proprietary software-driven neuromonitoring systems, however this does not make up a material part of our business. While selling or leasing of capital equipment has not historically made up a material portion of our total net sales, selling and leasing of capital equipment is expected to continue to increase over time as a result of our commercialization of the Pulse platform in 2021.

A substantial portion of our operations are located in the U.S., and the majority of our net sales and cash generation have been made in the U.S. We sell our products in the U.S. through a sales force comprised primarily of directly employed and independent sales representatives. Our sales force provides a delivery and consultative service to surgeon and hospital customers and is compensated based on sales and product placements in their territories. Sales force commissions are reflected in the selling, general and administrative operating expense line item within our 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 representatives, as well as exclusive and non-exclusive independent third-party distributors.

Results of Operations

Net Sales

	March 31,			
(in thousands, except %)	**2023**	**2022**	**$ Change**	**% Change**
Three Months Ended				
Net sales				
Spinal hardware	$ 234,300	$ 220,796	$ 13,504	6 %
Surgical support	73,411	69,966	3,445	5 %
Total net sales	$ 307,711	$ 290,762	$ 16,949	6 %

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

We expect continued adoption of our innovative less-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, continued changes in the public and private insurance markets regarding reimbursement, and ongoing policy and legislative changes in the U.S. have created less predictability. Although the market for procedurally-integrated spine surgery solutions is expected to 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. Additionally, the COVID-19 pandemic and global macroeconomic conditions have had and may continue to have, an adverse effect on our business.

Net sales from our spinal hardware product line offerings increased $13.5 million, or 6%, during the three months ended March 31, 2023, compared to the same period in 2022. Product volume within spinal hardware increased our net sales by approximately 9% during the three months ended March 31, 2023, compared to the same period in 2022, primarily due to increased spine procedural volumes throughout the three months ended March 31, 2023. There were unfavorable pricing changes of approximately 1% during the three months ended March 31, 2023, compared to the same period in 2022. Foreign currency fluctuations decreased our spinal hardware net sales by approximately 2% during the three months ended March 31, 2023, compared to the same period in 2022.

Net sales from our surgical support product line offerings increased $3.4 million, or 5%, during the three months ended March 31, 2023, compared to the same period in 2022. Product and service volume within surgical support increased our net sales by approximately 6% during the three months ended March 31, 2023, compared to the same period in 2022, primarily due to increased IONM service and surgical procedural volumes throughout the three months ended March 31, 2023. There was a de minimis pricing impacts during the three months ended March 31, 2023, compared to the same period in 2022. Foreign currency fluctuations decreased our surgical support net sales by approximately 1% during the three months ended March 31, 2023, compared to the same period in 2022.

Cost of Sales, Excluding Below Amortization of Intangible Assets

	March 31,			
(in thousands, except %)	2023	2022	$ Change	% Change
Three Months Ended				
Cost of sales	$ 86,370	$ 79,097	$ 7,273	9 %
% of total net sales	28 %	27 %		1 %

Cost of sales 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 IONM services, which includes personnel and physician oversight costs. We primarily procure and manufacture our products in the U.S., and accordingly, foreign currency fluctuations have not materially impacted our cost of sales.

Cost of sales increased $7.3 million, or 9%, during the three months ended March 31, 2023, compared to the same period in 2022. Cost of sales as a percentage of net sales for the three months ended March 31, 2023 increased by 1%, compared to the same period in 2022. The increase in cost of sales for the three months ended March 31, 2023 is primarily associated with proportional higher net sales, compared to the prior year period.

Operating Expenses

	Three Months Ended March 31,			
(in thousands, except %)	2023	2022	$ Change	% Change
Selling, general and administrative	$ 176,192	$ 160,281	$ 15,911	10 %
% of total net sales	57 %	55 %		
Research and development	24,573	23,358	1,215	5 %
% of total net sales	8 %	8 %		
Amortization of intangible assets	8,796	13,032	(4,236)	(33 %)
Business transition costs	4,614	3,060	1,554	51 %

Selling, General and Administrative

Selling, general and administrative expenses consist primarily of compensation costs, commissions and training costs for our employees 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 employees and third-party service providers.

Selling, general and administrative expenses increased $15.9 million, or 10%, during the three months ended March 31, 2023, compared to the same period in 2022. The increase during the three months ended March 31, 2023, compared to the same period in 2022, is primarily due to increased sales commissions and depreciation costs for surgical sets associated with higher net sales, increased travel expenses coinciding with the easing of COVID-19 related restrictions, and increased legal expenses associated with certain ongoing litigation matters. During the three months ended March 31, 2023, we have continued to experience macroeconomic inflationary pressures within our selling, general and administrative expenses.

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 employee related expenses. In the last several years, we have introduced numerous new products and product enhancements that have significantly expanded our technology platforms and our comprehensive product portfolio. 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 related to our core product portfolio, as well as in our capital equipment.

Research and development expense increased by $1.2 million, or 5%, during the three months ended March 31, 2023, compared to the same period in 2022. The increase in spending for the period is primarily due to higher headcount-related costs and further development, enhancement and functionality of our current and future product offerings, including capital equipment. Over the course of the COVID-19 pandemic, we have stayed committed to our investment in research and development in order to further advance our leadership position in spine surgery and our enabling technologies portfolio.

Amortization of Intangible Assets

Amortization of intangible assets relates to the amortization of finite-lived intangible assets acquired. Amortization expense decreased by $4.2 million, or 33% in 2023 compared to 2022 primarily due to the completion of amortization associated with certain acquisition-related intangible assets during 2022 and the three months ended March 31, 2023.

Business Transition Costs

We incur certain costs related to acquisition, integration and business transition activities, which include severance, relocation, consulting, leasehold exit costs, costs related to the proposed merger with Globus Medical, third-party acquisition costs, contingent consideration fair value adjustments and other costs directly associated with such activities. Contingent consideration is accrued based on the fair value of the expected payment, and such accruals are subject to increase or decrease based on the assessment of the likelihood and amount of contingent consideration achievement resulting in payment. If an accrual for contingent consideration decreases during a particular period, it results in a reduction of costs during such period, which we record as a benefit.

During the three months ended March 31, 2023, we recorded $4.6 million of costs related to acquisition, integration and business transition activities, which includes $7.4 million related to costs incurred associated with the proposed merger with Globus Medical, offset by a $(4.8) million benefit related to fair value adjustments on contingent consideration liabilities associated with our 2022, 2021, 2018 and 2016 acquisitions.

During the three months ended March 31, 2022, we recorded $3.1 million of costs related to acquisition, integration and business transition activities, which included de minimis fair value adjustments on contingent consideration liabilities associated with our 2021, 2017 and 2016 acquisitions.

Interest and Other (Expense) Income, Net

	March 31,			
(in thousands, except %)	**2023**	**2022**	**$ Change**	**% Change**
Three Months Ended				
Interest income	$ 1,828	$ 43	$ 1,785	4,151 %
Interest expense	(4,378)	(4,379)	1	— %
Other (expense) income, net	(4,436)	16,244	(20,680)	(127)%
Total interest and other (expense) income, net	$ (6,986)	$ 11,908	$ (18,894)	(159)%

Total interest and other (expense) income, net for the periods presented included gains and losses from strategic investments and net foreign currency exchange gains and losses.

Total interest and other (expense) income, net was $(7.0) million of expense during the three months ended March 31, 2023, as compared to $11.9 million of income during the same period in 2022. Interest income increased by $1.8 million, during the three months ended March 31, 2023 as compared to the same period in 2022, primarily due to higher interest amounts earned on our money market funds. Other (expense) income, net increased by $(20.7) million of expense during the three months ended March 31, 2023, as compared to the same period in 2022. The change in other (expense) income, net is primarily due to net foreign currency exchange losses of $(4.8) million during the three months ended March 31, 2023, as compared to net foreign currency exchange gains of $16.0 million during the three months ended March 31, 2022.

Income Tax Expense

(in thousands, except %)	March 31, 2023	March 31, 2022
Three Months Ended		
Income tax expense	$ (1,193)	$ (4,641)
Effective income tax rate	663 %	20 %

The provision for income tax expense was 663% for the three months ended March 31, 2023, compared with 20% for the three months ended March 31, 2022. The increased rate during the three months ended March 31, 2023, was primarily due to the size of discrete items of tax expense related to shortfalls on stock-based compensation relative to year-to-date pretax income and increased valuation allowances, offset by increased tax credits, reduced foreign income inclusions and reduced limitations on officer's compensation.

Liquidity, Cash Flows and Capital Resources

Liquidity and Capital Resources

Our principal sources of liquidity are our existing cash and cash equivalents, 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, which include impacts from the COVID-19 pandemic and general macroeconomic conditions, working capital requirements and capital deployment decisions. We have historically invested our cash primarily in 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. Additionally, the COVID-19 pandemic and general macroeconomic conditions have led to disruptions in the global supply chain. While we have largely been able to mitigate the impact, we have experienced challenges associated with material and component availability for certain product lines, longer shipping and delivery times for raw materials and components, constrained logistics capacity related to the movement of our products, availability of skilled labor and increased costs of raw materials, components, labor, and freight and courier services.

Our future capital requirements will depend on many factors including our growth rate in net sales, the timing and extent of spending to support development efforts, the expansion of selling, general 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, international expansions of our business, and impacts from the COVID-19 pandemic and global macroeconomic factors. We expect our cash flows from operations to continue to fund the ongoing core business. As borrowings become due, we may be required to access the capital markets or draw upon our line of credit for additional funding. We intend to draw upon our senior credit facility and use available cash on hand to repay the Senior Convertible Notes due June 2023. As we assess inorganic growth strategies, we may need to supplement our internally generated cash flow with outside sources. 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 secure additional credit facilities, term loans, or other similar arrangements and access the capital markets in light of those earning levels and general financial market conditions.

A substantial portion of our operations are located in the U.S., and the majority of our net sales and cash generation have been made in the U.S. However, as our business in markets outside of the U.S. continues to increase, our exposure to foreign currency exchange risk related to our foreign operations will increase. Fluctuations in the rate of exchange between the U.S. dollar and foreign currencies, primarily in the Australian dollar, the Brazilian real, the British pound sterling, the Colombian peso, the euro, the Japanese yen and the Singapore dollar, has and could continue to adversely affect our financial results, including our net sales, growth rates in net sales, gross margins, gains and losses as well as assets and liabilities. In particular, as a result of our acquisition of Simplify Medical, we have additional exposure to fluctuations in the Australian dollar. We established intercompany receivables and payables in Australian dollars in connection with the acquisition of Simplify Medical, a proprietary limited company registered in Australia. Additionally, we have future contingent consideration liabilities denominated in U.S. dollars, in connection with the acquisition of Simplify Medical, which are the financial obligation of NuVasive (AUST/NZ) Pty Limited, an Australian dollar denominated company. Both the intercompany receivables and payables and contingent consideration liabilities are subject to foreign currency remeasurement. While we enter into forward currency contracts for certain currencies 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 have not entered into hedges with respect to the Australian dollar. In addition, we currently do not hedge future forecasted transactions but will continue to assess whether that strategy is appropriate. As of March 31, 2023, the cash balance held by our foreign subsidiaries with currencies other than the U.S. dollar was approximately $55.7 million and it is our intention to indefinitely reinvest all of our current foreign earnings to increase working capital within our international business and to expand our existing operations outside the U.S. As of March 31, 2023, our account receivable balance held by our foreign subsidiaries with currencies other than the U.S. dollar was approximately $69.4 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.

Under the terms of the Merger Agreement with Globus Medical, we have agreed to various covenants and agreements, including, among others, agreements to use commercially reasonable efforts to conduct our business in the ordinary course during the period between the execution of the Merger Agreement and the closing of the Merger. Subject to certain exceptions, we may not take, commit or agree to take certain actions without Globus Medical's consent, including, but not limited to, making material acquisitions, disposing of material assets, making capital expenditures in excess of specified amounts, issuing additional capital stock or other equity securities, or incurring additional indebtedness (subject to certain exceptions). We do not believe these restrictions will prevent us from meeting our ongoing operating expenses, working capital needs or capital expenditure requirements.

We are currently, and in the future could be, involved in legal actions and investigations arising out of the normal course of our business. 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 that are not disclosed in our unaudited Consolidated Financial Statements. It is reasonably possible, however, that an unfavorable outcome that exceeds our accrual estimate for a particular legal proceeding or investigation 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 or investigation 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 or investigation could have an adverse impact on our liquidity or affect our access to additional capital resources. We have disclosed all material accruals for pending litigation or investigations in Note 12, Contingencies, in the Notes to unaudited Consolidated Financial Statements included in this Quarterly Report.

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. As of March 31, 2023, we anticipate the remaining sales-based milestones will become payable by 2024 but this date is subject to change based on the achievement of those commercial milestones.

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. In May 2020, we paid $7.5 million toward the successful achievement of a milestone. In March 2022, we paid $7.5 million toward the successful achievement of a second milestone. As of March 31, 2023, there are two remaining milestones, and we anticipate the next milestone will become payable in 2023 with the final milestone anticipated no earlier than 2027. These dates are subject to change based on the achievement of those manufacturing and commercial milestones.

On February 24, 2021, we completed the acquisition of Simplify Medical, a developer of cervical disc technology for cTDR procedures. In connection with the acquisition, we recorded a purchase accounting fair value estimate of $103.4 million for contingent consideration liabilities related to the achievement of milestones related to regulatory approval and net sales from products incorporating the Simplify Medical cervical disc technology. On April 1, 2021, the Simplify Cervical Disc received approval from the Food and Drug Administration, or FDA, for two-level cervical total disc replacement, resulting in the achievement of the regulatory milestone. We made a payment of $45.8 million on April 20, 2021 for the regulatory milestone using available cash. Additional milestone payments, which are uncapped and contingent upon net sales from products incorporating the Simplify Medical cervical disc technology, are payable in the calendar years 2023, 2024 and 2025. The first net sales milestone payment in the amount of $56.5 million was paid in March 2023.

On December 6, 2022, we completed the acquisition of certain intellectual property and other assets from a developer of implantable sensor technology for orthopedic procedures. In connection with the acquisition, we recorded a purchase accounting fair value estimate of $5.5 million for contingent consideration liabilities related to the successful achievement of development, regulatory and commercial milestones. We anticipate the milestones will become payable between 2024 and 2028. These dates are subject to change based on the achievement of those milestones.

Cash and cash equivalents were $181.2 million and $248.7 million at March 31, 2023 and December 31, 2022, respectively. While the efforts to contain and manage the spread and impact of COVID-19 have created significant disruptions to the healthcare system and the global economy, as of the filing date of this report, we believe our existing cash and cash equivalents, projected future cash flows from operations and access to external financing sources are sufficient to satisfy our current and reasonably anticipated requirements for funds to conduct our operations in the ordinary course of our business and pay our obligation as they become due for the next twelve months. Additionally, we have varying needs for cash in connection with our Senior Convertible Notes, of which $450 million of Senior Convertible Notes are due June 2023, as well as for certain acquisition-related obligations and contingent consideration achievements. Future litigation or requirements to escrow funds could also materially impact our liquidity and our ability to invest in and operate our business on an ongoing basis. Although we have no cash borrowings under our existing revolving senior credit facility as of the date of this report, we expect to use our cash resources or cash borrowings under our senior credit facility to support our business within the context of prevailing market and economic conditions, which, given the continued unpredictability of the COVID-19 pandemic and global macroeconomic conditions, could rapidly and materially deteriorate or otherwise change. During this time, we may seek other sources of liquidity through capital market or bank loan transactions to support our business needs. In addition, we may seek to further adjust or amend the terms of and/or expand the capacity of our existing senior credit facility, or enter into additional credit facilities, term loans, or other similar arrangements. However, with continued uncertainty surrounding the COVID-19 pandemic and the macroeconomic conditions discussed above, our ability to engage in such transactions may be constrained by volatile financial market conditions, unfavorable lending terms, reduced investor and/or lender interest or capacity, as well as our liquidity, leverage, and general creditworthiness and we can provide no assurance as to successfully completing such transactions. Furthermore, our ability to borrow under our existing revolving senior credit facility is subject to remaining in compliance with underlying financial covenants which may be difficult to satisfy if our business experiences additional disruptions as a result of the COVID-19 pandemic or global macroeconomic conditions. Further discussion of the potential impacts on our business from the COVID-19 pandemic and global macroeconomics conditions is provided under Item 1A of Part I of our Annual Report on Form 10-K for the year ended December 31, 2022.

On January 1, 2022, a provision of the Tax Cuts and Jobs Act of 2017 went into effect which eliminates the option to deduct research and development expenditures in the year incurred and requires taxpayers to capitalize and amortize domestic expenditures over five years and foreign expenditures over fifteen years. Although Congress is considering legislation that would defer the amortization requirement to later years, it is uncertain whether the provision will be repealed or otherwise modified. As of March 31, 2023, there has been no legislation passed to repeal or modify the provision. This provision has adversely impacted cash flows from operations during 2022 and for the three months ended March 31, 2023, and is expected to continue to adversely impact future cash flows from operations unless the provision is repealed or modified.

As of February 2023, the Internal Revenue Service is offering relief to certain tax filers in Federal Emergency Management Agency designated disaster areas related to severe winter storms. As our San Diego corporate office is located in one of these designated areas, we are eligible to defer certain tax payments due prior to October 16, 2023.We have elected to defer the extension payment for our 2022 U.S. federal income taxes, as well as our quarterly estimated U.S. federal income tax payment for first quarter, and we intend to defer future quarterly estimated U.S. federal income tax payments due prior to October 16, 2023, until October 16, 2023.

The decrease in liquidity during the three months ended March 31, 2023 of $67.5 million was primarily driven by $56.5 million in cash outflows for the first net sales milestone payment related to the Simplify Medical acquisition and $35.1 million in cash outflows for purchases of property and equipment, offset by operating cash flows. At March 31, 2023, we had cash totaling $1.5 million in restricted accounts which is not available to us to meet any ongoing capital requirements if and when needed.

Cash Flows

The following table summarizes our unaudited Consolidated Statements of Cash Flows:

	Three Months Ended March 31,		2022 to 2023	
(in thousands, except %)	2023	2022	$ Change	% Change
Net cash provided by operating activities	$ 1,970	$ 6,539	$ (4,569)	(70)%
Net cash used in investing activities	(35,148)	(34,170)	(978)	3 %
Net cash used in financing activities	(34,902)	(12,705)	(22,197)	175 %
Effect of exchange rate changes on cash	616	(443)	1,059	(239)%
Decrease in cash, cash equivalents and restricted cash	$ (67,464)	$ (40,779)	$ (26,685)	65 %

Cash Flows from Operating Activities

Cash provided by operating activities was $2.0 million for the three months ended March 31, 2023, compared to $6.5 million for the same period in 2022. The $4.6 million decrease in cash provided by operating activities was primarily due to the payment of $56.5 million for the first net sales milestone related to the Simplify Medical acquisition, of which $25.5 million was reflected within our operating activities, and the timing of spending for inventory purchases. This decrease was partially offset by the timing of collections and payments associated with our accounts receivable and accounts payable and accrued liabilities during the three months ended March 31, 2023, compared to the same period in 2022.

Cash Flows from Investing Activities

Cash used in investing activities was $35.1 million for the three months ended March 31, 2023, compared to $34.2 million for the same period in 2022. In both periods, cash used in investing activities was primarily related to purchases of property and equipment.

Cash Flows from Financing Activities

Cash used in financing activities was $34.9 million for the three months ended March 31, 2023, compared to $12.7 million for the same period in 2022. The $22.2 million increase in cash used in financing activities was primarily due to the payment of $56.5 million for the first net sales milestone payment related to the Simplify Medical acquisition, of which $31.7 million was reflected within our financing activities. This amount was offset by the $7.5 million payment relating to a milestone payment related to our 2017 acquisition, of which $6.8 million is reflected within our financing activities, and the remainder allocated to our operating activities during the three months ended March 31, 2022.

Treasury stock purchases related to equity award vesting totaled $3.0 million during the three months ended March 31, 2023. We use net share settlement on stock issuances, which results in cash tax payments. Net share settlement is generally used in lieu of cash payments by employees for minimum tax withholding 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 employee tax obligations for vested equity awards. We anticipate using cash generated from operating activities to fund such payments.

Senior Convertible Notes

1.00% Senior Convertible Notes due 2023

In June 2020, we issued $450.0 million principal amount of unsecured senior convertible notes with a stated interest rate of 1.00% and a maturity date of June 1, 2023, which we refer to as the 2023 Notes. The net proceeds from the offering, after deducting initial purchasers' discounts and costs directly related to the offering, were approximately $436.7 million. Interest on the 2023 Notes began accruing upon issuance and is payable semi-annually. The 2023 Notes permit us to settle conversions of the 2023 Notes in cash, stock, or a combination thereof, solely at our discretion, and we have elected to settle all conversions in cash. Accordingly, we will satisfy the principal amount outstanding and any note conversion value over the principal amount with cash. We may not redeem the 2023 Notes prior to the maturity date. No principal payments are due on the 2023 Notes prior to maturity. Other than restrictions relating to certain fundamental changes and consolidations, mergers or asset sales and customary anti-dilution adjustments, the 2023 Notes do not contain any financial covenants and do not restrict us from conducting significant restructurings, paying dividends or issuing or repurchasing any of our other securities. Prior to the close of business on the business day immediately preceding February 1, 2023, the 2023 Notes were convertible at the option of holders only upon the satisfaction of specified conditions and during certain periods. On or after February 1, 2023, until the close of business on the second scheduled trading day immediately preceding June 1, 2023, holders may convert their 2023 Notes at any time, regardless of these conditions. The 2023 Notes are included within current liabilities in the unaudited Consolidated Balance Sheets.

In connection with the sale of the 2023 Notes, we entered into transactions for convertible notes hedge, which we refer to as the 2023 Hedge, and warrants, which we refer to as the 2023 Warrants. The 2023 Hedge was entered into with certain dealers, which included affiliates of certain of the initial purchasers of the 2023 Notes and other financial institutions, which we refer to as the 2023 Counterparties, entitling us to purchase up to 5,345,010 shares of our own common stock at an initial price of $84.19 per share, each of which is subject to adjustment. The cost of the 2023 Hedge was $69.5 million. The 2023 Hedge will expire on the second scheduled trading day immediately preceding June 1, 2023. The 2023 Hedge is expected to reduce the potential equity dilution upon conversion of the 2023 Notes if the daily volume-weighted average price per share of our common stock exceeds the strike price of the 2023 Hedge. Our assumed exercise of the 2023 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 2023 Warrants to the 2023 Counterparties to acquire up to 5,345,010 common shares of our stock. The 2023 Warrants will expire on various dates from September 2023 through November 2023 and may be settled in net shares or cash, subject to certain conditions. It is our current intent and policy to settle all conversions in shares of our common stock. We received $46.8 million in cash proceeds from the sale of the 2023 Warrants. The 2023 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 2023 Warrants, which is $104.84 per share.

0.375% Senior Convertible Notes due 2025

In March 2020, we issued $450.0 million principal amount of unsecured senior convertible notes with a stated interest rate of 0.375% and a maturity date of March 15, 2025, which we refer to as the 2025 Notes. The net proceeds from the offering, after deducting initial purchasers' discounts and costs directly related to the offering, were approximately $437.0 million. Interest on the 2025 Notes began accruing upon issuance and is payable semi-annually. The 2025 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. On or after September 15, 2024, until the close of business on the second scheduled trading day immediately preceding March 15, 2025, holders may convert their 2025 Notes at any time, regardless of the foregoing conditions.

We may not redeem the 2025 Notes prior to March 20, 2023. We may redeem the 2025 Notes, at our option, in whole or in part, on or after March 20, 2023 until the close of business on the business day immediately preceding September 15, 2024, 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 2025 Notes to be redeemed plus accrued and unpaid interest to, but excluding, the redemption date. No principal payments are due on the 2025 Notes prior to maturity. Other than restrictions relating to certain fundamental changes and consolidations, mergers or asset sales and customary anti-dilution adjustments, the 2025 Notes do not contain any financial covenants and do not restrict us from conducting significant restructurings, paying dividends or issuing or repurchasing any of our other securities.

In connection with the sale of the 2025 Notes, we entered into transactions for convertible notes hedge, which we refer to as the 2025 Hedge, and warrants, which we refer to as the 2025 Warrants. The 2025 Hedge was entered into with certain dealers, which included affiliates of certain of the initial purchasers of the 2025 Notes and other financial institutions, which we refer to as the 2025 Counterparties, entitling us to purchase up to 4,823,910 shares of our own common stock at an initial stock price of $93.29 per share, each of which is subject to adjustment. The cost of the 2025 Hedge was $78.3 million. The 2025 Hedge will expire on the second scheduled trading day immediately preceding March 15, 2025. The 2025 Hedge is expected to reduce the potential equity dilution upon conversion of the 2025 Notes if the daily volume-weighted average price per share of our common stock exceeds the strike price of the 2025 Hedge. Our assumed exercise of the 2025 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 2025 Warrants to the 2025 Counterparties to acquire up to 4,823,910 common shares of our stock. The 2025 Warrants will expire on various dates from June 2025 through October 2025 and may be settled in net shares or cash, subject to certain conditions. It is our current intent and policy to settle all conversions in shares of our common stock. We received $47.1 million in cash proceeds from the sale of the 2025 Warrants. The 2025 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 2025 Warrants, which is $127.84 per share.

Revolving Senior Credit Facility

In February 2020, we entered into a Second Amended and Restated Credit Agreement, or the 2020 Credit Agreement, for a revolving senior credit facility, referred to as the 2020 Facility, which replaced the previous Amended and Restated Credit Agreement we had entered into in April 2017. The 2020 Credit Agreement was amended in May 2020 to, among other things, provide additional flexibility in determining the financial covenant leverage ratios for the second and third fiscal quarters of 2020 and to adjust certain margin and benchmark rates used to determine interest under the 2020 Facility. The 2020 Credit Agreement was further amended in May 2023 to replace the LIBOR-based rates with a SOFR-based rate (including a customary spread adjustment) and other rates for “Alternate Currencies” including, Australian dollars (BBSY), British pound sterling (SONIA), Euros (EURIBOR) and Japanese yen (TIBOR) and adjusts certain other provisions to reflect current documentation standards and other agreed modifications. The 2020 Credit Agreement provides for secured revolving loans, multicurrency loan options and letters of credit in an aggregate amount of up to $550.0 million. We did not carry any outstanding revolving loans under the 2020 Facility as of March 31, 2023 and December 31, 2022.

Any borrowings under the 2020 Facility are intended to be used to provide financing for working capital and other general corporate purposes, including potential mergers and acquisitions and to refinance indebtedness. Borrowings under the 2020 Facility bear interest, at our option, at a rate equal to an applicable margin plus: (a) the applicable Eurocurrency Rate (as defined in the 2020 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) the Eurocurrency Rate plus 1.00%. The margin for the 2020 Facility ranges, based on our consolidated total net leverage ratio, from 0.50% to 1.25% in the case of base rate loans and from 1.50% to 2.25% in the case of Eurocurrency Rate loans. The 2020 Facility includes an unused line fee ranging, based on our consolidated total net leverage ratio, from 0.35% to 0.50% per annum on the revolving commitment.

The 2020 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 a consolidated interest coverage ratio and certain consolidated leverage ratios, which are measured on a quarterly basis. The 2020 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. As of March 31, 2023, we are in compliance with the 2020 Credit Agreement covenants.

See Note 5, Indebtedness, in the Notes to unaudited Consolidated Financial Statements included in this Quarterly Report for more information about the terms of the 2023 Notes, the 2023 Hedge, the 2023 Warrants, the 2025 Notes, the 2025 Hedge, the 2025 Warrants and the 2020 Credit Agreement.

Critical Accounting Policies and Estimates

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 U.S. The preparation of these financial statements requires us to make estimates and judgments that affect the reported amounts of assets, liabilities, net sales and expenses. On an ongoing basis, we evaluate our estimates including those related to credit losses, 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, 2022 and there have been no material changes during the three months ended March 31, 2023.

Off-Balance Sheet Arrangements

As of March 31, 2023, we did not have any off-balance sheet arrangements.

Contractual Obligations and Commitments

As of March 31, 2023, 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, 2022.

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

Interest Rate Sensitivity and Risk

Our exposure to interest rate risk at March 31, 2023 is related to our investment portfolio which consists largely of money market funds of high quality financial institutions. Due to the short-term nature of these investments, we have assessed that there is no material exposure to interest rate risk arising from our investments. Fixed rate investments and borrowings may have their fair market value adversely impacted from changes in interest rates. At March 31, 2023, we do not hold any material asset-backed investment securities and as of March 31, 2023, we did not realize any losses related to asset-backed investment securities. Based upon our overall interest rate exposure as of March 31, 2023, a change of 10 percent in interest rates, assuming the amount of our investment portfolio and overall economic environment remains constant, would not have a material effect on interest income.

The primary objective of our investment activities is to preserve the principal while at the same time maximizing yields without significantly increasing the risk. To achieve this objective, we maintain our portfolio of cash equivalents and investments in instruments that meet high credit quality standards, as specified in our investment policy. None of our investments are held for trading purposes. Our policy also limits the amount of credit exposure to any one issue, issuer and type of instrument.

As of March 31, 2023, we only held investments in securities of a short-term nature classified as cash equivalents. During the periods presented, we did not hold any investments that were in a significant unrealized loss position and no impairment charges were recorded. Realized gains and losses related to these investments were immaterial during the periods presented. Interest income of $1.8 million was recognized during the three months ended March 31, 2023.

Market Price Sensitive Instruments

In order to reduce the potential equity dilution associated with our convertible notes, we entered into the 2023 Hedge and 2025 Hedge in connection with the issuances of 2023 Notes and 2025 Notes, respectively, entitling us to purchase our common stock. Upon conversion of our convertible notes, the 2023 Hedge and 2025 Hedge are expected to reduce the equity dilution if the daily volume-weighted average price per share of our common stock exceeds the strike price of the applicable hedge. We also entered into warrant transactions with the counterparties of the 2023 Hedge and 2025 Hedge entitling them to acquire shares of our common stock. The warrant transactions 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 (the quarter or year to date period) exceeds the strike price of the warrants. See Note 5, Indebtedness, in the Notes to unaudited Consolidated Financial Statements included in this Quarterly Report for further discussion.

Foreign Currency Exchange Risk

A substantial portion of our operations are located in the U.S., and the majority of our sales since inception have been made in the U.S. dollars. However, as our business in markets outside of the U.S. continues to increase, our exposure to foreign currency exchange risk related to our foreign operations will continue to grow. Fluctuations in the rate of exchange between the U.S. dollar and foreign currencies, primarily the Australian dollar, the Brazilian real, the British pound sterling, the Colombian peso, the euro, the Japanese yen, and the Singapore dollar, has had and could continue to have an adverse effect on our financial results, including our net sales, net sales growth rates, gross margins, income and losses as well as assets and liabilities. In particular, as a result of our acquisition of Simplify Medical, we have additional exposure to fluctuations in the Australian dollar. We established intercompany receivables and payables in Australian dollars in connection with the acquisition of Simplify Medical, a proprietary limited company registered in Australia. We also have future contingent consideration liabilities denominated in U.S. dollars, in connection with the acquisition of Simplify Medical, which are the financial obligation of NuVasive (AUST/NZ) Pty Limited, an Australian dollar denominated company. 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 in Puerto Rico, Brazil, and Argentina that have financial instability or currency controls.

We translate the financial statements of our foreign subsidiaries with functional currencies other than the U.S. dollar into the U.S. dollar for consolidation using end-of-period exchange rates for assets and liabilities and average exchange rates during each reporting period for results of operations. Net gains or losses resulting from the translation of foreign financial statements and the effect of exchange rate changes on intercompany receivables and payables of a long-term investment nature are recorded as a separate component of stockholders' equity. These adjustments will affect net income only upon sale or liquidation of the underlying investment in foreign subsidiaries. Exchange rate fluctuations resulting from the translation of the short-term intercompany balances between domestic entities and our foreign subsidiaries are recorded as foreign currency transaction gains or losses and are included in other expense, net in the unaudited Consolidated Statements of Operations. For those short-term intercompany balances, we enter into the foreign currency forward contracts to partially offset the impact from fluctuation of the foreign currency rates. The notional amount of the outstanding foreign currency forward contracts was $18.0 million as of March 31, 2023. During the three months ended March 31, 2023, a gain of $0.2 million was recognized in other (expense) income, net due to the change in the fair value of the derivative instruments, and the fair value of the hedge contracts we held was $0.1 million on our unaudited Consolidated Balance Sheets as of March 31, 2023. 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. The notional principal amounts provide one measure of the transaction volume outstanding as of period end, but do not represent the amount of our exposure to market loss. The estimates of fair value are based on applicable and commonly used pricing models using prevailing financial market information. The amounts ultimately realized upon settlement of these financial instruments, together with the gains and losses on the underlying exposures, will depend on actual market conditions during the remaining life of the instruments. The financial exposures by exchange rate fluctuations are monitored and managed by us as an integral part of our overall risk management program, which recognizes the unpredictability of financial markets and seeks to reduce potentially adverse effects on our results.

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 March 31, 2023. Based on such evaluation, our management has concluded that as of March 31, 2023, 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.

PART II. OTHER INFORMATION

Item 1. ***Legal Proceedings***

For a description of our material pending legal proceedings, refer to Note 12, Contingencies, in 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, 2022. 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
2.1†	Agreement and Plan of Merger, dated as of February 8, 2023, by and among NuVasive, Inc., Globus Medical, Inc. and Zebra Merger Sub, Inc (incorporated by reference to our Current Report on Form 8-K filed with the Commission on February 9, 2023)
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	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 10, 2020)
3.4	Restated Bylaws (incorporated by reference to our Current Report on Form 8-K filed with the SEC on January 6, 2012)
3.5	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)
3.6	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)
3.7	Amendment No. 3 to the Restated Bylaws (incorporated by reference to our Current Report on Form 8-K filed with the Commission on February 9, 2023)
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
10.1	Voting and Support Agreement, dated as of February 8, 2023, by and among NuVasive, Inc., Globus Medical, Inc., David Paul and Sonali Paul. (incorporated by reference to our Current Report on Form 8-K filed with the Commission on February 9, 2023)
10.2	Amendment No. 2 to Credit Agreement, dated as of May 8, 2023, by and among NuVasive, Inc., certain of its material subsidiaries, as guarantors, Bank of America, N.A., as administrative agent, and each of those additional lenders that are a party to such agreement. (incorporated by reference to our Current Report on Form 8-K filed with the Commission on May 10, 2023)
10.3#	First Amendment to the NuVasive, Inc. Amended and Restated Executive Severance Plan
10.4#	NuVasive, Inc. Excise Tax Gross-Up Plan
10.5#	Form of Restricted Stock Unit Agreement (with accompanying Form Notice of Grant) for grants on or after March 1, 2023
101.INS	Inline 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	Inline XBRL Taxonomy Extension Schema
101.CAL	Inline XBRL Taxonomy Extension Calculation Linkbase
101.DEF	Inline XBRL Taxonomy Extension Definition Linkbase
101.LAB	Inline XBRL Taxonomy Extension Label Linkbase
101.PRE	Inline XBRL Taxonomy Extension Presentation Linkbase
104	Cover Page Interactive Data File (formatted as Inline XBRL with applicable taxonomy extension information contained in Exhibit 101.INS)

† Schedules have been omitted pursuant to Item 601(a)(5) of Regulation S-K. The Company hereby undertakes to furnish supplemental copies of any of the omitted schedules upon request by the U.S. Securities and Exchange Commission; provided, that the Company may request confidential treatment pursuant to Rule 24b-2 of the Securities Exchange Act of 1934, as amended, for any schedules so furnished.

# Indicates management contract or compensatory plan.

* These certifications are being furnished solely to accompany this annual report pursuant to 18 U.S.C. Section 1350, and are not being filed fo 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: May 10, 2023	By:	/s/ J. Christopher Barry
		J. Christopher Barry
		Chief Executive Officer
Date: May 10, 2023	By:	/s/ Matthew K. Harbaugh
		Matthew K. Harbaugh
		Executive Vice President and Chief Financial Officer

FIRST AMENDMENT TO THE
NUVASIVE, INC.
AMENDED AND RESTATED EXECUTIVE SEVERANCE PLAN

NuVasive, Inc. ("NuVasive" or the "Company") established the NuVasive, Inc. Amended and Restated Executive Severance Plan and Summary Plan Description effective as of July 26, 2007 (the "Plan"). In Article VI of the Plan, the Company, by action of its Board of Directors or Compensation Committee of the Board, reserved the right to amend the Plan at any time and in any manner in its sole discretion. The Company wishes to amend the Plan as provided below effective as of February 8, 2023 (the "Effective Date").

RECITALS

1. Article II of the Plan provides that the Company shall provide eligible executives with certain severance benefits upon a qualifying termination of employment, as set forth therein.

2. The Board of Directors of the Company has determined to amend the Plan to provide that any NuVasive employee who is working in a position designated by the Company at a level of Band 11 or above shall be eligible to participate in the Plan.

3. The Board of Directors of the Company has further determined to amend the Plan to provide that the Plan shall automatically terminate on the date that is six months following the date of a "Change in Control" (as defined below) and to prohibit the amendment or termination of the Plan prior to the date of such termination.

AMENDMENT

The first sentence of Article II (Eligibility) of the Plan is hereby amended and restated as of the Effective Date so as to read as set forth below:

> Any NuVasive executive who (1) was employed by NuVasive in a position designated by the Company at a level of Band 11 or Band 12 on June 1, 2017, and is working in such a position at the time of termination of employment, or (2) is working in a position designated by the Company at a level of Band ~~13~~ **11** or above (hereinafter referred to as "executive"), and whose employment is involuntarily terminated by the Company is eligible for severance benefits described in Section III of this Plan, PROVIDED each of the following requirements is met:

Article VI (Amendment and Termination) of the Plan is hereby amended and restated as of the Effective Date so as to read as set forth below:

> NuVasive, by action of its Board or Compensation Committee of the Board, reserves the right to terminate or amend the Plan at any time and in any manner in its sole discretion**, except as otherwise provided in this Article VI. In the event of a "Change in Control" (as defined in 2014 Equity Incentive Plan of the Company), this Plan shall automatically terminate on the date that is six months following the effective date of the Change in Control (such date, the "Expiration Date"); provided, however, that this Plan may not be terminated or amended between the date of the Change in Control and Expiration Date; and provided, further, that all executives who become entitled to payments or benefits hereunder shall continue to receive such payments and benefits notwithstanding such termination of the Plan**. No executive shall have any vested interest in severance benefits payable under this Plan prior to satisfying all of the terms and conditions for payment of benefits under this Plan.

NUVASIVE, INC.
EXCISE TAX GROSS-UP PLAN

1. Purpose; Effective Date. The purpose of this NuVasive, Inc. Excise Tax Gross-Up Plan (the "Plan") is to make affected employees whole for the impact of the excise tax imposed by Section 4999 of the Internal Revenue Code of 1986, as amended (the "Code") with respect to certain compensation and benefits to be paid or provided in connection with the merger contemplated by the Agreement and Plan of Merger among Globus Medical, Inc. ("Parent"), Zebra Merger Sub, Inc. and NuVasive, Inc. (the "Company"), dated as of February 8, 2023 (the "Merger Agreement"). This Plan shall become effective upon, and subject to the occurrence of, the closing of the merger contemplated by the Merger Agreement (the "Closing").

2. Definitions. The following capitalized terms shall have the meanings given below when used in this Plan.

   a. "Accounting Firm" has the meaning specified in Section 4(c).

   b. "Administrator" means (i) prior to the Closing, the Compensation Committee of the Board of Directors of the Company or its delegate, and (ii) after the Closing, the Compensation Committee of the Board of Directors of Parent or its delegate.

   c. "Affiliate" means, with respect to any Person, any other Person directly or indirectly controlling, controlled by, or under common control with such Person. The term "control" means the possession, directly or indirectly, of the power to direct or cause the direction of the management and policies of a Person, whether through the ownership of voting securities, by contract or otherwise, and the terms "controlled" and "controlling" have meanings correlative thereto.

   d. "Closing" has the meaning specified in Section 1.

   e. "Code" has the meaning specified in Section 1.

   f. "Company" has the meaning specified in Section 1.

   g. "Company Group" means the Company and its Affiliates (including, after the Closing, Parent and its Affiliates).

   h. "Excise Tax" has the meaning specified in Section 4(a).

   i. "Gross-Up Payment" has the meaning given in Section 4(a).

   j. "Merger Agreement" has the meaning specified in Section 1.

   k. "Parachute Value" of a Payment shall mean the present value as of the date of the change of control for purposes of Section 280G of the Code of the portion of such Payment that constitutes a "parachute payment" under Section 280G(b)(2), as determined by the Accounting Firm for purposes of determining whether and to what extent the Excise Tax will apply to such Payment.

   l. "Parent" has the meaning specified in Section 1.

m. "Participation Agreement" means each agreement between a Participant and the Company setting forth the terms and conditions of the Participant's right to participate in this Plan.

n. "Participant" means an employee of the Company or any of its Affiliates who enters into a Participation Agreement.

o. "Payment" has the meaning given in Section 4(a).

p. "Person" means and refers to an individual, a corporation, a limited liability company, an association, a partnership, an estate, a trust, or any other entity or organization.

q. "Safe Harbor Amount" means 2.99 times the Participant's "base amount," within the meaning of Section 280G(b)(3) of the Code.

r. "Underpayment" has the meaning specified in Section 4(d).

3. Eligibility. Each employee of the Company or any of its subsidiaries who (a) is listed on Appendix A and (b) enters into a Participation Agreement substantially in the form attached hereto as Appendix B.

4. Gross-Up Payments.

a. In General. In the event it shall be determined that any payment, benefit or distribution (or combination thereof) by any member of the Company Group to or for the benefit of a Participant (a "Payment") would be subject to the excise tax imposed by Section 4999 of the Code, or any interest or penalties are incurred by the Participant with respect to such excise tax (such excise tax, together with any such interest and penalties, hereinafter collectively referred to as the "Excise Tax"), the Participant shall be entitled to receive an additional payment (a "Gross-Up Payment") in an amount such that after payment by the Participant of all taxes whatsoever, including, without limitation, any employment and income taxes (including any interest and penalties imposed with respect to such taxes), and Excise Tax imposed upon the aggregate Gross-Up Payment, the Participant retains an amount of the Gross-Up Payment equal to the Excise Tax imposed upon the Payments (including the Gross-Up Payment), provided that, except as provided in Section 4(b)(ii), the maximum aggregate amount of Gross-Up Payments payable under the Plan will be $4.0 million (the "Aggregate Cap"). Notwithstanding the foregoing provisions of this Section 4(a), in the event it shall be determined that any Participant is entitled to a Gross-Up Payment, but that the Parachute Value of all of the Participant's Payments does not exceed 110% of the Participant's Safe Harbor Amount, then no Gross-Up Payment shall be made to the Participant and the Participant's Payments shall be reduced so that the Parachute Value of all of the Participant's Payments, in the aggregate, equals the Safe Harbor Amount. The reduction of the Payments, if applicable, shall be made by reducing payments and benefits in the following order: (i) cash payments that may not be valued under Treas. Reg. § 1.280G-1, Q&A-24(c) ("24(c)"), (ii) equity-based payments that may not be valued under 24(c), (iii) cash payments that may be valued under 24(c), (iv) equity-based payments that may be valued under 24(c) and (v) other types of benefits.

b. Aggregate Cap. Gross-Up Payments shall be payable on a "first come, first served" basis. A Participant will not be entitled to a Gross-Up Payment if such Participant becomes subject to the Excise Tax on or after the date Gross-Up Payments hereunder equal or exceed the Aggregate Cap. In the event that a Gross-Up Payment becomes payable to any Participant such that the aggregate amount of Gross-Up Payments payable to Participants hereunder exceeds the Aggregate Cap, the Gross-Up Payment will be cut back to the extent required to avoid the aggregate amount of Gross-Up Payments payable to Participants hereunder exceeding the Aggregate Cap. In the event that Gross-Up Payments become payable at the same time to multiple Participants such that the aggregate amount of Gross-Up Payments payable to Participants hereunder exceeds the Aggregate Cap, the Gross-Up Payments payable to each such Participant will be cut back on a pro rata basis to the extent required to avoid the aggregate amount of Gross-Up Payments payable to Participants hereunder exceeding the Aggregate Cap.

c. Accounting Firm Determinations.

i. Subject to the provisions of Section 4(e), all determinations required to be made under this Section 4, including whether and when a Gross-Up Payment is required, the amount of such Gross-Up Payment and the assumptions to be utilized in arriving at such determination, shall be made by Compensation & Benefits Advisory Services, LLC (the "Accounting Firm"); provided that for purposes of determining the amount of any Gross-Up Payment due in respect of Payments to be made at Closing, the Company and Parent will agree on the likelihood that each Participant will be terminated after the Closing. The Accounting Firm shall provide detailed supporting calculations both to the Company and the applicable Participant within fifteen (15) business days of the receipt of notice from the Participant or any member of the Company Group that there has been a Payment, or at such earlier time as is requested by the Company. If the Accounting Firm determines that no Excise Tax is payable by a Participant, it shall furnish the Participant and the Company with a written opinion that the Participant has substantial authority not to report any Excise Tax on the Participant's federal income tax return. Any determination by the Accounting Firm in accordance with this Section 4(c) shall be binding upon the Company, Parent and the applicable Participant.

ii. All fees and expenses of the Accounting Firm shall be borne solely by the Company.

d. Payment Timing. Any Gross-Up Payment, as determined pursuant to this Section 4, shall be paid by the Company to the applicable Participant, or remitted to the applicable taxing authority by the Company on the Participant's behalf, within five (5) days after the Company's receipt of the Accounting Firm's determination. As a result of the uncertainty in the application of Section 4999 of the Code at the time of the initial determination by the Accounting Firm hereunder, it is possible that Gross-Up Payments which will not have been made by the Company should have been made ("Underpayment"), consistent with the calculations required to be made hereunder. In the event that the Company exhausts its remedies pursuant to Section 4(e) and the applicable Participant thereafter is required to make a payment of any Excise Tax, the Accounting Firm shall determine the amount of the Underpayment that has occurred and any such Underpayment shall be promptly paid by the Company to the Participant or remitted to the applicable taxing authority on the Participant's behalf, provided that payment of an Underpayment amount shall not be made to the extent that it would cause the aggregate amount of Gross-Up Payments payable pursuant to the Plan to exceed the Aggregate Cap.

e. Claims Procedures. Each Participant shall notify the Company in writing of any claim by the Internal Revenue Service that, if successful, would require the payment by the Company of the Gross-Up Payment. Such notification shall be given as soon as practicable but no later than ten (10) business days after Participant is informed in writing of such claim and shall apprise the Company of the nature of such claim and the date on which such claim is requested to be paid. Participant shall not pay such claim prior to the expiration of the thirty (30) day period following the date on which it gives such notice to the Company (or such shorter period ending on the date that any payment of taxes with respect to such claim is due). If the Company notifies the Participant in writing prior to the expiration of such period that it desires to contest such claim, the Participant shall:

i. give the Company any information reasonably requested by the Company relating to such claim;

ii. take such action in connection with contesting such claim as the Company shall reasonably request in writing from time to time, including, without limitation, accepting legal representation with respect to such claim by an attorney reasonably selected by the Company (at the Company's expense);

iii. cooperate with the Company in good faith in order to effectively contest such claim; and

iv. permit the Company to participate in any proceedings relating to such claim;

provided, however, that the Company shall bear and pay directly all costs and expenses (including additional interest and penalties and legal and accounting fees and expenses) incurred in connection with such contest and shall indemnify and hold Participant harmless, on an after-tax basis, for any Excise Tax or income tax (including interest and penalties with respect thereto) imposed as a result of such representation and payment of costs and expenses. Without limitation on the foregoing provisions of this Section 4(e), the Company shall control all proceedings taken in connection with such contest and, at its sole option, may pursue or forego any and all administrative appeals, proceedings, hearings and conferences with the taxing authority in respect of such claim and may, at its sole option, either direct the Participant to pay the tax claimed and sue for a refund or contest the claim in any permissible manner, and the Participant agrees to prosecute such contest to a determination before any administrative tribunal, in a court of initial jurisdiction and in one or more appellate courts, as the Company shall determine; provided, however, that if the Company directs Participant to pay such claim and sue for a refund, the Company shall advance the amount of such payment to Participant, on an interest-free basis, and shall indemnify and hold Participant harmless, on an after-tax basis, from any Excise Tax (including interest or penalties with respect thereto) imposed with respect to such advance or with respect to any imputed income (including interest or penalties with respect thereto) with respect to such advance; and provided, further, that if Participant is required to extend the statute of limitations to enable the Company to contest such claim, Participant may limit this extension solely to such contested amount. Furthermore, the Company's control of the contest shall be limited to the issues with respect to which a Gross-Up Payment would be payable hereunder and the Participant shall be entitled to settle or contest, as the case may be, any other issues raised by the Internal Revenue Service or any other taxing authority. Notwithstanding anything to the contrary, the amounts payable by the Company to, or on behalf of, any Participant pursuant to this Section 4(e) shall be subject to the Aggregate Cap pursuant to Section 4(b).

f. Refunds. If, after the receipt by Participant of an amount advanced by the Company pursuant to Section 4(e), Participant becomes entitled to receive any refund with respect to such claim, Participant shall (subject to the Company's complying with the requirements of Section 4(e)) promptly pay to the Company the amount of such refund (together with any interest paid or credited thereon after taxes applicable thereto). If, after the receipt by Participant of an amount advanced by the Company pursuant to Section 4(e), a determination is made that Participant shall not be entitled to any refund with respect to such claim and the Company does not notify Participant in writing of its intent to contest such denial of refund prior to the expiration of thirty (30) days after such determination, then such advance shall be forgiven and shall not be required to be repaid and the amount of such advance shall offset, to the extent thereof, the amount of the Gross-Up Payment required to be paid.

5. Miscellaneous.

a. Assignment; Non-transferability. No right of a Participant to any payment under this Plan shall be subject to assignment, anticipation, alienation, sale, transfer, assignment, pledge, encumbrance, attachment, or garnishment by creditors of the Participant or of any beneficiary of the Participant. The terms and conditions of this Plan shall be binding on the successors and assigns of the Company.

b. Withholding; Section 409A. The Company Group shall have the right to deduct from all payments hereunder all taxes that it determines are required by law to be withheld therefrom. All payments under this Plan are intended to comply with or be exempt from the requirements of Section 409A of the U.S. tax code and this Plan shall be interpreted accordingly. Notwithstanding anything to the contrary in this Plan, each Gross-Up Payment will be paid no later than the end of each Participant's taxable year next following the taxable year in which the Excise Tax (or any income or other related taxes or interest or penalties thereon) on a Payment to which the Gross-Up Payment relates are remitted to the Internal Revenue Service or any other applicable taxing authority.

c. No Right to Employment or Other Rights. Nothing in this Plan shall be construed as giving any Participant the right to be retained in the employment of the Company Group, nor shall it affect the right of Company Group to terminate the employment of a Participant. Any Participant's participation in the Plan is not to be considered part of any normal or expected compensation.

d. Amendment; Termination. The Company may amend this Plan at any time, provided that (i) any amendment of this Plan must be in writing, and (ii) the Company may not amend this Plan on or after the Closing in any way that adversely affects the rights of a Participant without such Participant's written consent.

e. Governing Law. THE VALIDITY, CONSTRUCTION, AND EFFECT OF THIS PLAN SHALL BE DETERMINED IN ACCORDANCE WITH THE LAWS (INCLUDING THOSE GOVERNING CONTRACTS) OF THE STATE OF DELAWARE, WITHOUT GIVING EFFECT TO PRINCIPLES OF CONFLICTS OF LAWS. If any provision hereof shall be held by a court or arbitrator of competent jurisdiction to be invalid and unenforceable, the remaining provisions shall continue to be fully effective.

f. Full Settlement. The Company's obligation to make any payments provided for in this Agreement and otherwise to perform its obligations hereunder shall not be affected by any set-off, counterclaim, recoupment, defense or other claim, right or action which the Company may have against a Participant or others.

Appendix A
Eligible Employees

1. J. Christopher Barry
2. Matthew K. Harbaugh
3. Dale A. Wolf
4. Nathaniel Sisitsky
5. Michael Farrington

Appendix B
Form of Excise Tax Gross-Up Plan Participation Agreement

[Date]

[Name]
[Title]

Re: Participation in NuVasive, Inc. Excise Tax Gross-Up Plan

Dear [Name]:

NuVasive, Inc. (the "Company") maintains the NuVasive, Inc. Excise Tax Gross-Up Plan (the "Plan"). I am pleased to inform you that you have been designated as an eligible participant in the Plan. All capitalized terms used and not otherwise defined in this Participation Agreement (this "Agreement") shall have the meanings given to such terms in the Plan.

1. Entitlement to Gross-Up Payment. The Company hereby agrees that you shall be entitled to receive a Gross-Up Payment in accordance with the terms and conditions of the Plan. As a condition to your participation in the Plan, you hereby acknowledge that a copy of the Plan has been made available to you, and you hereby agree that your entitlement to receive a Gross-Up Payment is subject to the terms and conditions of the Plan.
2. Cooperation. In connection with making determinations regarding any Excise Tax that you owe, the Accounting Firm will take into account the value of any reasonable compensation for services to be rendered by you before or after the Closing, including any noncompetition provisions that apply to you. As a condition to your participation in the Plan, you agree that you shall cooperate in the valuation of any such services, including any noncompetition provisions.
3. Amendment. No provision of this Agreement may be amended, waived, or discharged except by the mutual written agreement of the parties.
4. Counterparts. This Agreement may be executed in counterparts, each of which shall be deemed to be an original and all of which together shall constitute one and the same instrument.

[Signature Page Follows]

Sincerely,

NUVASIVE, INC.

By: ___________________________________
Name: [●]
Title: [●]

PARTICIPANT

____
[NAME]

Exhibit 10.5

[FORM OF] NUVASIVE, INC.
NOTICE OF GRANT OF RESTRICTED STOCK UNITS

NuVasive, Inc. (the "***Company***") has granted to the participant identified below (the "***Participant***") an award (the "***Award***") of the number of restricted stock units specified below in this Grant Notice (each, a "***Restricted Stock Unit***" or an "***RSU***") pursuant to the [2014 Equity Incentive Plan of NuVasive, Inc.] [Ellipse Technologies, Inc. 2015 Incentive Award Plan] (the "***Plan***"), each of which represents the right to receive - on the Settlement Date provided in the Restricted Stock Unit Agreement attached hereto (together with this Notice of Grant, the "***Agreement***") - one (1) share of Stock as set forth in, and subject to the terms and conditions of, this Agreement. This Award is subject to all of the terms and conditions set forth in the Agreement and the Plan, each of which are incorporated herein by reference. Unless otherwise defined herein, capitalized terms shall have the meanings assigned to such terms in the Plan or the Agreement, as appropriate[, and, in the event of any inconsistency between the Plan and the Agreement, the terms of the Plan shall control.]

Participant:	[FIRST_NAME_MIDDLE_NAME_LAST_NAME]
Participant ID:	[EMPLOYEE_IDENTIFIER]
Date of Grant:	[March 1, 2023]
Total Number of RSUs:	[TOTAL_SHARES_GRANTED], subject to adjustment as provided by the Agreement.
Vesting Start Date:	[March 1, 2023]
Vesting Schedule:	Subject to the terms and conditions of the Agreement (including, without limitation, conditions requiring continued Service with the Company through the applicable date), the RSUs shall vest as follows: 100% of the RSUs shall vest on the third (3rd) anniversary of the Vesting Start Date (such anniversary, the "***Scheduled Vesting Date***").

By electronically accepting the Award according to the instructions in the Participant's E*TRADE account (pursuant to which the Participant received this Notice of Grant), the Participant agrees that the Award is governed by this Notice of Grant and by the provisions of the Plan and the Agreement, both of which are made a part of this document.

The Participant acknowledges that copies of the Plan, the Agreement, and the prospectus for the Plan are available via the Participant's E*TRADE account.

The Participant represents that the Participant has read and is familiar with the provisions of the Plan and the Agreement, and hereby accepts the Award subject to all of their terms and conditions.

[FORM OF] NUVASIVE, INC.
RESTRICTED STOCK UNIT AGREEMENT

NuVasive, Inc. has granted to the Participant named in the *Notice of Grant of Restricted Stock Units* (the "***Grant Notice***") to which this Restricted Stock Unit Agreement is attached (together with the Grant Notice, this "***Agreement***") an Award consisting of Restricted Stock Units ("***RSUs***") subject to the terms and conditions set forth in this Agreement. The Award has been granted pursuant to the terms and conditions of the [2014 Equity Incentive Plan of NuVasive, Inc.] [Ellipse Technologies, Inc. 2015 Incentive Award Plan] (the "***Plan***"), as amended from time-to-time, the provisions of which are incorporated herein by reference. By electronically accepting the Award, the Participant: (a) acknowledges receipt of, and represents that the Participant has read and is familiar with, this Agreement, the Plan and the prospectus for the Plan prepared in connection with the registration with the Securities and Exchange Commission of the shares of Stock issuable pursuant to the Award (the "***Plan Prospectus***"), (b) accepts the Award subject to all of the terms and conditions of this Agreement and the Plan, and (c) agrees to accept as binding, conclusive and final all decisions or interpretations of the Committee or its delegate (to the extent delegation is permitted under the Plan) in the event any questions arise (and/or interpretation may be required) regarding this Agreement or the Plan.

1. **Definitions and Construction**.

1.1 **Definitions.** Unless otherwise defined herein, capitalized terms shall have the meanings assigned to such terms in the Grant Notice or the [Plan] [2014 Equity Incentive Plan of NuVasive, Inc].

(a) "***Dividend Equivalent Units***" mean additional Restricted Stock Units as may be credited pursuant to Section 3.3 of this Agreement.

(b) "***RSUs***" mean the Restricted Stock Units originally granted pursuant to the Award and any Dividend Equivalent Units credited pursuant to the Award, as each may be adjusted from time-to-time pursuant to [Section 4.4 (Adjustments for Changes in Capital Structure)] [Article VIII (Adjustments for Changes in Common Stock and Certain Other Events)] or [Section 4.5 (Assumption or Substitution of Awards)] [Section 4.4 (Substitute Awards)] of the Plan.

1.2 **Construction.** Captions and titles contained herein are for convenience only and shall not affect the meaning or interpretation of any provision of this Agreement. Except when otherwise indicated by the context, the singular shall include the plural and the plural shall include the singular. Use of the term "or" is not intended to be exclusive, unless the context clearly requires otherwise.

2. **Administration**.

2.1 **Committee Actions.** All questions of interpretation concerning this Agreement, the Plan or any other form of agreement or other document employed by the Company in the administration of the Plan or the Award shall be determined by the Committee or its delegate. All such determinations by the Committee or its delegate shall be final, binding and conclusive upon all persons having an interest in the Award, unless fraudulent or made in bad faith. Any and all actions, decisions and determinations taken or made by the Committee in the exercise of its discretion pursuant to the Plan or the Award or other agreement thereunder (other than determining questions of interpretation pursuant to the preceding sentence) shall be final, binding and conclusive upon all persons having an interest in the Award.

2.2 **Express Authority Required.** Only individuals expressly designated by the Committee shall have the authority to act on behalf of the Committee with respect to certain of the matters, rights, obligations, modifications, or elections allocated to the Company herein (or in the Plan).

3. **The Award**.

3.1 **Grant of RSUs.** On the Date of Grant, the Participant shall acquire, subject to the provisions of this Agreement, the Total Number of RSUs set forth in the Grant Notice, subject to adjustment as provided in [Section 4.4 (Adjustments for Changes in Capital Structure)] [Article VIII (Adjustments for Changes in Common Stock and Certain Other Events)] or [Section 4.5 (Assumption or Substitution of Awards)] [Section 4.4 (Substitute Awards)] of the Plan. Each RSU represents a conditional right to receive, subject and pursuant to the terms and conditions of the Plan and this Agreement, one (1) share of Stock.

3.2 **No Monetary Payment Required.** The Participant is not required to make any monetary payment (other than applicable tax withholding, if any) as a condition to receiving the RSUs or shares of Stock issued upon settlement of Vested RSUs (as defined in Section 4.1 of this Agreement), the consideration for which shall be the Participant rendering Service as provided in this Agreement to a Participating Company or for its benefit.

3.3 **Dividend Equivalent Units.** On the date that the Company pays a cash dividend to holders of Stock generally, if any, the Participant shall be credited with a number of additional whole Dividend Equivalent Units determined by dividing (a) the product of (i) the dollar amount of the cash dividend paid per share of Stock on such date, and (ii) the number of RSUs which have not been settled as of such date, *by* (b) the Fair Market Value per share of Stock on such date. Any resulting fractional Dividend Equivalent Unit shall be rounded to the nearest whole number. Any such additional Dividend Equivalent Units shall be subject to the same terms and conditions, and shall be settled or forfeited in the same manner and at the same time, as the RSUs with respect to which they have been credited.

4. **Vesting; Forfeiture**.

4.1 **Vesting of RSUs.** Provided that the Participant's Service has not terminated prior to the applicable date, RSUs acquired pursuant to the Award shall become vested upon the earliest to occur of the following (such RSUs, when so vested, being referred to herein as "***Vested RSUs***"):

(a) the Scheduled Vesting Date (as provided in the Grant Notice);

(b) the Participant's death;

(c) termination of the Participant's Service due to Disability;

(d) immediately before any Change in Control in which the surviving, continuing, successor, or purchasing corporation or other business entity or parent thereof, as the case may be, elects not to assume or substitute for this Award; and

(e) termination of the Participant's Service by the Company (or Company's successor) without Cause (as defined below) after a Change in Control.

For purposes hereof, "***Cause***" shall mean the following: (A) the Participant's repeated failure to satisfactorily perform the Participant's job duties; (B) refusal or failure to follow the lawful directions of the Participant's direct supervisor, the Company's Chief Executive Officer or the Board, as applicable; (C) conviction of a crime involving moral turpitude; or (D) engaging in acts or omissions constituting gross negligence, recklessness or willful misconduct on the part of the Participant with respect to the Participant's obligations or otherwise relating to the business of the Company, its Affiliates or customers; except that if the Participant is a party to a Change in Control Agreement with the Company, the definition of "Cause" therein shall apply. Notwithstanding the foregoing, following a Change in Control, any determination as to whether "Cause" exists under the terms of this Agreement shall be subject to *de novo* review by a court of competent jurisdiction.

4.2 **Leaves of Absence.**

(a) Unless otherwise required by applicable law, the RSUs will cease vesting during a leave of absence. If, however, Participant takes an approved medical, FMLA (or other statutorily protected leave), or military leave (each, an "***Approved Leave***") and returns from such leave for at least thirty calendar days, then (i) Participant shall be treated as if the period of such Approved Leave had been a period of continuous Service with the Company or Affiliate, and (ii) such number of RSUs as would have vested pursuant to the vesting schedule set forth in the Grant Notice during such Approved Leave and the foregoing thirty calendar day-period shall be considered vested as of the end of such thirty calendar day-period (which shall be considered the Scheduled Vesting Date), and such Vested RSUs shall be settled in accordance with Section 5 of this Agreement.

(b) In the event the Participant takes a leave of absence other than an Approved Leave, the vesting of RSUs will be tolled during the period of such leave. Upon return from such leave of absence, the RSUs shall again commence vesting but the period of such leave shall be respectively added to the vesting schedule set forth in the Grant Notice.

(c) In the event of Participant's termination of Service during any leave of absence, then the RSUs shall expire in accordance with the provisions set forth in Section 4.4 below.

4.3 **Vesting of Dividend Equivalents Units.** Any Dividend Equivalent Units shall become vested (and also constitute "***Vested RSUs***") at the same time as the RSUs with respect to which they have been credited.

4.4 **Forfeiture of RSUs That Are Not Vested RSUs Upon Termination of Service.** Except as otherwise provided in Section 4.1 above, any RSUs that are not Vested RSUs ("***Unvested RSUs***") will terminate automatically without any further action by the Company and be forfeited without further notice and at no cost to the Company upon Participant's termination of Service.

5. **Settlement of Vested RSUs.**

5.1 **Distribution of Shares in Settlement of Vested RSUs.**

(a) Subject to the terms and conditions of the Plan and this Agreement, shares of Stock shall be distributed to Participant (or Participant's estate in the event of death) with respect to Participant's Vested RSUs within thirty days following the Scheduled Vesting Date for such RSUs, except as otherwise provided in Section 6.3 or Section 9.1 of this Agreement (the "***Settlement Date***").

(b) All distributions of shares of Stock with respect to Participant's Vested RSUs shall be made by the Company in the form of whole shares. In lieu of any fractional share of Stock, the Company shall make a cash payment to Participant equal to the Fair Market Value of such fractional share on the date the RSUs are settled as provided herein. The Company shall not be required to issue fractional shares of Stock upon the settlement of Vested RSUs.

(c) Shares of Stock issued in settlement of Vested RSUs shall not be subject to any restriction on transfer other than any such restriction as may be required pursuant to Section 5.3 of this Agreement or the Company's Insider Trading Policy.

5.2 **Certificate Registration.** The Participant hereby authorizes the Company, in its sole discretion, to deposit any or all shares of Stock acquired by the Participant pursuant to the settlement of Vested RSUs with the Company's transfer agent, including any successor transfer agent, to be held in book entry form, or to deposit such shares for the benefit of the Participant with any broker with which the Participant has an account relationship of which the Company has notice. Except as provided by the foregoing, a certificate for the shares of Stock acquired by the Participant shall be registered in the name of the Participant, or, if applicable, in the name of the Participant's estate.

5.3 **Restrictions on Grant of the Award and Issuance of Shares.** The grant of the Award and issuance of shares of Stock upon settlement of Vested RSUs shall be subject to compliance with all applicable requirements of federal, state or foreign law with respect to such securities. No shares of Stock may be issued hereunder if the issuance of such shares would constitute a violation of any applicable federal, state or foreign securities laws or other law or regulations or the requirements of any stock exchange or market system upon which the Stock may then be listed. The inability of the Company to obtain from any regulatory body having jurisdiction the authority, if any, deemed by the Company's legal counsel to be necessary to the lawful issuance of any shares of Stock subject to the Award shall relieve the Company of any liability in respect of the failure to issue such shares as to which such requisite authority shall not have been obtained. As a condition to the settlement of Vested RSUs, the Company may require the Participant to satisfy any qualifications that may be necessary or appropriate, to evidence compliance with any applicable law or regulation and to make any representation or warranty with respect thereto as may be requested by the Company.

6. **Tax Withholding.**

6.1 **In General.** By electronically accepting the Award (as provided in the Grant Notice), the Participant hereby authorizes withholding from payroll and any other amounts payable to the Participant, including withholding of shares of Stock otherwise issuable to the Participant in settlement of Vested RSUs, and otherwise agrees to make adequate provision for, any sums required to satisfy the federal, state, local and foreign tax (including any social insurance) withholding obligations of the Participating Company, if any, which arise in connection with the Award, the vesting of RSUs or the issuance of shares of Stock in settlement of Vested RSUs. The Company shall have no obligation to deliver shares of Stock until the tax withholding obligations of the Participating Company have been satisfied by the Participant.

6.2 **Withholding in Shares.** The Company shall have the right, but not the obligation, to require the Participant to satisfy all or any portion of a Participating Company's tax withholding obligations by deducting from the shares of Stock otherwise deliverable to the Participant in settlement of Vested RSUs a number of whole shares of Stock having a Fair Market Value, as determined by the Company as of the date on which the tax withholding obligations arise, not in excess of the amount of such tax withholding obligations determined by the applicable minimum statutory withholding rates (and subsequently making a payment of Company cash equal to the amount of any such tax obligation to the respective tax authorities).

6.3 **Assignment of Sale Proceeds.** Subject to compliance with applicable law and the Company's Insider Trading Policy, if permitted by the Company, the Participant may satisfy the Participating Company's tax withholding obligations in accordance with procedures established by the Company providing for delivery by the Participant to the Company or a broker approved by the Company of properly executed instructions, in a form approved by the Company, providing for the assignment to the Company of the proceeds of a sale with respect to some or all of the shares of Stock being acquired upon settlement of Vested RSUs. If the Settlement Date would occur on a date on which a sale of the shares of Stock by the Participant would violate the Insider Trading Policy of the Company, the Settlement Date for such Vested RSUs shall be deferred until the earlier of (a) the next day on which the sale of shares by the Participant would not violate the Insider Trading Policy, or (b) the 15^{th} day of the third calendar month following calendar year of the Settlement Date.

7. **Rights as a Stockholder, Director, Employee or Consultant.**

The Participant shall have no rights as a stockholder with respect to any shares of Stock which may be issued in settlement of Vested RSUs until the date of the issuance of such shares (as evidenced by the appropriate entry on the books of the Company or of a duly authorized transfer agent of the Company). No adjustment shall be made for dividends, distributions or other rights for which the record date is prior to the date the shares of Stock are issued, except as provided in Section 3.3 of this Agreement and [Section 4.4 of the Plan (Adjustments for Changes in Capital Structure)] [Article VIII (Adjustments for Changes in Common Stock and Certain Other Events) of the Plan]. If the Participant is an Employee, the Participant understands and acknowledges that, except as otherwise provided in a separate, written employment agreement between a Participating Company and the Participant, the Participant's employment is "at will" and is for no specified term. Nothing in this Agreement shall confer upon the Participant any right to continue in the Service of a Participating Company or interfere in any way with any right of the Participating Company Group to terminate the Participant's Service at any time.

8. **Legends.**

The Company may at any time place legends referencing any applicable federal, state or foreign securities law restrictions on all certificates representing shares of Stock issued pursuant to this Agreement. The Participant shall, at the request of the Company, promptly present to the Company any and all certificates representing shares of Stock acquired pursuant to this Award in the possession of the Participant in order to carry out the provisions of this Section.

9. **Compliance with Section 409A.**

It is intended that the settlement of Vested RSUs as set forth in this Agreement qualify for exemption from, or comply with, the requirements of Section 409A, and any ambiguities herein will be interpreted to so qualify or comply. Notwithstanding the foregoing, if it is determined that the RSUs fail to satisfy the requirements of the "short-term deferral" exemption and are otherwise Section 409A Deferred Compensation, it is intended that any payment or benefit which is made or provided pursuant to or in connection with this Award shall comply in all respects with the applicable requirements of Section 409A (including applicable regulations or other administrative guidance thereunder, as determined by the Committee in good faith) to avoid the unfavorable tax consequences provided therein for non-compliance. In connection with effecting such compliance with Section 409A, the following shall apply:

9.1 **Separation from Service; Required Delay in Payment to Specified Employee.** Notwithstanding anything set forth herein to the contrary, no amount payable pursuant to this Agreement on account of the Participant's termination of Service which constitutes a "deferral of compensation" within the meaning of the Treasury Regulations issued pursuant to Section 409A of the Code (the "***Section 409A Regulations***") shall be paid unless and until the Participant has incurred a "separation from service" within the meaning of the Section 409A Regulations. Furthermore, to the extent that the Participant is a "specified employee" within the meaning of the Section 409A Regulations as of the date of the Participant's separation from service, no amount that constitutes a deferral of compensation which is payable on account of the Participant's separation from service shall be paid to the Participant before the date (the "***Delayed Payment Date***") which is first day of the seventh month after the date of the Participant's separation from service or, if earlier, the date of the Participant's death following such separation from service. All such amounts that would, but for this Section, become payable prior to the Delayed Payment Date will be accumulated and paid on the Delayed Payment Date.

9.2 **Other Changes in Time of Payment.** Neither the Participant nor the Company shall take any action to accelerate or delay the payment of any benefits under this Agreement in any manner which would not be in compliance with the Section 409A Regulations.

9.3 **Amendments to Comply with Section 409A; Indemnification.** Notwithstanding any other provision of this Agreement to the contrary, the Company is authorized to amend this Agreement, to void or amend any election made by the Participant under this Agreement and/or to delay the payment of any monies and/or provision of any benefits in such manner as may be determined by the Company, in its discretion, to be necessary or appropriate to comply with the Section 409A Regulations without prior notice to or consent of the Participant. The Participant hereby releases and holds harmless the Company, its directors, officers and stockholders from any and all claims that may arise from or relate to any tax liability, penalties, interest, costs, fees or other liability incurred by the Participant in connection with the Award, including as a result of the application of Section 409A.

9.4 **Advice of Independent Tax Advisor.** The Company has not obtained a tax ruling or other confirmation from the Internal Revenue Service with regard to the application of Section 409A to the Award, and the Company does not represent or warrant that this Agreement will avoid adverse tax consequences to the Participant, including as a result of the application of Section 409A to the Award. The Participant hereby acknowledges that he or she has been advised to seek the advice of his or her own independent tax advisor prior to entering into this Agreement and is not relying upon any representations of the Company or any of its agents as to the effect of or the advisability of entering into this Agreement.

10. **Miscellaneous Provisions.**

10.1 **Termination or Amendment.** The Committee may terminate or amend the Plan or this Agreement at any time; provided, however, that no such termination or amendment may have a materially adverse effect on the Participant's rights under this Agreement without the consent of the Participant unless such termination or amendment is necessary to comply with applicable law or government regulation, including, but not limited to, Section 409A. No amendment or addition to this Agreement shall be effective unless in writing.

10.2 **Nontransferability of the Award.** Prior to the issuance of shares of Stock on the applicable Settlement Date, neither this Award nor any RSUs subject to this Award shall be subject in any manner to anticipation, alienation, sale, exchange, transfer, assignment, pledge, encumbrance, or garnishment by creditors of the Participant or the Participant's beneficiary, except transfer by will or by the laws of descent and distribution. All rights with respect to the Award shall be exercisable during the Participant's lifetime only by the Participant or the Participant's guardian or legal representative.

10.3 **Repayment/Forfeiture**. By accepting this Award, the Participant specifically agrees that any and all payments or benefits the Participant or any other person may be entitled to receive under or as a result of this Award shall be immediately forfeited, and that the aggregate amount of any payments or benefits the Participant or any other person has received under or as a result of this Award (determined without regard to any taxes or other amounts withheld from such payments or benefits), shall be repaid to the Company within 30 days following written notice from the Company (or such shorter period as may be required by applicable law),

(1) as the Company in its discretion determines may be required to comply with any applicable listing standards of a national securities exchange adopted in accordance with Section 954 of the Dodd-Frank Wall Street Reform and Consumer Protection Act (regarding recovery of erroneously awarded compensation) and any implementing rules and regulations of the U.S. Securities and Exchange Commission adopted thereunder or similar rules under the laws of any other jurisdiction, (2) to the extent provided pursuant to the Company's Incentive Compensation Recoupment Policy, and (3) in the event the Committee or its delegate determines that the Participant has engaged in Prohibited Conduct (as defined below) at any time during the Recoupment Period (as defined below). For purposes of this Section 10.3,

(a) ***"Prohibited Conduct"*** means (1) violation of the Company's Code of Ethical Business Conduct, Insider Trading Policy, or any Proprietary Information, Inventions Agreement, Non-Compete Agreement (or similar agreement) signed by the Participant; (2) unethical behavior (such as, without limitation, fraud, dishonesty, or misrepresentation of product benefits); (3) engaging in Competition; (4) disclosing or using in any capacity other than as necessary in the performance of duties assigned by the Company or its Affiliates any confidential information, trade secrets or other business sensitive information or material concerning the Company or its Affiliates, customers, suppliers or partners; (5) directly or indirectly employing, contacting concerning employment, or participating in any way in the recruitment for employment of (whether as an employee, officer, director, agent, consultant or independent contractor), any person who was or is an employee, representative, officer or director of the Company or any of its Affiliates at any time within the 12 months prior to termination of Participant's employment; (6) any action or statement by Participant and/or his or her representatives that either does or could reasonably be expected to disparage the Company, its Affiliates, or their officers, employees, or directors, or undermines, diminishes or otherwise damages the relationship between the Company or any of its Affiliates and any of their respective customers, potential customers, vendors and/or suppliers that were known to Participant; or (7) breach of any provision of any employment or severance agreement with the Company or any Affiliate. Any determination of Prohibited Conduct shall be made by the Committee or its delegate in its sole discretion and shall be binding on all parties. Notwithstanding anything contained herein to the contrary, Prohibited Conduct shall not include communication by Participant with any government agency, commission or regulator or participation by Participant in any investigation or proceeding that may be conducted by any government agency, commission or regulator, but only to the extent that such communication is required or permitted by law.

(b) ***"Competition"*** means, either during Participant's employment with the Company or any of its Affiliates, or within 12 months following termination of such employment, accepting employment with, or serving as a consultant or advisor or in any other capacity to a competitor of the Company, including but not limited to the DePuy Synthes division of Johnson & Johnson, Stryker Corporation, Globus Medical, Inc., Medtronic, Inc., K2M Holdings, Inc., Zimmer Biomet Holdings, Inc., Alphatec Holdings, Inc. or any subsidiary or Affiliate of the foregoing (a ***"Competitor"***), including, but not limited to, employment or another business relationship with any Competitor if Participant has been introduced to trade secrets, confidential information or business sensitive information during Participant's employment with the Company or any of its Affiliates and such information would aid the Competitor because the threat of disclosure of such information is so great that it must be assumed that such disclosure would occur.

(c) ***"Recoupment Period"*** means the period beginning on the Date of Grant and ending on the date that is 12 months after the date on which the Participant or any other person received any payment or benefit pursuant to this Award, provided, however, that if the Prohibited Conduct resulted in the Participant or any other person receiving any payment or benefit pursuant to this Award in excess of the payment or benefit that would have been received absent such Prohibited Conduct, the Recoupment Period shall end on the date that is 36 months after the date on which such payment or benefit was received.

10.4 **Further Instruments.** The parties hereto agree to execute such further instruments and to take such further action as may reasonably be necessary to carry out the intent of this Agreement.

10.5 **Binding Effect.** This Agreement shall inure to the benefit of the successors and assigns of the Company and, subject to the restrictions on transfer set forth herein, be binding upon the Participant and the Participant's heirs, executors, administrators, successors and assigns. If all or any part of any section or clause of this Agreement is determined to be invalid or unenforceable in any respect or to any degree, that section or clause shall be interpreted and enforced to the maximum extent allowed by law and shall not invalidate or impact any other sections and/or clauses that remain.

10.6 **Delivery of Documents and Notices.** Any document relating to participation in the Plan or any notice required or permitted hereunder shall be given in writing and shall be deemed effectively given (except to the extent that this Agreement provides for effectiveness only upon actual receipt of such notice) upon personal delivery, electronic delivery at the e-mail address, if any, provided for the Participant by a Participating Company, or upon deposit in the U.S. Post Office or foreign postal service, by registered or certified mail, or with a nationally recognized overnight courier service, with postage and fees prepaid, addressed to the other party at the address of such party set forth in the Grant Notice or at such other address as such party may designate in writing from time to time to the other party.

(a) ***Description of Electronic Delivery.*** The Plan documents, which may include but do not necessarily include: the Plan, this Agreement, the Plan Prospectus, and any reports of the Company provided generally to the Company's stockholders, may be delivered to the Participant electronically. In addition, if permitted by the Company, the Participant may deliver electronically the Grant Notice to the Company or to such third party involved in administering the Plan as the Company may designate from time to time. Such means of electronic delivery may include but do not necessarily include the delivery of a link to a Company intranet or the Internet site of a third party involved in administering the Plan, the delivery of the document via e-mail or such other means of electronic delivery specified by the Company.

(b) ***Consent to Electronic Delivery.*** The Participant acknowledges that the Participant has read Section 10.6(a) of this Agreement and consents to the electronic delivery of the Plan documents and, if permitted by the Company, the delivery of the Grant Notice, as described in Section 10.6(a). The Participant acknowledges that he or she may receive from the Company a paper copy of any documents delivered electronically at no cost to the Participant by contacting the Company by telephone or in writing. The Participant further acknowledges that the Participant will be provided with a paper copy of any documents if the attempted electronic delivery of such documents fails. Similarly, the Participant understands that the Participant must provide the Company or any designated third party administrator with a paper copy of any documents if the attempted electronic delivery of such documents fails. The Participant may revoke his or her consent to the electronic delivery of documents described in Section 10.6(a) or may change the electronic mail address to which such documents are to be delivered (if Participant has provided an electronic mail address) at any time by notifying the Company of such revoked consent or revised e-mail address by telephone, postal service or electronic mail. Finally, the Participant understands that he or she is not required to consent to electronic delivery of documents described in Section 10.6(a), but has nevertheless knowingly and voluntarily chosen to do so by electronically accepting the Award (as provided in the Grant Notice).

10.7 **Integrated Agreement.** This Agreement and the Plan shall constitute the entire understanding and agreement of the Participant and the Participating Company Group with respect to the subject matter contained herein or therein and supersede any prior agreements, understandings, restrictions, representations, or warranties among the Participant and the Participating Company Group with respect to such subject matter. To the extent contemplated herein or therein, the provisions of this Agreement and the Plan shall survive any settlement of Vested RSUs and shall remain in full force and effect.

10.8 **Applicable Law.** This Agreement shall be governed by the laws of the State of Delaware as such laws are applied to agreements between Delaware residents entered into and to be performed entirely within the State of Delaware.

10.9 **Addendum.** Notwithstanding any provisions of this Agreement to the contrary, the Award shall be subject to any special terms and conditions for the Participant's country of residence (and country of employment, if different) set forth in an addendum to this Agreement (an "***Addendum***"). Further, if the Participant transfers his or her residence and/or employment to another country reflected in an Addendum to this Agreement at the time of transfer, the special terms and conditions for such country will apply to the Participant to the extent the Company determines, in its sole discretion, that the application of such terms and conditions is necessary or advisable in order to comply with local law, rules and regulations or to facilitate the operation and administration of the Award and the Plan (or the Company may establish alternative terms and conditions as may be necessary or advisable to accommodate the Participant's transfer). In all circumstances, any applicable Addendum shall constitute part of this Agreement.

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: May 10, 2023

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

Exhibit 31.2

CERTIFICATION

I, Matthew K. Harbaugh, 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: May 10, 2023

By: /s/ Matthew K. Harbaugh

Matthew K. Harbaugh

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 March 31, 2023, 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: May 10, 2023

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

In connection with the Quarterly Report, I, Matthew K. Harbaugh, 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: May 10, 2023

By: /s/ Matthew K. Harbaugh
Matthew K. Harbaugh
Executive Vice President and Chief Financial Officer